**GRADE 7** 

# **Mathematics**

Teacher Toolkit: CAPS Planner and Tracker

2019 TERM 3

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# A. ABOUT THE TRACKER AND RESOURCES

1. Your quick guide to using this planner and tracker



What is the NECT and where do I fit in?

What you do matters! What you do every day as a teacher can change the life-chances of every child that you teach. The NECT supports teachers by providing CAPS planners and trackers so that teachers can plan to cover the curriculum, track progress, and seek help when they are falling behind.





But who will help me?

The NECT will work with your school management team (SMT) and assist them to have supportive and professional conversations with you about curriculum coverage that will be orientated to identifying and solving problems.





I have looked at the planner and tracker. It goes too fast!

The CAPS planner and tracker is an expanded ATP. It helps you pace yourself as if you were able to cover everything in the ATP/CAPS. When you fall behind because time has been lost, or because the learners are progressing slowly, you need to confidently discuss this with your teaching team without feeling blamed. The pace of coverage will be determined by the pace of learning. That is why coverage must be tracked by the teacher and the SMT.





How do I use the planner and tracker?

See the "Quick 5-step Guide to Using the CAPS Planners and Trackers" on the opposite page.



**2** Grade 7 Mathematics

## QUICK 5-STEP GUIDE TO USING THE CAPS PLANNERS AND TRACKERS

**1.** Find the textbook that YOU are using.

- Use the planning page each week to plan your teaching for the week. It will help you link the CAPS content and skills to relevant material in the textbook, the teacher's guide, and other materials such as the DBE workbook.
- **3.** Keep a record of the date when you were able to complete the topic. It may be different from the date you planned, and for different classes. Write this date in the column on the right for your records.
- **4.** At the end of the week, reflect and check if you are up to date. Make notes in the blank space.
- **5.** Be ready to have a professional and supportive curriculum coverage conversation with your HoD (or subject or phase head).

The CAPS planners and trackers also provide guidelines for assessment with samples, and may also have enrichment and remedial suggestions. Read the introduction pages carefully for a full explanation.



## 2. Purpose of the tracker

The Grade 7 Mathematics Curriculum and Assessment Planner and Tracker is a tool to support you in your role as a professional teacher. Its main purpose is to help you to keep pace with the time requirements and the content coverage of the CAPS. The tracker provides a programme of work which should be covered each day of the term and a space for reflection on work done. By following the programme in the tracker, you should cover the curriculum in the allocated time, and complete the formal assessment programme. By noting the date when each lesson is completed, you can see whether or not you are *on track* and if not, you can strategise with your head of department and peers as to how best to make up time to ensure that all the work for the term is completed. In addition, the tracker encourages you to reflect on what in your lessons is effective, and where content coverage could be strengthened. These reflections can be shared with colleagues. In this way, the tracker may encourage continuous improvement in practice. This tracker should be kept and filed at the end of the term.

## 3. Links to the CAPS

The Mathematics tracker for Grade 7 is based on the requirements prescribed by the Department of Basic Education's Curriculum and Assessment Policy Statement (CAPS) for Mathematics in the Senior Phase. The work set out for each day is linked directly to the topics and subtopics given in the CAPS, and the specified amount of time is allocated to each topic. The tracker gives the page number in the CAPS document of the topics and subtopics being addressed in each session to help you to refer to the curriculum document directly should you wish to.

## 4. Links to the approved sets of LTSMs

The tracker coordinates the CAPS requirements with the content set out in the approved Learner's Books and Teacher's Guides. There is a tracker for each of the Learner's Books on the list of approved books on the national catalogue. You must therefore refer to the tracker for the book that is used by learners at your school. If you have copies of other LBs, you can of course refer to these too, for ideas for teaching the same content in a different way – but you must be sure to cover the content systematically. For each set of learning and teaching support materials (LTSMs), links are given to the relevant pages in both the Learner's Book and Teacher's Guide to make it easier for you to access the correct resources.

In a few instances, when necessary, we recommend that you should use only selected activities from the LB. This is when the recommended exercises have more work than can be done in the time allocated to the lesson. In other instances, the LBs do not have sufficient activities for learners to consolidate work done on a topic, and in these cases, we recommend that you supplement the recommended activities using the DBE worksheet referred to by the page number given in the DBE column. You could also use other approved LBs or other resources which you may have.

The tracker uses the latest print editions of the eight approved LTSMs. It is important to note that page numbers may differ slightly from other print runs of the same books. If the page numbers in your edition are not exactly the same as those given in the tracker, you should use the activity/exercise numbers given in the tracker to guide you to the correct pages. These should only be a page or two different from those given in the tracker.

## 5. Links to the DBE workbooks

The tracker gives links to worksheets in the DBE workbook relevant to the content described for each day. The worksheets are referred to by worksheet number and page. They should be used in conjunction with the Learner's Book activities as mentioned above. You should review the suggested worksheets before each lesson, and decide how best to use them – for teaching, revision, extension or for consolidation, in class or for homework.

**Note:** The trackers refer to the 2017 edition of the DBE workbook. As there might have been slight changes in the edition you are using, please always check that the exercise to which you are referred is relevant for the work to which it is linked in the tracker.

## 6. Managing time allocated in the tracker

The CAPS prescribes four and a half hours of Mathematics per week in Grade 7. This tracker has provided work for five fifty-five minute lessons in which the CAPS requirements will be covered each week. Each school will organise its timetable differently. For this reason, you might have to divide the sessions in the programme slightly differently to accommodate the length of the lessons at your school. Depending on the pace at which your learners work, and how much support is needed, you might also have to supplement the set activities by using other resources to ensure that the full **four and a half hours** of time for Mathematics is used constructively.

Please note that this tracker is based on a third term that is 11 weeks long. The prescribed content should have been completed by the end of Week 8, including some

catch-up and consolidation time. Weeks 9 and 10 are for revision, and it is suggested that the term test be written in Week 10. Week 11 is thus available for review of the test, remediation and learner corrections. Should you use this tracker in a third term that is longer or shorter than 11 weeks, you will need to adjust the programme of work accordingly. It is important that you take note of this at the start of the term.

## 7. Sequence adherence

The content in each tracker has been carefully sequenced, and it is therefore important that lessons are not skipped. Should you miss a Mathematics lesson for any reason or should you be going at a slower pace, you should continue the next day from where you last left off. Do not leave a lesson out to get back on track. You may need to speed up the pace of delivery to catch up the lesson schedule – such as by covering the lesson concept content of two consecutive days in one day. To do this you could cut out or cut back on some of the routine activities like Mental Mathematics or homework reflection to save time until you are back on track for curriculum coverage.

### 8. Links to assessment

In **Term 3** of **Grade 7**, the formal assessment programme specified by CAPS requires at least **one assignment**, **one project** and **a test**. The approved Learner's Books and Teacher's Guides provide exemplar investigations and tests, which you can use with your class. The assessment plan, provided in Section D *Assessment Resources* of this document, shows where in the programme of work they are included in each set of materials, and on which pages in the Learner's Books or Teacher's Guides they can be found. The tracker indicates where in the series of lessons the formal assessments are to be done and when feedback should be given. The actual tasks and the dates for the assessments vary slightly from Learner's Book to Learner's Book, but are always in line with the CAPS specifications. It is suggested that you discuss testing times with your colleagues teaching other subjects in order to avoid the learners having to write several tests on the same day in a single week.

You should use the investigation and test in your set of LTSMs with due diligence making sure that you personalise them and supplement them using other Learner's Books or ANA past papers and exemplars, if necessary, in order to be sure that they fulfil the requirements of the CAPS.

We have also provided an exemplar test and marking memorandum which you could use instead of the test in the LTSM used by your class. In addition, there is an analysis

of the examination according to the cognitive levels described in the CAPS. You will find these resources in Section D *Assessment Resources* of this document.

Where the test is in the Learner's Book, you cannot use it as part of the formal assessment programme as learners will be able to prepare for it in advance. It can, however, be used for practice and for informal assessment. If this is the case, you will need to use a test from a Teacher's Guide of a different set of LTSMs, or set your own, or make use of the test in this tracker, as mentioned above. We recommend that your learners write the test in **Week 9**.

A suggested assessment record sheet is provided for you to copy and complete for all the learners in your class. This records the marks of the formal assessment that you carry out in the term. You may prefer to use your own assessment record sheet created using your class list.

In addition to the prescribed formal assessment, you should also include some informal assessment. Informal assessment is an essential part of teaching and learning as it provides feedback to learners and informs planning for teaching. While informal assessment marks need not be recorded, some informal assessments, such as, class tests written after completion of a section of work, should be marked. In order to reduce teacher workload, learners can mark their own work (**self-assessment**) using a pencil or the learners can mark each other's work (**peer marking**). The tracker does not indicate which activities should be used for informal assessment – you should use your own discretion in this regard. If your Learner's Book has informal assessments as specified in the CAPS, these are indicated in the tracker.

## 9. Resources

The tracker makes clear which resources you will need each day in order to deliver the lesson. Several of the published Learner's Books and Teacher's Guides provide printable resources that you could copy for the learners to use with the lessons in that book. In addition, Sections F *Printable Resources* of the tracker provide some resources for your use this term.

In addition, a number of actual printable resources, as well as useful information about them, are provided in two books. These books are:

- Mental Maths Activities and Printable Resources
- Remediation and Enrichment Activities.

You should look at both these books carefully to see for yourself how you might make best use of them. Although the remediation and enrichment activities are based on work done in grades before Grade 7, learners in Grade 7 who did not fully grasp certain concepts in previous years will benefit from these activities. There are Mental Maths activities that are suitable for learners in all the grades from 4 to 7, and many of the printable resources will also be useful in Grade 7.

Section D of the tracker has resources for assessment.

## **B. LESSON PREPARATION KEY STEPS**

The tracker provides a detailed programme to guide you through the daily content you need to teach to your class, and when to do formal assessments. You are still required to draw up your own lesson plans. You will still make the final professional choices about which examples and explanations to give, which activities to set for your class and how to manage your class on a daily basis.

It is a good idea that you agree with your Mathematics colleagues on a day that you can get together to plan your lessons as a group and submit your plans to your head of department for quality assurance. To deliver the lessons successfully **you must do the necessary preparation yourself**. Bear in mind that your lessons will not succeed if you have not prepared properly for them. This entails a number of key steps, such as those noted below.

- 1. Review the term focus: Start by looking at the CAPS and *orientating* yourself to the CAPS content focus for the term. It is important that you are clear about the content focus as this will frame everything you do in your Mathematics lessons during the term.
- 2. Prepare resources: The resources needed for each lesson are listed at the start of each CAPS topic or for each lesson in the trackers. It is very important that you check what is required for each lesson ahead of time so that you have all your resources ready for use every day (e.g. counters, number boards, paper cut-outs, examples of shapes, etc.).
  - If you do not have all the necessary resources readily available, see how best you can improvise. For example, ask learners to collect bottle tops or small stones to be used for counting or make your own flard cards/number boards

using pieces of cardboard and a marker pen.

- Collect necessary items from home (e.g. bottles, bottle tops, etc.) long in advance so that you have all the necessary resources for your lesson.
- Use newspapers and magazines to cut out pictures that could be used in your teaching. If you have access to the internet, use Google to search for and print out pictures that you may need to use as illustrations in your lessons.
- Also make sure you have chalk or marking pens so that you can use your chalk or whiteboard as needed. If you have digital resources, check that they are in working order.
- Check the assessment programme so you can prepare any resources such as test papers needed for formal assessment so that leaners can settle down and begin working promptly.

You will find many ideas for mental mathematics activities in the *Mental Maths Activities and Printable Resources* book – such as drawings of 3-D objects and nets.

- **3. Prepare the content:** Think carefully about what it is that you will teach your learners in this lesson. Think about the prior knowledge of the content that learners should have learned in earlier grades that will be built on in this lesson. You should refer to the CAPS content and skills clarification column for further guidance while you prepare. Consider any common misconceptions, and how you will address these. Do you have any learners with learning barriers in the class? How will you accommodate them?
  - **Prepare a short introduction** to the topic so that you can explain it in simple terms to your learners. The Learner's Book and Teacher's Guide will assist you. Think also about how learners will develop an understanding of the main concepts of the lesson topic. You need to think about how to explain new Mathematics content and skills to your learners.
  - Make sure you have prepared for the teaching of the concepts before you teach. Prepare yourself to assist learners with any questions they might have during the lesson. Look at the activities in the Learner's Book and in the DBE workbook, and think about how best to help your learners engage with them. Consider what will be done in class and what at home. Be sure to have some enrichment and remediation activities ready to use as needed. The Teacher's Guides offer suggestions for remediation and enrichment activities that you might want to use.
  - Consider the needs of any learners with barriers to learning in your class, and how best you can support them. The DBE has published some excellent materials to support you in working with learners with learning barriers. Two

such publications are:

- Directorate Inclusive Education, Department of Basic Education (2011) Guidelines for Responding to Learner Diversity in the Classroom Through Curriculum and Assessment Policy Statements. Pretoria. <u>www.education.</u> gov.za, <u>www.thutong.doe.gov.za/InclusiveEducation</u>
- Directorate Inclusive Education, Department of Basic Education (2010)
   Guidelines for Inclusive Teaching and Learning. Education White Paper
   6. Special Needs Education: Building an Inclusive Education and Training
   System. Pretoria. <u>www.education.gov.za</u>, <u>www.thutong.doe.gov.za/</u>
   InclusiveEducation
- 4. Plan the steps in your lesson, and think carefully about how much time to allocate to different learner activities. Also think about how to organise the learners when they work. Most lessons should include the steps below and we have suggested the time to be spent on each but you might find that you need to work differently in some lessons, such as when a test is being written.
  - Step 1: Mental Mathematics (5–10 minutes): This is the start-up activity for each lesson and should not take more than 5 to 10 minutes. The Mental Mathematics games provided this term in Section E *Resources for Mental Mathematics* relate to Geometry work. It is recommended that you continue to use the strategies and skills provided in the Term 1 and Term 2 trackers to consolidate the learners number knowledge and calculation techniques developed in the Intermediate Phase. It will be useful to practise the properties of numbers as learners also have to apply the properties of numbers in algebra, when they work with variables in place of numbers.

Mental Mathematics support is provided in *Solutions for All Mathematics* LB pp. 449–457, TG 326–344. It will be useful to get a single copy of this LB and TG to use even if it not the LTSMs selected for your school.

Mental calculations should be used to practise concepts and skills developed through the main lesson, sometimes with smaller number ranges. Learners should not be asked to do random calculations each day (CAPS, p. 39). Rather, mental calculations should be used as an opportunity to consolidate three aspects of learners' number knowledge:

#### 1. Number facts

- 1.1 Number bonds
- 1.2 Times tables

#### 2. Calculation techniques

- 2.1 Doubling and halving, using multiplication to do division, multiplying and dividing by 10, 100, 1 000
- 2.2 Multiplying by multiples of 10, 100, 1000
- 2.3 Building up and breaking down numbers, rounding off and compensating

#### 3. Number concept

- 3.1 Counting, ordering and comparing, place value, odd and even numbers, multiples and factors
- 3.2 Properties of numbers (identity elements for addition and multiplication)
- 3.3 Commutative and associative property for addition and multiplication
- 3.4 Inverse operation for multiplication and division.

Learners should not use concrete material to work out the answers in Mental Mathematics. However, if learners need to, let them use their fingers as a concrete aid, but make a note of which learners are doing this and then spend time with them during remediation to help them with the basic skills.

Mental mathematics skills improve hugely through repeated activity and enable learners to perform higher level tasks with greater ease.

#### Helping learners develop a range of Mental Mathematics strategies

Learners will be at different stages in terms of number facts that they have committed to memory and the strategies available to them for figuring out other facts. It is important for you to be aware of a range of Mental Mathematics strategies so that:

- When learners are carrying out mental calculations, you will be in a better position to recognise the strategy being used
- You can draw attention to and model a variety of strategies used by learners in the class
- You can make suggestions to learners that will move them on to more efficient strategies.

There are **THREE** aspects to ensuring that learners become effective in drawing on and using these strategies:

- Raising learners' awareness of the range of strategies
- Developing their confidence and fluency with a range of strategies
- Helping them to choose from the range the most efficient method for a given calculation.

Please refer to the toolkit book *Mental Maths Activities and Printable Resources* for ideas for mental maths activities to supplement those in the LTSMs.

- Step 2: Homework review/reflection (10 minutes): This is the second activity of the lesson. We recommend that you take no more than 10 minutes to remediate and correct the previous day's homework. Read out answers to all of the homework questions. Make sure that you mark the homework activities use peer and individual marking and check homework yourself as often as you can. If peer or individual marking has been done, you should regularly sample some learners' books to moderate this marking. Choose one or two activities that you realise were problematic to go over more thoroughly. During this part of the lesson you may reflect on the previous day's work. Allow learners the opportunity to write corrections as needed.
- Step 3: Lesson content concept development (20 minutes): This is the third activity of the lesson. We recommend that you should actively teach your class for 20 minutes going through examples interactively with your learners. Worked examples and suggested explanations are given in the Learner's Book or Teacher's Guide that you should go through with your class as a whole. The CAPS content clarification column would also be a useful reference should you need further examples or ideas to enrich your explanations. You should elaborate on these explanations and provide additional examples if necessary.
- Step 4. Classwork activity (20 minutes): This is the fourth activity of
  the lesson. This part of the lesson provides an opportunity for learners
  to consolidate new concepts by doing activities or exercises from the
  Learner's Book or DBE workbook. These activities allow them to practise
  their mathematic and problem solving skills. It is important that you prepare
  yourself for the classwork activity you need to assist learners as they do
  the classwork. You might also need to select particular questions from each
  activity for the classwork so that learners can manage the selection the
  exercises given in the various Learner's Books vary greatly in length
  and
  you need to make this selection in advance (ensuring that all types of activities
  or concepts are covered each day) so that you can give quick and clear
  instructions to your leaners about which exercises they should do.

Depending on your learners and the activities, you could go over one or two of the classwork activities orally with the whole class before allowing the learners to work independently. Allow the learners opportunities to do these activities alone, in pairs, and in groups, so that they experience working alone as well as with their peers. Remember not to give your learners more work than you are able to control and mark. Look out for the \* linked to exercises or activities which are too long and choose which numbers you want your learners to complete. Also encourage them, where appropriate, to write their answers and to show their working neatly and systematically in their workbooks. Plan the timing of the lesson so that you and the learners can go over the classwork together and they can do corrections in the lesson.

If you require your learners to work in groups, carefully assign learners to groups in such a way that there are learners with mixed abilities who can assist each other in each group.

This is also the part of the lesson where you can assist learners who need extra support and extend those who need enrichment. Throughout the lesson, try to identify learners who need additional support or extension by paying attention to how well they cope with the Mental Mathematics activities, how they managed the homework, how they respond when you develop the new content, and how they cope with the class activities. While the rest of the class is busy working through the classwork activities, you should spend some time with those learners who need extra support and help them to work through the remediation activities. If learners successfully complete the daily classwork activities to do.

• Step 5: Allocate homework (5 minutes): This is the fifth and final activity of the lesson. In this step you should tell the learners about the homework for the day and make sure they know what is expected of them and understand what it is that they have to do.

For homework, you can select a few questions from the daily classwork in their Learner's Book and ask the learners to complete them at home, or ask them to do part or all of a DBE worksheet. Homework enables the learners to consolidate the Mathematics that you have taught them in class. It also promotes learner writing and development of mathematical knowledge, and the development of regular study habits. Encourage your learners to show their parent(s) or their guardian(s) the work they have done. When you can, take in homework books to check the work, and always allow some time to go through the homework with the learners to check that the work has been understood.

5. After each lesson, reflect on how it went: Each week there is a reminder to you that you should note your thoughts about the day's lesson. You will use these notes as you plan and prepare for your teaching and in discussion with your colleagues.

## C. TRACKERS FOR EACH SET OF APPROVED LTSMs

## 1. Clever Keeping Mathematics Simple

This section maps out how you should use your Teacher's Guide and Learner's Book in a way that enables you to cover the curriculum sequentially, aligning with the CAPS, for well-paced and meaningful teaching.

The following components are provided in the columns of the tracker table:

- 1. Day/lesson number.
- 2. CAPS page numbers and content linked to Learner's Book content.
- 3. Learner's Book exercises/activities that cover the CAPS content for the day.
- 4. Page reference in the Learner's Book (LB page reference).
- 5. Page reference in your Teacher's Guide for the day's activities (TG page reference).
- 6. DBE workbook link to related content (worksheet and page numbers are referenced).
- 7. Date completed (complete this daily).

**Note:** You will find useful ideas and resources in the toolkit book *Mental Maths Activities and Printable Resources.* 

#### Weekly reflection

The tracker gives you space to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and discuss things that worked or did not go so well in your lesson. Together with your HOD you can think of ways of improving on the daily work that the learners in your class are doing. When you reflect you could think about things such as:

• Was your preparation for the lesson adequate? For instance, did you have all the necessary resources? Had you thought through the content so that you

understood it fully and so could teach it effectively?

- Did the purpose of the lesson succeed? For instance, did the learners reach a good understanding of the key concepts for the day? Could they use the language expected from them? Could they write what was expected from them?
- Did the learners cope with the work set for the day? For instance, did they finish the classwork? Was their classwork done adequately? Did you assign the homework?
- Are your learners' books up to date?
- Does what the learners have done in their books correlate with the tracked comments in the tracker?

Briefly write down your reflection weekly, following the prompts in the tracker.

- What went well?
- What did not go well?
- What did the learners find difficult or easy to understand or do?
- What will you do to support or extend learners?
- Did you complete all the work set for the week?
- If not, how will you get back on track?
- What will you change for next time? Why?

The reflection should be based on the daily lessons you have taught each week. It will provide you with a record for the next time you implement the same lesson again, and also forms the basis for collegial conversations with your head of department and your peers.

|                                    | Clever Keeping Mathe   | matics s | Simple                | Week 1       |            |  |       |       |      |       |
|------------------------------------|--|----------|-----------------------|--------------|------------|--|-------|-------|------|-------|
| Day                                | CAPS concepts and skills   |          | LB                    | LB           | TG         | DBE  |       | C     | lass |       |
|                                    |  |          | ex.                   | pp.          | pp.        | WORKDOOK                                     |       |       |      |       |
|                                    |  |          |                       |              |            |  | D     | ate c | omp  | leted |
| 1                                  | <b>Investigate and extend patterns pp. 58–61</b><br>Relationship between numbers including patterns represented in physical or<br>diagram form   |          | 1а–с<br>2<br>За–с     | 200          | 193        | Worksheet 65<br>p. 2 no. 2                   |       |       |      |       |
| 2                                  | Relationship between numbers including patterns not limited to sequences including difference  |          | Ex.1c–d<br>2c–d<br>3c | 202          | 193<br>194 | Worksheet 65<br>p. 2 no. 1                   |       |       |      |       |
| 3                                  | Relationship between numbers including patterns not limited to sequences including ratio   |          | Ex. 2e–f              | 205          | 194        | Worksheet 66<br>p. 4<br>Worksheet 67<br>p. 6 |       |       |      |       |
| 4                                  | Relationship between numbers including patterns of learners own creation   |          | Ex. 3<br>2a–f         | 208          | 196        | Worksheet 67<br>p. 6                         |       |       |      |       |
| 5                                  | Relationship between numbers including patterns represented in tables  |          | Ex. 3<br>1a–j         | 208          | 195        | Worksheet 68<br>p. 8                         |       |       |      |       |
|                                    | Refle  | ection   |                       |              |            |  |       |       |      |       |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What wil | ll you chang          | je next time | ? Why?     |  |       |       |      |       |
|                                    |  | HOD:     |                       |              |            |  | Date: |       |      |       |

|                                    | Clever Keeping Mathem  | natics S  | Simple                                   | Week 2       |            |                        |      |      |        |     |
|------------------------------------|--|-----------|--|--------------|------------|------------------------|------|------|--------|-----|
| Day                                | CAPS concepts and skills   |           | LB                                       | LB           | TG         | DBE                    |      |      | Class  |     |
|                                    |  |           | ex.                                      | pp.          | pp.        | workbook               |      |      |        |     |
|                                    |  |           |  |              |            |                        |      | Date | comple | ted |
| 6                                  | Relationship between numbers including patterns represented in diagrams, tables, difference and ratio  | ,         | Ex. 3<br>3a–g                            | 209          | 196        | Worksheet 68<br>p. 9   |      |      |        |     |
| 7                                  | Input and output values p. 62<br>Determine rules for patterns using – flow diagrams, tables and formula  |           | 1a<br>2b                                 | 210          | 197        | Worksheet 72<br>p. 18  |      |      |        |     |
| 8                                  | Determine, interpret and justify equivalence of different descriptions of the same ru<br>represented – verbally, in flow diagrams, in tables;<br>Formula, by number sentence   | ule       | Ex. 1<br>1a<br>2a–b                      | 214          | 201        | Worksheet 73<br>p. 20  |      |      |        |     |
| 9                                  | <ul><li>Revision</li><li>Numeric and geometric patterns</li><li>Input/output values</li></ul>  |           | Ex. 2<br>1a, f<br>2a–e<br>Ex. 1<br>1b, 3 | 205<br>214   | 202<br>201 | Worksheet 71b<br>p. 16 |      |      |        |     |
| 10                                 | Algebraic language p. 63<br>Recognise and interpret rules or relationships represented in symbolic form  |           | Ex. 1<br>2a–e                            | 221          | 207        | Worksheet 74<br>p. 22  |      |      |        |     |
|                                    | Reflec   | tion      |  |              |            |                        |      | •    | i      |     |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>back on track? | What will | you chang                                | ge next time | ? Why?     |                        |      |      |        |     |
|                                    | HOD:   |           |  |              |            |                        | Date |      |        |     |

|                                    | Clever Keeping Mathe  | matics S | Simple                | Week 3       |        |                       |       |        |       |  |
|------------------------------------|---|----------|-----------------------|--------------|--------|-----------------------|-------|--------|-------|--|
| Day                                | CAPS concepts and skills  |          | LB<br>ex.             | LB<br>pp.    | TG     | DBE<br>workbook       |       | Class  |       |  |
|                                    |   |          | C/A                   | P            | PP.    |                       | Det   |        |       |  |
|                                    |   |          |                       |              |        |                       | Date  | e comp | leted |  |
| 11                                 | Identify variables and constants in given formulae  |          | Ex. 1<br>1a–h         | 221          | 207    | Worksheet 74<br>p. 23 |       |        |       |  |
| 12                                 | Identify variables and constants in given equations   |          | Ex. 2<br>1a–e         | 222          | 207    | Worksheet 77<br>p. 28 |       |        |       |  |
| 13                                 | <ul> <li>Number sentences p. 64</li> <li>Write number sentences to describe problem situations</li> <li>Analyse and interpret number sentences that describe a given situation</li> </ul>   |          | Ex. 1<br>1a–e<br>2a–c | 225          | 212    | Worksheet 79<br>p. 32 |       |        |       |  |
| 14                                 | Solve and complete number sentences by:<br>• inspection<br>• trial and improvement  |          | Ех. 2<br>2а–е<br>За–е | 228          | 213    | Worksheet 79<br>p. 33 |       |        |       |  |
| 15                                 | <ul> <li>Algebraic language p. 63</li> <li>Identify variables and constants in given formulae or equations</li> <li>Determine the numerical value of an expression by substitution</li> </ul>   |          | Ex. 2<br>4a–e<br>7a–b | 229          | 213    | Worksheet 78<br>p. 30 |       |        |       |  |
|                                    | Refl  | ection   |                       |              |        |                       |       |        |       |  |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did arners find difficult or easy to understand or do? What will you do to support or d learners? Did you complete the work set for the week? If not, what will you do t back on track? | What wil | l you chang           | ge next time | ? Why? |                       |       |        |       |  |
|                                    |   | HOD:     |                       |              |        |                       | Date: |        |       |  |

|                                    | Clever Keeping Mathe   | Simple   | Week 4                |                   |                   |                        |       |        |       |       |  |
|------------------------------------|--|----------|-----------------------|-------------------|-------------------|------------------------|-------|--------|-------|-------|--|
| Day                                | CAPS concepts and skills   |          | LB                    | LB                | TG                | DBE                    |       | (      | Class |       |  |
|                                    |  |          | ex.                   | pp.               | pp.               | workbook               |       |        |       |       |  |
|                                    |  |          |                       |                   |                   |                        | C     | Date o | comp  | leted |  |
| 16                                 | <b>Revision</b><br>Algebraic equations and number sentences  |          | Ex. 2<br>6a–b<br>8a–c | 229               | 213<br>214        | Worksheet 78<br>p. 30  |       |        |       |       |  |
| 17                                 | FORMAL ASSESSMENT 1<br>Assignment<br>Select one of the three options provided  |          | Task                  | 275<br>276<br>277 | 252<br>253<br>254 |                        |       |        |       |       |  |
| 18                                 | <b>Interpreting graphs p. 65</b><br>Analyse and interpret global graphs of problem situations with special focus on:<br>linear or non-linear (temperature and time graphs)   |          | 1а–е                  | 231               | 220               | Worksheet 80a<br>p. 34 |       |        |       |       |  |
| 19                                 | <ul> <li>Analyse and interpret global graphs of problem situations with special focus on:</li> <li>constant increasing (rainfall and time graphs)</li> </ul>   |          | Ex. 1<br>1a–d         | 233               | 220               | Worksheet 80b<br>p. 36 |       |        |       |       |  |
| 20                                 | <ul><li>Analyse and interpret global graphs of problem situations with special focus on:</li><li>constant decreasing (time and distance travelled)</li></ul>   |          | Ex. 1<br>2a–d         | 233<br>234        | 221               | Worksheet 81<br>p. 38  |       |        |       |       |  |
|                                    | Refle  | ection   |                       |                   |                   |                        |       |        |       |       |  |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>back on track? | What wil | l you chang           | je next time      | ? Why?            |                        |       |        |       |       |  |
|                                    |  | HOD:     |                       |                   |                   |                        | Date: |        |       |       |  |

|                                    | Clever Keeping Mathem  | natics S | Simple   | Week 5                   |            |                        |       |        |       |       |
|------------------------------------|--|----------|--|--------------------------|------------|------------------------|-------|--------|-------|-------|
| Day                                | CAPS concepts and skills   |          | LB   | LB                       | TG         | DBE                    |       | (      | Class |       |
|                                    |  |          | ex.  | pp.                      | pp.        | workbook               |       |        |       |       |
|                                    |  |          |  |                          |            |                        | C     | Date o | omp   | leted |
| 21                                 | <ul> <li>Analyse and interpret global graphs of problem situations with special focus on:</li> <li>linear or non-linear</li> <li>constant increasing or decreasing (drawing of graphs)</li> </ul>  |          | Ex. 2<br>1a–c<br>3a–b                          | 236<br>237               | 221        | Worksheet 81<br>p. 39  |       |        |       |       |
| 22                                 | Draw global graphs from given descriptions of a problem situation, by identifying features like:<br>• linear and non-linear (drawing of graphs)  |          | Ex. 4<br>4a–b                                  | 237                      | 221        | Worksheet 82<br>p. 40  |       |        |       |       |
| 23                                 | Draw global graphs from given descriptions of a problem situation, by identifying features like:<br>• constants (drawing of graphs)  |          | Ex. 2<br>5a–c                                  | 238                      | 221        | Worksheet 83a<br>p. 42 |       |        |       |       |
| 24                                 | <b>Revision</b><br>Algebraic equations, number sentences and graphs  |          | Ex. 2<br>3a–e<br>5a–3<br>Ex. 1<br>2a–d<br>3a–c | 228<br>229<br>233<br>234 | 213<br>220 |                        |       |        |       |       |
| 25                                 | Remediation of assignment  |          |  |                          |            |                        |       |        |       |       |
|                                    | Refle  | ction    |  |                          |            |                        |       |        |       |       |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What wil | l you chang                                    | ge next time             | ? Why?     |                        |       |        |       |       |
|                                    |  | HOD:     |  |                          |            |                        | Date: |        |       |       |

|                                    | Clever Keeping Mathen  | natics S | Simple                         | Week 6             |                |  |       |        |       |       |  |
|------------------------------------|--|----------|--------------------------------|--------------------|----------------|--|-------|--------|-------|-------|--|
| Day                                | CAPS concepts and skills   |          | LB                             | LB                 | TG             | DBE  |       | C      | Class |       |  |
|                                    |  |          | ex.                            | pp.                | pp.            | WORKDOOK   |       |        |       |       |  |
|                                    |  |          |                                |                    |                |  | C     | Date o | omp   | leted |  |
| 26                                 | <ul> <li>Transformations p. 65</li> <li>Recognise, describe and perform translations with geometric figures and shape squared paper</li> </ul>   | es on    | Ex. 1<br>1 & 2<br>Ex. 2<br>1–5 | 241–242<br>244–245 | 224<br>225–227 | Worksheet 86<br>p. 50<br>Worksheet 88<br>p. 54       |       |        |       |       |  |
| 27                                 | Recognise, describe and perform reflections with geometric figures and shapes or squared paper   | ١        | Ex. 3<br>1–3                   | 249–250            | 228–230        | Worksheet 86<br>p. 51 no. b<br>Worksheet 89<br>p. 56 |       |        |       |       |  |
| 28                                 | Recognise, describe and perform rotations with geometric figures and shapes on squared paper   |          | Ex. 4<br>1–4                   | 252–253            | 232–236        | Worksheet 86<br>p. 51 no. a<br>Worksheet 87<br>p. 52 |       |        |       |       |  |
| 29                                 | Recognise, describe and perform rotations with geometric figures and shapes on squared paper   |          | Ex. 5<br>1–3                   | 258                | 239–241        | Worksheet 92<br>p. 62                                |       |        |       |       |  |
| 30                                 | FORMAL ASSESSMENT 2<br>Project   |          | Task                           | 278                | 255            |  |       |        |       |       |  |
|                                    | Reflec   | ction    |                                |                    |                |  |       |        |       |       |  |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>back on track? | What wil | l you chang                    | ge next time       | ? Why?         |  |       |        |       |       |  |
|                                    |  | HOD:     |                                |                    |                |  | Date: |        |       |       |  |

|                                    | Clever Keeping Mathem  | natics S         | Simple                            | Week 7       |            |                        |      |      |       |       |  |
|------------------------------------|--|------------------|-----------------------------------|--------------|------------|------------------------|------|------|-------|-------|--|
| Day                                | CAPS concepts and skills   |                  | LB                                | LB           | TG         | DBE                    |      |      | Class |       |  |
|                                    |  |                  | ex.                               | pp.          | pp.        | WORKDOOK               |      |      |       |       |  |
|                                    |  |                  |                                   |              |            |                        |      | Date | comp  | leted |  |
| 31                                 | <b>Enlargements and reductions p. 65</b><br>Draw enlargements and reductions of geometric figures on squared paper and find<br>factor of enlargement or reduction  | d the            | Ex. 5<br>4–6                      | 249          | 241–242    | Worksheet 93<br>p. 64  |      |      |       |       |  |
| 32                                 | Draw enlargements and reductions of geometric figures on squared paper and rec<br>the change of size of figures by increasing or decreasing BUT keeping the same le<br>will produce similar instead of congruent figures   | cognise<br>ength | Ex. 5<br>7–9                      | 259          | 242        | Worksheet 94<br>p. 66  |      |      |       |       |  |
| 33                                 | Draw enlargements and reductions of geometric figures on squared paper and find factor of enlargement or reduction   | d the            | Ex. 5<br>10–12                    | 260          | 242        | Worksheet 94<br>p. 67  |      |      |       |       |  |
| 34                                 | <ul> <li>Classifying 3-D objects p. 66</li> <li>Describe, sort and compare polyhedral in terms of:</li> <li>shape</li> <li>number of faces</li> </ul>  |                  | Ex. 1<br>1a–g<br>Ex. 2<br>3, 4, 5 | 262<br>269   | 247<br>248 | Worksheet 99<br>p. 76  |      |      |       |       |  |
| 35                                 | <ul> <li>Describe, sort and compare polyhedral in terms of:</li> <li>number of edges</li> <li>number of vertices</li> </ul>  |                  | Ех. 3<br>За–е<br>4а–е             | 273          | 249<br>250 | Worksheet 100<br>p. 78 |      |      |       |       |  |
|                                    | Reflec   | ction            |                                   |              |            |                        |      |      |       |       |  |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What wil         | l you chang                       | ge next time | ₽? Why?    |                        |      |      |       |       |  |
|                                    | HOD:   |                  |                                   |              |            |                        | Date | :    |       |       |  |

|                                    | Clever Keeping Mather  | Simple    | Week 8                         |              |            |                         |       |       |      |      |
|------------------------------------|--|-----------|--------------------------------|--------------|------------|-------------------------|-------|-------|------|------|
| Day                                | CAPS concepts and skills   |           | LB                             | LB           | TG         | DBE                     |       | С     | lass |      |
|                                    |  |           | ex.                            | pp.          | pp.        | workbook                |       |       |      |      |
|                                    |  |           |                                |              |            |                         | D     | ate c | ompl | eted |
| 36                                 | Revise using nets to create models of geometric solids: <b>cubes; prisms;</b><br>Draw sketches of nets using knowledge of shape and number of faces of solids  |           | Ex. 3<br>1a–d<br>2a–c          | 273          | 249        | Worksheet 102a<br>p. 82 |       |       |      |      |
| 37                                 | Remediation of project   |           | Act.<br>1–3                    | 272          | 248        | Worksheet 104<br>p. 88  |       |       |      |      |
| 38                                 | Construction of nets is based on the number and shape of the solid and does not measuring of internal angles of polygons   | t require | Ex. 3<br>6                     | 274          | 251        | Worksheet 104<br>p. 89  |       |       |      |      |
| 39                                 | Able to work out relative position of faces of the nets, using trial and error to mate edges and vertices to build the 3-D object  | ch        | Ex. 3<br>7                     | 274          | 251        | Worksheet 101<br>p. 80  |       |       |      |      |
| 40                                 | <b>Revision</b><br>Numeric and geometric patterns  |           | Ex. 2<br>2a–c<br>Ex. 3<br>2a–f | 205<br>208   | 195<br>196 |                         |       |       |      |      |
|                                    | Refle  | ection    |                                |              |            |                         |       |       |      |      |
| Think<br>the le<br>exten<br>to get | a <b>bout and make a note of:</b> What went well? What did not go well? What did arners find difficult or easy to understand or do? What will you do to support or d learners? Did you complete the work set for the week? If not, what will you do t back on track? | What wil  | l you chang                    | ge next time | ? Why?     |                         |       |       |      |      |
|                                    |  | HOD:      |                                |              |            |                         | Date: |       |      |      |

|                                   | Clever Keeping Mathe   | Simple   | Week 9      |              |        |                         |       |         |        |   |
|-----------------------------------|--|----------|-------------|--------------|--------|-------------------------|-------|---------|--------|---|
| Day                               | CAPS concepts and skills   |          | LB          | LB           | TG     | DBE                     |       | Cla     | ss     |   |
|                                   |  |          | ex.         | pp.          | pp.    | WORKDOOK                |       |         |        |   |
|                                   |  |          |             |              |        |                         | Da    | ate con | pletec | k |
| 41                                | Revision<br>Algebraic equations and expressions  |          |             |              |        |                         |       |         |        |   |
| 42                                | Revision<br>Geometry   |          |             |              |        | Worksheet 102b<br>p. 84 |       |         |        |   |
| 43                                | Revision   |          |             |              |        |                         |       |         |        |   |
| 44                                | Revision   |          |             |              |        |                         |       |         |        |   |
| 45                                | Revision   |          |             |              |        |                         |       |         |        |   |
|                                   | Refle  | ection   |             |              |        |                         |       |         | -      |   |
| Think<br>the le<br>exten<br>to ge | about and make a note of: What went well? What did not go well? What did arners find difficult or easy to understand or do? What will you do to support or d learners? Did you complete the work set for the week? If not, what will you do t back on track? | What wil | l you chang | ge next time | ? Why? |                         |       |         |        |   |
|                                   |  | HOD:     |             |              |        |                         | Date: |         |        |   |

|                                    | Clever Keeping Mathematics Simple Week 10: Revision and test – plan your week  |         |              |              |        |          |   |        |        |     |
|------------------------------------|--|---------|--------------|--------------|--------|----------|---|--------|--------|-----|
| Day                                | CAPS concepts and skills   |         | LB           | LB           | TG     | DBE      |   |        | Class  |     |
|                                    |  |         | ex.          | pp.          | pp.    | WORKDOOK |   |        |        |     |
|                                    |  |         |              |              |        |          | ]   | Date o | comple | ted |
| 46                                 |  |         |              |              |        |          |   |        |        |     |
| 47                                 |  |         |              |              |        |          |   |        |        |     |
| 48                                 |  |         |              |              |        |          |   |        |        |     |
| 49                                 |  |         |              |              |        |          |   |        |        |     |
| 50                                 |  |         |              |              |        |          |   |        |        |     |
|                                    | Refl   | ection  |              |              | 1      |          | <u>                                      </u> |        | I      |     |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>: back on track? | What wi | ll you chang | je next time | ? Why? |          |   |        |        |     |
|                                    |  | HOD:    |              |              |        |          | Date:   |        |        |     |

| Clever Keeping Mathematics Simple Week 11: Revision and remediation of test  |   |  |  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|--|--|
| End-of-ter   | m reflection  |  |  |  |  |  |  |  |  |
| Think about and make a note of: <ol> <li>Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</li> </ol> | 3. What ONE change should you make to your teaching practice to help you teach more effectively next term?  |  |  |  |  |  |  |  |  |
| 2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?   | 4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in the future? What plan will you make to get back on track? |  |  |  |  |  |  |  |  |
| HOD:   | Date:   |  |  |  |  |  |  |  |  |

## 2. Mathematics Today

This section maps out how you should use your Teacher's Guide and Learner's Book in a way that enables you to cover the curriculum sequentially, aligning with the CAPS, for well-paced and meaningful teaching.

The following components are provided in the columns of the tracker table:

- 1. Day/lesson number.
- 2. CAPS page numbers and content linked to Learner's Book content.
- 3. Learner's Book exercises/activities that cover the CAPS content for the day.
- 4. Page reference in the Learner's Book (LB page reference).
- 5. Page reference in your Teacher's Guide for the day's activities (TG page reference).
- 6. DBE workbook link to related content (worksheet and page numbers are referenced).
- 7. Date completed (complete this daily).

**Note:** You will find useful ideas and resources in the toolkit book *Mental Maths Activities and Printable Resources.* 

## Weekly reflection

The tracker gives you space to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and discuss things that worked or did not go so well in your lesson. Together with your HOD you can think of ways of improving on the daily work that the learners in your class are doing. When you reflect you could think about things such as:

• Was your preparation for the lesson adequate? For instance, did you have all the necessary resources? Had you thought through the content so that you

understood it fully and so could teach it effectively?

- Did the purpose of the lesson succeed? For instance, did the learners reach a good understanding of the key concepts for the day? Could they use the language expected from them? Could they write what was expected from them?
- Did the learners cope with the work set for the day? For instance, did they finish the classwork? Was their classwork done adequately? Did you assign the homework?
- Are your learners' books up to date?
- Does what the learners have done in their books correlate with the tracked comments in the tracker?

Briefly write down your reflection weekly, following the prompts in the tracker.

- What went well?
- What did not go well?
- What did the learners find difficult or easy to understand or do?
- What will you do to support or extend learners?
- Did you complete all the work set for the week?
- If not, how will you get back on track?
- What will you change for next time? Why?

The reflection should be based on the daily lessons you have taught each week. It will provide you with a record for the next time you implement the same lesson again, and also forms the basis for collegial conversations with your head of department and your peers.

|                                    | Mathematics To   | day Wo       | 'eek 1          |             |        |                      |         |          |
|------------------------------------|--|--------------|-----------------|-------------|--------|----------------------|---------|----------|
| Day                                | CAPS concepts and skills   |              | LB              | LB          | TG     | DBE                  | C       | lass     |
|                                    |  |              | ex.             | pp.         | pp.    | WOLKDOOK             |         |          |
|                                    |  |              |                 |             |        |                      | Date co | ompleted |
| 1                                  | <b>Investigate and extend patterns pp. 58–61</b><br>Relationship between numbers including patterns represented in physical or<br>diagram form   | E            | x. 11.1<br>1, 2 | 159         | 55     |                      |         |          |
| 2                                  | Relationship between numbers including patterns not limited to sequences including difference  | E            | x. 11.1<br>5    | 160         | 56     | Worksheet 65<br>p. 2 |         |          |
| 3                                  | Relationship between numbers including patterns not limited to sequences including ratio   |              |                 |             |        | Worksheet 66<br>p. 4 |         |          |
| 4                                  | Relationship between numbers including patterns of learners own creation   | E            | x. 11.1<br>8    | 161         | 56     |                      |         |          |
| 5                                  | Relationship between numbers including patterns represented in tables  | E            | x. 11.2<br>3    | 162         | 56     | Worksheet 68<br>p. 8 |         |          |
|                                    | Reflect  | tion         |                 |             |        |                      |         |          |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What will yo | ou change       | e next time | ? Why? |                      |         |          |
|                                    | ŀ  | HOD:         |                 |             |        | I                    | Date:   |          |

|                                    | Mathematics 7  | ōday   | Week 2                   |              |          |                        |       |        |        |   |
|------------------------------------|--|--------|--------------------------|--------------|----------|------------------------|-------|--------|--------|---|
| Day                                | CAPS concepts and skills   |        | LB                       | LB           | TG       | DBE                    |       | Cla    | ss     |   |
|                                    |  |        | ex.                      | pp.          | pp.      | WORKDOOK               |       |        |        |   |
|                                    |  |        |                          |              |          |                        | Da    | te cor | nplete | d |
| 6                                  | Relationship between numbers including patterns represented in diagrams, table difference and ratio  | es,    | Ex. 11.2<br>4, 5         | 162          | 56       | Worksheet 68<br>p. 9   |       |        |        |   |
| 7                                  | <b>Input and output values p. 62</b><br>Determine rules for patterns using flow diagrams, tables and formula   |        | Ex. 12.1<br>1a–c         | 171          | 60       | Worksheet 72<br>p. 18  |       |        |        |   |
| 8                                  | Determine, interpret and justify equivalence of different descriptions of the same<br>represented verbally, in flow diagrams, in tables;<br>Formula by number sentence   | rule   | Ex. 12.1<br>6, 9         | 171          | 60       | Worksheet 73<br>p. 20  |       |        |        |   |
| 9                                  | <ul><li>Revision</li><li>Numeric and geometric patterns</li><li>Input/output values</li></ul>  |        | 1, 2, 3<br>1             | 168<br>176   | 57<br>61 | Worksheet 71b<br>p. 16 |       |        |        |   |
| 10                                 | Algebraic language p. 63<br>Recognise and interpret rules or relationships represented in symbolic form  |        | Ex. 13.1<br>1a–b<br>2a–b | 179          | 64       | Worksheet 74<br>p. 22  |       |        |        |   |
|                                    | Refle  | ection |                          |              |          |                        |       |        |        |   |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What w | ill you chang            | je next time | ? Why?   |                        |       |        |        |   |
|                                    |  | HOD:   |                          |              |          |                        | Date: |        |        |   |

|                                   | Mathematics To  | oday   | Week 3                         |             |        |                       |       |      |       |       |   |
|-----------------------------------|---|--------|--------------------------------|-------------|--------|-----------------------|-------|------|-------|-------|---|
| Day                               | CAPS concepts and skills  |        | LB                             | LB          | TG     | DBE                   |       |      | Class |       |   |
|                                   |   |        | ex.                            | pp.         | pp.    | workbook              |       |      |       |       | _ |
|                                   |   |        |                                |             |        |                       | 0     | Date | comp  | leted |   |
| 11                                | Identify variables and constants in given formulae  |        | Ex. 13.2<br>1, 4               | 180         | 64     | Worksheet 74<br>p. 23 |       |      |       |       |   |
| 12                                | Identify variables and constants in given equations   |        | Ex. 13.3<br>1, 2               | 182         | 65     | Worksheet 77<br>p. 28 |       |      |       |       |   |
| 13                                | <ul> <li>Number sentences p. 64</li> <li>Write number sentences to describe problem situations</li> <li>Analyse and interpret number sentences that describe a given situation</li> </ul>   |        | Ex. 14.1<br>2, 4               | 186         | 67     | Worksheet 79<br>p. 32 |       |      |       |       |   |
| 14                                | <ul><li>Solve and complete number sentences by:</li><li>inspection</li><li>trial and improvement</li></ul>  |        | Ex. 14.1<br>5<br>Ex. 14.3<br>1 | 186<br>188  | 67     | Worksheet 79<br>p. 33 |       |      |       |       |   |
| 15                                | <ul> <li>Algebraic language p. 63</li> <li>Identify variables and constants in given formulae or equations</li> <li>Determine the numerical value of an expression by substitution</li> </ul>   |        | Ex. 14.2<br>1, 2, 4            | 187<br>188  | 67     | Worksheet 78<br>p. 30 |       |      |       |       |   |
|                                   | Reflec  | ction  |                                |             |        |                       |       |      |       |       |   |
| Think<br>the le<br>exten<br>to ge | about and make a note of: What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What w | ill you chang                  | e next time | ? Why? |                       |       |      |       |       |   |
|                                   |   | HOD:   |                                |             |        |                       | Date: |      |       |       |   |

|                                    | Mathematics To   | day V              | Neek 4        |              |          |                        |       |        |        |   |
|------------------------------------|--|--------------------|---------------|--------------|----------|------------------------|-------|--------|--------|---|
| Day                                | CAPS concepts and skills   |                    | LB            | LB           | TG       | DBE                    |       | Clas   | s      |   |
|                                    |  |                    | ex.           | pp.          | pp.      | WORKDOOK               |       |        |        |   |
|                                    |  |                    |               |              |          |                        | Da    | te com | pletec | 4 |
| 16                                 | <b>Revision</b><br>Algebraic equations and number sentences  |                    | 1, 2<br>1, 4  | 184<br>192   | 65<br>68 | Worksheet 76<br>p. 30  |       |        |        |   |
| 17                                 | FORMAL ASSESSMENT 1<br>Assignment  |                    | Task          | 193–194      | 69       |                        |       |        |        |   |
| 18                                 | <ul> <li>Interpreting graphs p. 65</li> <li>Analyse and interpret global graphs of problem situations with special focus on:</li> <li>linear or non-linear (temperature and time graphs)</li> </ul>  |                    | Ex. 15.1<br>7 | 198          | 70       | Worksheet 80a<br>p. 34 |       |        |        |   |
| 19                                 | Analyse and interpret global graphs of problem situations with special focus on:<br>• constant increasing (rainfall and time graphs)   |                    | Ex. 15.1<br>1 | 197          | 70       | Worksheet 80b<br>p. 36 |       |        |        |   |
| 20                                 | Analyse and interpret global graphs of problem situations with special focus on:<br>• constant decreasing (time and distance travelled)  |                    | Ex. 15.1<br>5 | 197          | 70       | Worksheet 81<br>p. 38  |       |        |        |   |
|                                    | Reflect  | tion               |               |              |          |                        |       |        |        |   |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>back on track? | What will <u>y</u> | you chang     | je next time | ? Why?   |                        |       |        |        |   |
|                                    | F  | HOD:               |               |              |          |                        | Date: |        |        |   |

|                                    | Mathematics Too  | day      | Week 5              |             |          |  |       |                |      |  |
|------------------------------------|--|----------|---------------------|-------------|----------|--|-------|----------------|------|--|
| Day                                | CAPS concepts and skills   |          | LB                  | LB          | TG       | DBE  |       | С              | lass |  |
|                                    |  |          | ex.                 | pp.         | pp.      | WORKDOOK                                       |       |                |      |  |
|                                    |  |          |                     |             |          |  | D     | Date completed |      |  |
| 21                                 | <ul> <li>Analyse and interpret global graphs of problem situations with special focus on:</li> <li>linear or non-linear</li> <li>constant increasing or decreasing (drawing of graphs)</li> </ul>  |          | Ex. 15.2<br>1, 4, 5 | 201<br>202  | 70<br>71 | Worksheet 81<br>p. 39                          |       |                |      |  |
| 22                                 | Draw global graphs from given descriptions of a problem situation, by identifying features like:<br>• linear and non-linear (drawing of graphs)  |          | Ex. 15.3<br>1, 2    | 203<br>204  | 72       | Worksheet 82<br>p. 40                          |       |                |      |  |
| 23                                 | Draw global graphs from given descriptions of a problem situation, by identifying features like:<br>• constants (drawing of graphs)  |          | Ex. 15.3<br>4, 5    | 205<br>206  | 73       | Worksheet 83a<br>p. 42                         |       |                |      |  |
| 24                                 | <b>Revision</b><br>Algebraic equations, number sentences and graphs  |          | 1, 3<br>1, 2        | 192<br>207  | 68<br>74 |  |       |                |      |  |
| 25                                 | <b>Transformations p. 65</b><br>Recognise, describe and perform translations with geometric figures and shapes on squared paper  | ٦        | Ex. 16.2<br>1, 2    | 212         | 81       | Worksheet 86<br>p. 50<br>Worksheet 88<br>p. 54 |       |                |      |  |
|                                    | Reflect  | tion     |                     |             |          |  |       |                |      |  |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>back on track? | What wil | ll you chang        | e next time | ? Why?   |  |       |                |      |  |
|                                    | F  | HOD:     |                     |             |          |  | Date: |                |      |  |

|                                     | Mathematics Toc  | day         | Week 6                            |            |          |  |       |        |       |
|-------------------------------------|--|-------------|-----------------------------------|------------|----------|--|-------|--------|-------|
| Day                                 | CAPS concepts and skills   |             | LB                                | LB         | TG       | DBE  |       | Class  |       |
|                                     |  |             | ex.                               | pp.        | pp.      | workbook   |       |        |       |
|                                     |  |             |                                   |            |          |  | Dat   | e comp | leted |
| 26                                  | <b>Transformations p. 65</b><br>Identify and draw lines of symmetry in geometric figures   |             | Ex. 16.1<br>2, 5                  | 209<br>210 | 80       | Worksheet 86<br>p. 51 no. b<br>Worksheet 89<br>p. 56   |       |        |       |
| 27                                  | Recognise, describe and perform translations and reflection with geometric figures a shapes on squared paper   | and         | Ex. 16.2<br>1, 2<br>Ex. 16.2<br>3 | 212        | 81       | Worksheet 86<br>p. 50<br>Worksheet 88<br>p. 54<br>Worksheet 86<br>p. 51 no. a<br>Worksheet 87<br>p. 52 |       |        |       |
| 28                                  | Recognise, describe and perform rotations with geometric figures and shapes on sq<br>paper   | quared      | Ex. 16.4<br>1, 3                  | 215<br>216 | 81<br>82 | Worksheet 92<br>p. 62  |       |        |       |
| 29                                  | Draw enlargements and reductions of geometric figures on squared paper and com them in terms of shape  | npare       | Ex. 16.5<br>1, 3                  | 217<br>218 | 82       | Worksheet 93<br>p. 64  |       |        |       |
| 30                                  | Draw enlargements and reductions of geometric figures on squared paper and com them in terms of size   | npare       | Ex. 16.6<br>3, 5                  | 219<br>220 | 82       |  |       |        |       |
|                                     | Reflecti   | tion        |                                   |            |          |  |       |        |       |
| Think<br>the le<br>exten-<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>back on track? | e next time | ? Why?                            |            |          |  |       |        |       |
|                                     | Н  | IOD:        |                                   |            |          |  | Date: |        |       |

|                                    | Mathematics Toda   | y Week                 | 7            |         |                        |       |        |       |       |   |
|------------------------------------|--|------------------------|--------------|---------|------------------------|-------|--------|-------|-------|---|
| Day                                | CAPS concepts and skills   | LB                     | LB           | TG      | DBE                    |       | (      | Class |       |   |
|                                    |  | ex.                    | pp.          | pp.     | WORKDOOK               |       |        |       |       |   |
|                                    |  |                        |              |         |                        | C     | Date d | comp  | letec | ł |
| 31                                 | <b>Enlargements and reductions p. 65</b><br>Draw enlargements and reductions of geometric figures on squared paper and recogn<br>the production of congruent figures   | nise Ex. 16.5          | 5 217        | 82      |                        |       |        |       |       |   |
| 32                                 | Draw enlargements and reductions of geometric figures on squared paper and recogn<br>the change of size of figures by increasing or decreasing BUT keeping the same length<br>will produce similar instead of congruent figures  | nise Ex. 16.6<br>n 4–5 | 220          | 82      |                        |       |        |       |       |   |
| 33                                 | Draw enlargements and reductions of geometric figures on squared paper and find the factor of enlargement or reduction   | e Ex. 16.5<br>4–5      | 5 218        | 82      | Worksheet 99<br>p. 76  |       |        |       |       |   |
| 34                                 | FORMAL ASSESSMENT 2<br>Project   | Task                   | 222          | 85      |                        |       |        |       |       |   |
| 35                                 | Classifying 3-D objects p. 66<br>Describe, sort and compare polyhedral in terms of:<br>• shape<br>• number of faces  | Ex. 17.1               | 224          | 86      | Worksheet 100<br>p. 78 |       |        |       |       |   |
|                                    | Reflection   | า                      |              |         |                        |       |        |       |       |   |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | at will you cha        | nge next tim | e? Why? |                        |       |        |       |       |   |
|                                    | НОГ  | D:                     |              |         |                        | Date: |        |       |       |   |

|                                    | Mathematics Too  | day      | Week 8                                     |             |        |  |       |       |       |
|------------------------------------|--|----------|--|-------------|--------|--|-------|-------|-------|
| Day                                | CAPS concepts and skills   |          | LB   | LB          | TG     | DBE  |       | Class |       |
|                                    |  |          | ex.  | pp.         | pp.    | WORKDOOK   |       |       |       |
|                                    |  |          |  |             |        |  | Date  | comp  | leted |
| 36                                 | <ul> <li>Describe, sort and compare polyhedral in terms of:</li> <li>number of edges</li> <li>number of vertices</li> </ul>  |          | Ex. 17.2                                   | 226         | 86     | Worksheet 102a<br>p. 82                          |       |       |       |
| 37                                 | <b>Revision</b><br>Use nets to create models of geometric solids: <b>cubes; prisms;</b><br>Draw sketches of nets using knowledge of shape and number of faces of solids  |          | Ex. 17.5<br>1, 2, 3<br>Ex. 17.6<br>1, 2, 3 | 231         | 88     | Worksheet 104<br>p. 89<br>Worksheet 104<br>p. 88 |       |       |       |
| 38                                 | Remediation of project   |          |  |             |        |  |       |       |       |
| 39                                 | Construction of nets is based on the number and shape of the solid and does not re<br>measuring of internal angles of polygons   | equire   | Ex. 17.7<br>1, 2, 3                        | 233         | 88     | Worksheet 101<br>p. 80                           |       |       |       |
| 40                                 | Able to work out relative position of faces of the nets, using trial and error to match edges and vertices to build the 3-D object   | 1        | Ex. 17.3<br>2, 3                           | 229         | 86     |  |       |       |       |
|                                    | Reflect  | tion     |  |             |        |  |       |       |       |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | Vhat wil | ll you chang                               | e next time | ? Why? |  |       |       |       |
|                                    | н  | IOD:     |  |             |        | I  | Date: |       |       |

|                                   | Mathematics 7   | Today   | Week 9        |             |  |          |                |
|-----------------------------------|---|---------|---------------|-------------|--|----------|----------------|
| Day                               | CAPS concepts and skills  |         | LB            | LB          | TG                                     | DBE      | Class          |
|                                   |   |         | ex.           | pp.         | pp.                                    | workbook |                |
|                                   |   |         |               |             |  |          | Date completed |
| 41                                | <b>Revision</b><br>Numeric and geometric patterns<br>Functions and relationships  |         | 1–4<br>1–5    | 168<br>184  | 57<br>61–62<br>PWB<br>Topic 11<br>& 12 |          |                |
| 42                                | <b>Revision</b><br>Algebraic number sentences<br>Graphs   |         | 1–7<br>1–3    | 192<br>207  | 68<br>74<br>PWB<br>Topic<br>13–16      |          |                |
| 43                                | Revision<br>Transformations   |         | 1-4           | 221         | 84<br>PWB<br>Topic 16                  |          |                |
| 44                                | Revision<br>Geometry: 3-D objects   |         | 1–15          | 234         | 89<br>PWB<br>Topic 17                  |          |                |
| 45                                | Revision  |         | Task          | -           | 90                                     |          |                |
|                                   | Refle   | ection  |               |             |  |          |                |
| Think<br>the le<br>exten<br>to ge | about and make a note of: What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What wi | ill you chang | e next time | ? Why?                                 |          |                |
|                                   |   | HOD:    |               |             |  |          | Date:          |

|                                   | Mathematics Today Week 10: I  | Revision | and test     | t – plan y   | our weel | ٢        |       |          |      |       |  |
|-----------------------------------|---|----------|--------------|--------------|----------|----------|-------|----------|------|-------|--|
| Day                               | CAPS concepts and skills  |          | LB           | LB           | TG       | DBE      | Class |          |      |       |  |
|                                   |   |          | ex.          | pp.          | pp.      | WORKDOOK |       |          |      |       |  |
|                                   |   |          |              |              |          |          |       | Date     | comp | leted |  |
| 46                                |   |          |              |              |          |          |       |          |      |       |  |
| 47                                |   |          |              |              |          |          |       |          |      |       |  |
| 48                                |   |          |              |              |          |          |       |          |      |       |  |
| 49                                |   |          |              |              |          |          |       |          |      |       |  |
| 50                                |   |          |              |              |          |          |       |          |      |       |  |
|                                   | Refl  | ection   | <u> </u>     | <u> </u>     | <u> </u> |          | 1     | <u> </u> | l    | 1     |  |
| Think<br>the le<br>exten<br>to ge | about and make a note of: What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What wi  | ll you chang | je next time | ? Why?   |          |       |          |      |       |  |
|                                   |   | HOD:     |              |              |          |          | Date: |          |      |       |  |

| Mathematics Today Week 11: Revision and remediation of test  |   |  |  |  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|--|--|--|
| End-of-ter   | m reflection  |  |  |  |  |  |  |  |  |  |
| Think about and make a note of: <ol> <li>Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</li> </ol> | 3. What ONE change should you make to your teaching practice to help you teach<br>more effectively next term?   |  |  |  |  |  |  |  |  |  |
| 2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?   | 4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in the future? What plan will you make to get back on track? |  |  |  |  |  |  |  |  |  |
| HOD:   | Date:   |  |  |  |  |  |  |  |  |  |

## 3. Oxford Headstart Mathematics

This section maps out how you should use your Teacher's Guide and Learner's Book in a way that enables you to cover the curriculum sequentially, aligning with the CAPS, for well-paced and meaningful teaching.

The following components are provided in the columns of the tracker table:

- 1. Day/lesson number.
- 2. CAPS page numbers and content linked to Learner's Book content.
- 3. Learner's Book exercises/activities that cover the CAPS content for the day.
- 4. Page reference in the Learner's Book (LB page reference).
- 5. Page reference in your Teacher's Guide for the day's activities (TG page reference).
- 6. DBE workbook link to related content (worksheet and page numbers are referenced).
- 7. Date completed (complete this daily).

**Note:** You will find useful ideas and resources in the toolkit book *Mental Maths Activities and Printable Resources.* 

### Weekly reflection

The tracker gives you space to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and discuss things that worked or did not go so well in your lesson. Together with your HOD you can think of ways of improving on the daily work that the learners in your class are doing. When you reflect you could think about things such as:

• Was your preparation for the lesson adequate? For instance, did you have all the necessary resources? Had you thought through the content so that you

understood it fully and so could teach it effectively?

- Did the purpose of the lesson succeed? For instance, did the learners reach a good understanding of the key concepts for the day? Could they use the language expected from them? Could they write what was expected from them?
- Did the learners cope with the work set for the day? For instance, did they finish the classwork? Was their classwork done adequately? Did you assign the homework?
- Are your learners' books up to date?
- Does what the learners have done in their books correlate with the tracked comments in the tracker?

Briefly write down your reflection weekly, following the prompts in the tracker.

- What went well?
- What did not go well?
- What did the learners find difficult or easy to understand or do?
- What will you do to support or extend learners?
- Did you complete all the work set for the week?
- If not, how will you get back on track?
- What will you change for next time? Why?

The reflection should be based on the daily lessons you have taught each week. It will provide you with a record for the next time you implement the same lesson again, and also forms the basis for collegial conversations with your head of department and your peers.

|                                    | Oxford Headstart M   | lathema  | tics We                          | eek 1       |         |                      |       |        |       |       |
|------------------------------------|--|----------|----------------------------------|-------------|---------|----------------------|-------|--------|-------|-------|
| Day                                | CAPS concepts and skills   |          | LB                               | LB          | TG      | DBE                  |       | (      | Class |       |
|                                    |  |          | act.                             | pp.         | pp.     | WORKDOOK             |       |        |       |       |
|                                    |  |          |                                  |             |         |                      | D     | Date o | comp  | leted |
| 1                                  | <b>Investigate and extend patterns pp. 58–61</b><br>Relationship between numbers including patterns represented in physical or<br>diagram form   |          | Act. 1<br>1a–c<br>Act. 2<br>1, 2 | 216<br>218  | 179–181 |                      |       |        |       |       |
| 2                                  | Relationship between numbers including patterns not limited to sequences including difference  |          | Act. 3<br>3, 4                   | 218         | 183     | Worksheet 65<br>p. 2 |       |        |       |       |
| 3                                  | Relationship between numbers including patterns not limited to sequences including ratio   |          | Act. 3<br>5                      | 218         | 183     | Worksheet 66<br>p. 4 |       |        |       |       |
| 4                                  | Relationship between numbers including patterns of learners own creation   |          | Act. 3<br>8<br>Act. 4<br>8       | 220<br>221  | _       |                      |       |        |       |       |
| 5                                  | Relationship between numbers including patterns represented in tables  |          | 1–3                              | 223         | 184     | Worksheet 68<br>p. 8 |       |        |       |       |
|                                    | Refle  | ection   |                                  |             |         |                      |       |        |       |       |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>back on track? | What wil | l you chang                      | e next time | ? Why?  |                      |       |        |       |       |
|                                    |  | HOD:     |                                  |             |         |                      | Date: |        |       |       |
|                                    | Oxford Headstart Ma  | athema   | atics Wo                       | eek 2       |                |                        |       |      |       |       |  |
|------------------------------------|--|----------|--------------------------------|-------------|----------------|------------------------|-------|------|-------|-------|--|
| Day                                | CAPS concepts and skills   |          | LB                             | LB          | TG             | DBE                    |       |      | Class |       |  |
|                                    |  |          | act.                           | pp.         | pp.            | workbook               |       |      |       |       |  |
|                                    |  |          |                                |             |                |                        | 1     | Date | comp  | leted |  |
| 6                                  | <b>Input and output values p. 62</b><br>Determine rules for patterns using flow diagrams, tables and formula   |          | Act. 1<br>1, 3, 5, 7<br>Act. 3 | 226<br>228  | 188<br>189     | Worksheet 68<br>p. 9   |       |      |       |       |  |
| 7                                  | Determine, interpret and justify equivalence of different descriptions of the same represented verbally, in flow diagrams, in tables;<br>Formula by number sentence  | rule     | Act. 1<br>1, 3                 | 230<br>231  | 190<br>191     | Worksheet 72<br>p. 18  |       |      |       |       |  |
| 8                                  | <ul><li>Revision</li><li>Numeric and geometric patterns</li><li>Input/output values</li></ul>  |          | 1, 3                           | 233         | 191–192        | Worksheet 73<br>p. 20  |       |      |       |       |  |
| 9                                  | <b>Algebraic language p. 63</b><br>Recognise and interpret rules or relationships represented in symbolic form   |          | Act. 1<br>2<br>Act. 2<br>1–10  | 237<br>238  | 194–195<br>196 | Worksheet 71b<br>p. 16 |       |      |       |       |  |
| 10                                 | Identify variables and constants in given formulae   |          | Act. 1<br>1                    | 237         | 191–192        | Worksheet 74<br>p. 22  |       |      |       |       |  |
|                                    | Refle  | ction    |                                |             |                |                        |       |      |       |       |  |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>back on track? | What wil | ll you chang                   | e next time | e? Why?        |                        |       |      |       |       |  |
|                                    |  | HOD:     |                                |             |                |                        | Date: |      |       |       |  |

|                                    | Oxford Headstart N   | lathema  | atics W                        | 'eek 3         |            |                       |       |      |       |       |   |
|------------------------------------|--|----------|--------------------------------|----------------|------------|-----------------------|-------|------|-------|-------|---|
| Day                                | CAPS concepts and skills   |          | LB                             | LB             | TG         | DBE                   |       | (    | Class |       |   |
|                                    |  |          | act.                           | pp.            | pp.        | workbook              |       |      |       |       |   |
|                                    |  |          |                                |                |            |                       | [     | Date | comp  | letec | 4 |
| 11                                 | Identify variables and constants in given equations  |          | Act. 3<br>1–3                  | 240            | 196–197    | Worksheet 74<br>p. 23 |       |      |       |       |   |
| 12                                 | <ul> <li>Number sentences p. 64</li> <li>Write number sentences to describe problem situations</li> <li>Analyse and interpret number sentences that describe a given situation</li> </ul>  |          | Act. 1<br>1a–c<br>2a–c         | 242<br>243     | 199–200    | Worksheet 77<br>p. 28 |       |      |       |       |   |
| 13                                 | <ul><li>Solve and complete number sentences by:</li><li>inspection</li><li>trial and improvement</li></ul>   |          | Act. 2<br>1–5<br>Act. 3<br>1–2 | 244<br>244–245 | 200<br>200 | Worksheet 79<br>p. 32 |       |      |       |       |   |
| 14                                 | FORMAL ASSESSMENT 1<br>Assignment  |          | Task                           | 245            | 201        | Worksheet 79<br>p. 33 |       |      |       |       |   |
| 15                                 | <ul> <li>Algebraic language p. 63</li> <li>Identify variables and constants in given formulae or equations</li> <li>Determine the numerical value of an expression by substitution</li> </ul>  |          | Act. 3<br>2–5                  | 244–245        | 200–201    | Worksheet 78<br>p. 30 |       |      |       |       |   |
|                                    | Refl   | ection   |                                |                |            |                       |       |      |       |       |   |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What wil | l you chang                    | ge next time   | ? Why?     |                       |       |      |       |       |   |
|                                    |  | HOD:     |                                |                |            |                       | Date: |      |       |       |   |

|                                    | Oxford Headstart M   | lathema  | ntics W       | eek 4        |        |                        |       |        |       |     |
|------------------------------------|--|----------|---------------|--------------|--------|------------------------|-------|--------|-------|-----|
| Day                                | CAPS concepts and skills   |          | LB            | LB           | TG     | DBE                    |       | C      | Class |     |
|                                    |  |          | act.          | pp.          | pp.    | WORKDOOK               |       |        |       |     |
|                                    |  |          |               |              |        |                        | D     | )ate c | omple | ted |
| 16                                 | <b>Revision</b><br>Algebraic equations and number sentences  |          | 1–8           | 247          | 202    | Worksheet 76<br>p. 30  |       |        |       |     |
| 17                                 | <ul> <li>Interpreting graphs p. 65</li> <li>Analyse and interpret global graphs of problem situations with special focus on:</li> <li>linear or non-linear (temperature and time graphs)</li> </ul>  |          | Act. 1<br>1–4 | 253–254      | 207    | Worksheet 84<br>p. 46  |       |        |       |     |
| 18                                 | <ul><li>Analyse and interpret global graphs of problem situations with special focus on:</li><li>constant increasing (rainfall and time graphs)</li></ul>  |          | Act. 2<br>1–5 | 256          | 208    | Worksheet 80a<br>p. 34 |       |        |       |     |
| 19                                 | <ul> <li>Analyse and interpret global graphs of problem situations with special focus on:</li> <li>constant decreasing (time and distance travelled)</li> </ul>  |          | Act. 3<br>1–2 | 257–258      | 209    | Worksheet 80b<br>p. 36 |       |        |       |     |
| 20                                 | <ul> <li>Analyse and interpret global graphs of problem situations with special focus on:</li> <li>linear or non-linear</li> <li>constant increasing or decreasing (drawing of graphs)</li> </ul>  |          | Act. 1<br>5–7 | 255          | 207    | Worksheet 81<br>p. 38  |       |        |       |     |
|                                    | Refle  | ection   |               |              |        |                        |       |        |       |     |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>back on track? | What wil | l you chang   | ge next time | ? Why? |                        |       |        |       |     |
|                                    |  | HOD:     |               |              |        |                        | Date: |        |       |     |

|                                    | Oxford Headstart M  | athema   | atics W                        | eek 5        |                    |  |       |      |       |       |
|------------------------------------|---|----------|--------------------------------|--------------|--------------------|--|-------|------|-------|-------|
| Day                                | CAPS concepts and skills  |          | LB                             | LB           | TG                 | DBE  |       |      | Class |       |
|                                    |   |          | act.                           | pp.          | pp.                | WORKDOOK                                       |       |      |       |       |
|                                    |   |          |                                |              |                    |  | 0     | Date | comp  | leted |
| 21                                 | Draw global graphs from given descriptions of a problem situation, by identifying features like:<br>• <b>linear and non-linear</b> (drawing of graphs)  |          | Act. 3<br>3                    | 258          | 209                | Worksheet 81<br>p. 39                          |       |      |       |       |
| 22                                 | Draw global graphs from given descriptions of a problem situation, by identifying features like:<br>• constants (drawing of graphs)   |          | Act. 3<br>4                    | 258          | 209                | Worksheet 82<br>p. 40                          |       |      |       |       |
| 23                                 | <b>Revision</b><br>Algebraic equations, number sentences and graphs   |          | 1–5                            | 259          | 210                | Worksheet 83a<br>p. 42                         |       |      |       |       |
| 24                                 | <b>Transformations p. 65</b><br>Recognise, describe and perform translations and reflections with geometric figur<br>shapes on squared paper  | res and  | Act. 1<br>1–6<br>Act. 2<br>1–4 | 262–264      | 212–213<br>214–215 | Worksheet 86<br>p. 50<br>Worksheet 88<br>p. 54 |       |      |       |       |
| 25                                 | Remediation of assignment   |          |                                |              |                    |  |       |      |       |       |
|                                    | Refle   | ction    |                                |              |                    |  |       |      |       |       |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did arners find difficult or easy to understand or do? What will you do to support or d learners? Did you complete the work set for the week? If not, what will you do t back on track? | What wil | ll you chang                   | ge next time | ? Why?             |  |       |      |       |       |
|                                    |   | HOD:     |                                |              |                    |  | Date: |      |       |       |

|                                   | Oxford Headstart Mathe  | matics W                      | 'eek 6       |         |  |       |        |        |  |
|-----------------------------------|---|-------------------------------|--------------|---------|--|-------|--------|--------|--|
| Day                               | CAPS concepts and skills  | LB                            | LB           | TG      | DBE  |       | Clas   | s      |  |
|                                   |   | act.                          | pp.          | pp.     | workbook   |       |        |        |  |
|                                   |   |                               |              |         |  | Da    | te com | pleted |  |
| 26                                | Recognise, describe and perform rotations with geometric figures and shapes on squared paper  | Act. 3<br>1–4                 | 265          | 218     | Worksheet 86<br>p. 51 no. b<br>Worksheet 89<br>p. 56 |       |        |        |  |
| 27                                | Identify and draw lines of symmetry in geometric figures  | Act. 2<br>1, 2                | 268          | 217–218 | Worksheet 86<br>p. 51 no. a<br>Worksheet 87<br>p. 52 |       |        |        |  |
| 28                                | Draw enlargements and reductions of geometric figures on squared paper and compar<br>them in terms of shape   | re Act. 1<br>1                | 272          | 219–220 | Worksheet 92<br>p. 62                                |       |        |        |  |
| 29                                | Draw enlargements and reductions of geometric figures on squared paper and compar<br>them in terms of size  | re Act. 1<br>2<br>Act. 2<br>1 | 273<br>274   | 220     | Worksheet 93<br>p. 64                                |       |        |        |  |
| 30                                | FORMAL ASSESSMENT 2<br>Project  | Task<br>Option 1<br>or 2 or 3 | 289          | 228     |  |       |        |        |  |
|                                   | Reflection  |                               |              |         |  |       |        |        |  |
| Think<br>the le<br>exten<br>to ge | about and make a note of: What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | t will you chang              | ge next time | ₽? Why? |  |       |        |        |  |
|                                   | HOD   | D:                            |              |         |  | Date: |        |        |  |

|                                    | Oxford Headstart Ma  | athema            | tics W      | eek 7        |        |                        |       |       |      |      |  |
|------------------------------------|--|-------------------|-------------|--------------|--------|------------------------|-------|-------|------|------|--|
| Day                                | CAPS concepts and skills   |                   | LB          | LB           | TG     | DBE                    |       | C     | lass |      |  |
|                                    |  |                   | аст.        | pp.          | pp.    | WORKDOOK               |       |       |      |      |  |
|                                    |  |                   |             |              |        |                        | D     | ate c | ompl | eted |  |
| 31                                 | <b>Enlargements and reductions p. 65</b><br>Draw enlargements and reductions of geometric figures on squared paper and red<br>the production of congruent figures  | ecognise          |             |              |        | Worksheet 94<br>p. 66  |       |       |      |      |  |
| 32                                 | Draw enlargements and reductions of geometric figures on squared paper and red<br>the change of size of figures by increasing or decreasing BUT keeping the same le<br>will produce similar instead of congruent figures   | ecognise<br>ength |             |              |        | Worksheet 94<br>p. 67  |       |       |      |      |  |
| 33                                 | Revision   |                   | 1–4         | 278          | 222    |                        |       |       |      |      |  |
| 34                                 | <ul> <li>Classifying 3-D objects p. 66</li> <li>Describe, sort and compare polyhedral in terms of:</li> <li>shape</li> <li>number of faces</li> </ul>  |                   | Act. 1      | 281          | 225    | Worksheet 99<br>p. 76  |       |       |      |      |  |
| 35                                 | Describe, sort and compare polyhedral in terms of:<br>• number of edges<br>• number of vertices  |                   | Act. 5      | 286          | 227    | Worksheet 100<br>p. 78 |       |       |      |      |  |
|                                    | Refle  | ection            |             |              |        |                        |       |       |      |      |  |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What wil          | l you chang | je next time | ? Why? |                        |       |       |      |      |  |
|                                    |  | HOD:              |             |              |        |                        | Date: |       |      |      |  |

|                                    | Oxford Headstart Math  | hemat       | ics We                     | eek 8             |         |   |       |        |       |  |
|------------------------------------|--|-------------|----------------------------|-------------------|---------|---|-------|--------|-------|--|
| Day                                | CAPS concepts and skills   |             | LB                         | LB                | TG      | DBE   |       | Class  |       |  |
|                                    |  |             | аст.                       | pp.               | pp.     | WORKDOOK  |       |        |       |  |
|                                    |  |             |                            |                   |         |   | Dat   | e comp | leted |  |
| 36                                 | Revise using nets to create models of geometric solids: <b>cubes; prisms;</b><br>Draw sketches of nets using knowledge of shape and number of faces of solids  |             | Act. 2<br>Act. 3<br>Act. 4 | 282<br>282<br>284 | 226     | Worksheet 104<br>p. 88<br>Worksheet 102a<br>p. 82 |       |        |       |  |
| 37                                 | Remediation of project   |             |                            |                   |         |   |       |        |       |  |
| 38                                 | Construction of nets is based on the number and shape of the solid and does not red<br>measuring of internal angles of polygons  | equire      | Act. 6<br>1, 2             | 287               | 227     | Worksheet 104<br>p. 89                            |       |        |       |  |
| 39                                 | Able to work out relative position of faces of the nets, using trial and error to match edges and vertices to build the 3-D object   |             | Act. 6<br>3, 4             | 287               | 2       | Worksheet 101<br>p. 80                            |       |        |       |  |
| 40                                 | <b>Revision</b><br>Numeric and geometric patterns  |             | 1–3                        | 223               | 184–185 |   |       |        |       |  |
|                                    | Reflection   | ion         |                            |                   |         |   |       |        |       |  |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>: back on track? | Vhat will y | you chang                  | e next time       | ? Why?  |   |       |        |       |  |
|                                    | н  | IOD:        |                            |                   |         | I   | Date: |        |       |  |

|                                    | Oxford Headstart Mathematics Week 9  |              |          |             |          |          |                 |        |       |
|------------------------------------|--|--------------|----------|-------------|----------|----------|-----------------|--------|-------|
| Day                                | CAPS concepts and skills   |              | LB       | LB          | TG       | DBE      | Class Date comp |        |       |
|                                    |  |              | acı.     | pp.         | pp.      | WORKDOOK |                 |        |       |
|                                    |  |              |          |             |          |          | Dat             | e comp | leted |
| 41                                 | <b>Revision</b><br>Functions and relationships   |              | 1–4      | 233         | 191–192  |          |                 |        |       |
| 42                                 | <b>Revision</b><br>Algebraic equations and expressions   |              | 1–10     | 247         | 202      |          |                 |        |       |
| 43                                 | Revision<br>Graphs   |              | 1–7      | 259         | 210      |          |                 |        |       |
| 44                                 | Revision<br>Geometry   |              | 1–5      | 290         | 229      |          |                 |        |       |
| 45                                 | Revision   |              |          |             |          |          |                 |        |       |
|                                    | Refle  | ection       |          |             | <u> </u> |          | II              |        |       |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>back on track? | What will yc | ou chang | e next time | ? Why?   |          |                 |        |       |
|                                    |  | HOD:         |          |             |          |          | Date:           |        |       |

|                                    | Oxford Headstart Mathematics Wee  | vision ar | nd test –    | plan you     | r week |          |       |        |       |       |  |
|------------------------------------|---|-----------|--------------|--------------|--------|----------|-------|--------|-------|-------|--|
| Day                                | CAPS concepts and skills  |           | LB           | LB           | TG     | DBE      |       | (      | Class |       |  |
|                                    |   |           | act.         | pp.          | pp.    | WORKDOOK |       |        |       |       |  |
|                                    |   |           |              |              |        |          |       | Date o | comp  | leted |  |
| 46                                 |   |           |              |              |        |          |       |        |       |       |  |
| 47                                 |   |           |              |              |        |          |       |        |       |       |  |
| 48                                 |   |           |              |              |        |          |       |        |       |       |  |
| 49                                 |   |           |              |              |        |          |       |        |       |       |  |
| 50                                 |   |           |              |              |        |          |       |        |       |       |  |
|                                    | Ref   | lection   |              | 1            | ,      | 1        | 1     | II     |       |       |  |
| Think<br>the le<br>exten<br>to get | about and make a note of: What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What wi   | ll you chang | je next time | ? Why? |          |       |        |       |       |  |
|                                    |   | HOD:      |              |              |        |          | Date: |        |       |       |  |

| Oxford Headstart Mathematics Week 11: Revision and remediation of test   |   |  |  |  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|--|--|--|
| End-of-terr  | n reflection  |  |  |  |  |  |  |  |  |  |
| Think about and make a note of: <ol> <li>Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</li> </ol> | 3. What ONE change should you make to your teaching practice to help you teach<br>more effectively next term?   |  |  |  |  |  |  |  |  |  |
| 2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?   | 4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in the future? What plan will you make to get back on track? |  |  |  |  |  |  |  |  |  |
| HOD:   | Date:   |  |  |  |  |  |  |  |  |  |

## 4. Oxford Successful Mathematics

This section maps out how you should use your Teacher's Guide and Learner's Book in a way that enables you to cover the curriculum sequentially, aligning with the CAPS, for well-paced and meaningful teaching.

The following components are provided in the columns of the tracker table:

- Day/lesson number.
- CAPS page numbers and content linked to Learner's Book content.
- Learner's Book exercises/activities that cover the CAPS content for the day.
- Page reference in the Learner's Book (LB page reference).
- Page reference in your Teacher's Guide for the day's activities (TG page reference).
- DBE workbook link to related content (worksheet and page numbers are referenced).
- Date completed (complete this daily).

**Note:** You will find useful ideas and resources in the toolkit book *Mental Maths Activities and Printable Resources.* 

### Weekly reflection

The tracker gives you space to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and discuss things that worked or did not go so well in your lesson. Together with your HOD you can think of ways of improving on the daily work that the learners in your class are doing. When you reflect you could think about things such as:

• Was your preparation for the lesson adequate? For instance, did you have all the necessary resources? Had you thought through the content so that you

understood it fully and so could teach it effectively?

- Did the purpose of the lesson succeed? For instance, did the learners reach a good understanding of the key concepts for the day? Could they use the language expected from them? Could they write what was expected from them?
- Did the learners cope with the work set for the day? For instance, did they finish the classwork? Was their classwork done adequately? Did you assign the homework?
- Are your learners' books up to date?
- Does what the learners have done in their books correlate with the tracked comments in the tracker?

Briefly write down your reflection weekly, following the prompts in the tracker.

- What went well?
- What did not go well?
- What did the learners find difficult or easy to understand or do?
- What will you do to support or extend learners?
- Did you complete all the work set for the week?
- If not, how will you get back on track?
- What will you change for next time? Why?

The reflection should be based on the daily lessons you have taught each week. It will provide you with a record for the next time you implement the same lesson again, and also forms the basis for collegial conversations with your head of department and your peers.

|                                    | Oxford Successful M   | lathema  | tics W        | eek 1        |        |                      |       |        |      |      |
|------------------------------------|---|----------|---------------|--------------|--------|----------------------|-------|--------|------|------|
| Day                                | CAPS concepts and skills  |          | LB            | LB           | TG     | DBE                  |       | С      | lass |      |
|                                    |   |          | ex.           | pp.          | pp.    | WORKDOOK             |       |        |      |      |
|                                    |   |          |               |              |        |                      | D     | ate co | ompl | eted |
| 1                                  | <b>Investigate and extend patterns pp. 58–61</b><br>Relationship between numbers including patterns represented in physical or<br>diagram form  |          | Ex. 1<br>1, 3 | 215          | 145    |                      |       |        |      |      |
| 2                                  | Relationship between numbers including patterns not limited to sequences including difference   |          | Ex. 2<br>1, 2 | 216          | 146    | Worksheet 65<br>p. 2 |       |        |      |      |
| 3                                  | Relationship between numbers including patterns not limited to sequences including ratio  |          | Ex. 3<br>3    | 217          | 147    | Worksheet 66<br>p. 4 |       |        |      |      |
| 4                                  | Relationship between numbers including patterns of learners own creation  |          | Ex. 1<br>4    | 215          | 146    |                      |       |        |      |      |
| 5                                  | Relationship between numbers including patterns represented in tables   |          | Ex. 3<br>1    | 217          | 147    | Worksheet 68<br>p. 8 |       |        |      |      |
|                                    | Refle   | ection   |               |              |        |                      |       |        | ·    |      |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did arners find difficult or easy to understand or do? What will you do to support or d learners? Did you complete the work set for the week? If not, what will you do t back on track? | What wil | l you chang   | je next time | ? Why? |                      |       |        |      |      |
|                                    |   | HOD:     |               |              |        |                      | Date: |        |      |      |

|                                   | Oxford Successful N   | lathema  | atics W          | eek 2       |        |                        |       |             |
|-----------------------------------|---|----------|------------------|-------------|--------|------------------------|-------|-------------|
| Day                               | CAPS concepts and skills  |          | LB               | LB          | TG     | DBE                    |       | Class       |
|                                   |   |          | ex.              | pp.         | pp.    | workbook               |       |             |
|                                   |   |          |                  |             |        |                        | Date  | e completed |
| 6                                 | Relationship between numbers including patterns represented in diagrams, table difference and ratio   | es,      | Ex. 3<br>2, 4    | 218         | 147    | Worksheet 68<br>p. 9   |       |             |
| 7                                 | <b>Input and output values p. 62</b><br>Determine rules for patterns using flow diagrams, tables and formula  |          | Ex. 1<br>1, 2    | 228         | 153    | Worksheet 72<br>p. 18  |       |             |
| 8                                 | Determine, interpret and justify equivalence of different descriptions of the same<br>represented verbally, in flow diagrams, in tables;<br>Formula by number sentence  | e rule   | Ex. 1<br>1, 3, 4 | 230         | 153    | Worksheet 73<br>p. 20  |       |             |
| 9                                 | <ul><li>Revision</li><li>Numeric and geometric patterns</li><li>Input/output values</li></ul>   |          | Ex. 1<br>1, 4, 6 | 231         | 157    | Worksheet 71b<br>p. 16 |       |             |
| 10                                | Algebraic language p. 63<br>Recognise and interpret rules or relationships represented in symbolic form   |          | Ex. 1<br>1–4     | 238         | 159    | Worksheet 74<br>p. 22  |       |             |
|                                   | Refle   | ection   |                  |             |        |                        |       |             |
| Think<br>the le<br>exten<br>to ge | <b>about and make a note of:</b> What went well? What did not go well? What did arners find difficult or easy to understand or do? What will you do to support or d learners? Did you complete the work set for the week? If not, what will you do t back on track? | What wil | l you chang      | e next time | ? Why? |                        |       |             |
|                                   |   | HOD:     |                  |             |        |                        | Date: |             |

|                                    | Oxford Successful N   | lathema  | ntics W       | eek 3        |        |                       |       |        |       |
|------------------------------------|---|----------|---------------|--------------|--------|-----------------------|-------|--------|-------|
| Day                                | CAPS concepts and skills  |          | LB            | LB           | TG     | DBE                   |       | Class  |       |
|                                    |   |          | ex.           | pp.          | pp.    | workbook              |       |        |       |
|                                    |   |          |               |              |        |                       | Date  | e comp | leted |
| 11                                 | Identify variables and constants in given formulae  |          | Ex. 2<br>2, 4 | 241          | 162    | Worksheet 74<br>p. 23 |       |        |       |
| 12                                 | Identify variables and constants in given equations   |          | Ex. 2<br>1    | 240          | 161    | Worksheet 77<br>p. 28 |       |        |       |
| 13                                 | <ul> <li>Number sentences p. 64</li> <li>Write number sentences to describe problem situations</li> <li>Analyse and interpret number sentences that describe a given situation</li> </ul>   |          | Ex. 1<br>1    | 243          | 163    | Worksheet 79<br>p. 32 |       |        |       |
| 14                                 | Solve and complete number sentences by inspection trial and improvement   |          | Ex. 1<br>2    | 244          | 164    | Worksheet 79<br>p. 33 |       |        |       |
| 15                                 | <ul> <li>Algebraic language p. 63</li> <li>Identify variables and constants in given formulae or equations</li> <li>Determine the numerical value of an expression by substitution</li> </ul>   |          | Ex. 2<br>1–4  | 245          | 164    | Worksheet 78<br>p. 30 |       |        |       |
|                                    | Refle   | ection   |               |              |        |                       |       |        |       |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did arners find difficult or easy to understand or do? What will you do to support or d learners? Did you complete the work set for the week? If not, what will you do t back on track? | What wil | l you chang   | je next time | ? Why? |                       |       |        |       |
|                                    |   | HOD:     |               |              |        |                       | Date: |        |       |

|                                    | Oxford Successful Ma   | athema    | tics W       | eek 4        |        |                        |       |        |        |    |
|------------------------------------|--|-----------|--------------|--------------|--------|------------------------|-------|--------|--------|----|
| Day                                | CAPS concepts and skills   |           | LB           | LB           | TG     | DBE                    |       | Cl     | ass    |    |
|                                    |  |           | ex.          | pp.          | pp.    | workbook               |       |        |        |    |
|                                    |  |           |              |              |        |                        | Da    | ate co | mplete | ed |
| 16                                 | <b>Revision</b><br>Algebraic equations and number sentences  |           | 1–4          | 249          | 168    | Worksheet 76<br>p. 30  |       |        |        |    |
| 17                                 | FORMAL ASSESSMENT 1<br>Assignment  |           | Task         | _            | 264    |                        |       |        |        |    |
| 18                                 | <ul> <li>Interpreting graphs p. 65</li> <li>Analyse and interpret global graphs of problem situations with special focus on:</li> <li>linear or non-linear (temperature and time graphs)</li> </ul>  |           | Ex. 1<br>1–3 | 254          | 171    | Worksheet 80a<br>p. 34 |       |        |        |    |
| 19                                 | Analyse and interpret global graphs of problem situations with special focus on:<br>• constant increasing (rainfall and time graphs)   |           | Ex. 2<br>1   | 256          | 172    | Worksheet 80b<br>p. 36 |       |        |        |    |
| 20                                 | Analyse and interpret global graphs of problem situations with special focus on:<br>• constant decreasing (time and distance travelled)  |           | Ex. 2<br>2   | 256          | 172    | Worksheet 81<br>p. 38  |       |        |        |    |
|                                    | Reflec   | ction     |              |              |        |                        |       |        |        |    |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What will | l you chang  | je next time | ? Why? |                        |       |        |        |    |
|                                    |  | HOD:      |              |              |        |                        | Date: |        |        |    |

|                                    | Oxford Successful M  | lathema | atics W      | eek 5        |        |                        |       |       |      |       |
|------------------------------------|--|---------|--------------|--------------|--------|------------------------|-------|-------|------|-------|
| Day                                | CAPS concepts and skills   |         | LB           | LB           | TG     | DBE                    |       | C     | lass |       |
|                                    |  |         | ex.          | pp.          | pp.    | WORKDOOK               |       |       |      |       |
|                                    |  |         |              |              |        |                        | D     | ate c | omp  | leted |
| 21                                 | <ul> <li>Analyse and interpret global graphs of problem situations with special focus on:</li> <li>linear or non-linear</li> <li>constant increasing or decreasing (drawing of graphs)</li> </ul>  |         | Ex. 1<br>1   | 260          | 174    | Worksheet 81<br>p. 39  |       |       |      |       |
| 22                                 | Draw global graphs from given descriptions of a problem situation, by identifying features like:<br>• linear and non-linear (drawing of graphs)  | 9       | Ex. 1<br>2   | 260          | 174    | Worksheet 82<br>p. 40  |       |       |      |       |
| 23                                 | Draw global graphs from given descriptions of a problem situation, by identifying features like:<br>• constants (drawing of graphs)  | 9       | Ex. 2<br>1   | 261          | 175    | Worksheet 83a<br>p. 42 |       |       |      |       |
| 24                                 | <b>Revision</b><br>Algebraic equations, number sentences and graphs  |         | 1, 2         | 264          | 176    |                        |       |       |      |       |
| 25                                 | Remediation of assignment  |         |              |              |        |                        |       |       |      |       |
|                                    | Refle  | ection  |              |              |        |                        |       |       |      |       |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What wi | ll you chang | ge next time | ? Why? |                        |       |       |      |       |
|                                    |  | HOD:    |              |              |        |                        | Date: |       |      |       |

| Oxford Successful Mathematics Week 6  |   |        |   |                    |            |  |       |       |        |
|---|---|--------|---|--------------------|------------|--|-------|-------|--------|
| Day   | CAPS concepts and skills  |        | LB  | LB                 | TG         | DBE  |       | Class | 5      |
|   |   |        | ex.   | pp.                | pp.        | workbook   |       |       |        |
|   |   |        |   |                    |            |  | Dat   | e com | oleted |
| 26  | <b>Transformations p. 65</b><br>Recognise, describe and perform translations and reflections with geometric figure<br>shapes on squared paper | es and | Ex. 1<br>1–5<br>Ex. 2<br>1<br>Ex. 2<br>3, 4 | 265<br>271         | 179        | Worksheet 86<br>p. 50<br>Worksheet 88<br>p. 54<br>Worksheet 86<br>p. 51 no. b<br>Worksheet 89<br>p. 56 |       |       |        |
| 27  | 27 Recognise, describe and perform rotations with geometric figures and shapes on square paper  |        |   | 271                | 179        | Worksheet 86<br>p. 51 no. a<br>Worksheet 87<br>p. 52   |       |       |        |
| 28  | Identify and draw lines of symmetry in geometric figures  |        | Ex. 1<br>1–3<br>Ex. 2                       | 273<br>275         | 180        | Worksheet 92<br>p. 62  |       |       |        |
| 29  | Draw enlargements and reductions of geometric figures on squared paper and cor them in terms of size and shape                                | mpare  | Ex. 1<br>1                                  | 278                | 182        | Worksheet 93<br>p. 64  |       |       |        |
| 30  | FORMAL ASSESSMENT 2<br>Project  |        | Project<br>option<br>1 or 2                 | 386–387<br>388–389 | 267<br>268 |  |       |       |        |
|   | Reflec  | tion   |   |                    |            |  |       |       |        |
| Think about and make a note of: What went well? What did not go well? What did<br>the learners find difficult or easy to understand or do? What will you do to support or<br>extend learners? Did you complete the work set for the week? If not, what will you do<br>to get back on track? |   |        |   |                    |            |  |       |       |        |
|   |   | HOD:   |   |                    |            |  | Date: |       |        |

|                                    | Oxford Successful Mat  | thema          | tics W       | eek 7        |        |                        |      |      |       |       |
|------------------------------------|--|----------------|--------------|--------------|--------|------------------------|------|------|-------|-------|
| Day                                | CAPS concepts and skills   |                | LB           | LB           | TG     | DBE                    |      |      | Class |       |
|                                    |  |                | ex.          | pp.          | pp.    | WORKDOOK               |      |      |       |       |
|                                    |  |                |              |              |        |                        |      | Date | comp  | leted |
| 31                                 | <b>Enlargements and reductions p. 65</b><br>Draw enlargements and reductions of geometric figures on squared paper and reco<br>the production of congruent figures   | ognise         | Ex. 1<br>2   | 278          | 182    | Worksheet 94<br>p. 66  |      |      |       |       |
| 32                                 | Draw enlargements and reductions of geometric figures on squared paper and reco<br>the change of size of figures by increasing or decreasing BUT keeping the same leng<br>will produce similar instead of congruent figures  | ognise<br>Igth | Ex. 2<br>1   | 279          | 183    | Worksheet 94<br>p. 67  |      |      |       |       |
| 33                                 | Draw enlargements and reductions of geometric figures on squared paper and find factor of enlargement or reduction   | l the          | Ex. 2<br>2   | 279          | 183    |                        |      |      |       |       |
| 34                                 | <ul> <li>Classifying 3-D objects p. 66</li> <li>Describe, sort and compare polyhedral in terms of:</li> <li>shape</li> <li>number of faces</li> </ul>  |                | Ex. 1<br>1–7 | 284          | 186    | Worksheet 99<br>p. 76  |      |      |       |       |
| 35                                 | <ul> <li>Describe, sort and compare polyhedral in terms of:</li> <li>number of edges</li> <li>number of vertices</li> </ul>  |                | Ex. 2<br>1–7 | 287          | 188    | Worksheet 100<br>p. 78 |      |      |       |       |
|                                    | Reflect  | tion           |              |              |        |                        |      |      |       |       |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What will      | you chang    | je next time | ? Why? |                        |      |      |       |       |
|                                    | н  | HOD:           |              |              |        |                        | Date | :    |       |       |

|                                    | Oxford Successful Mathe   | ematics \                    | Veek 8         |         |   |       |       |       |
|------------------------------------|---|------------------------------|----------------|---------|---|-------|-------|-------|
| Day                                | CAPS concepts and skills  | LB                           | LB             | TG      | DBE   |       | Class |       |
|                                    |   | ex.                          | pp.            | pp.     | WORKDOOK  |       |       |       |
|                                    |   |                              |                |         |   | Date  | comp  | leted |
| 36                                 | Revise using nets to create models of geometric solids: <b>cubes; prisms;</b><br>Draw sketches of nets using knowledge of shape and number of faces of solids   | Ex. 2<br>1–4<br>Ex. 1<br>1–5 | 293<br>291     | 189     | Worksheet 104<br>p. 88<br>Worksheet 102a<br>p. 82 |       |       |       |
| 37                                 | Remediation of project  |                              |                |         |   |       |       |       |
| 38                                 | Able to work out relative position of faces of the nets, using trial and error to match edges and vertices to build the 3-D object  | 2, 3, 4, 5                   | 296            | 190     | Worksheet 104<br>p. 89                            |       |       |       |
| 39                                 | Construction of nets is based on the number and shape of the solid and does not requ<br>measuring of internal angles of polygons  | ire 7, 8                     | 298            | 191     | Worksheet 101<br>p. 80                            |       |       |       |
| 40                                 | Revision<br>Numeric and geometric patterns  | 1–4<br>1–3                   | 221–222<br>224 | 149–150 |   |       |       |       |
|                                    | Reflection  |                              |                |         |   |       |       |       |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did arners find difficult or easy to understand or do? What will you do to support or d learners? Did you complete the work set for the week? If not, what will you do t back on track? | t will you cha               | nge next time  | e? Why? |   |       |       |       |
|                                    | HOD   | D:                           |                |         |   | Date: |       |       |

|                                    | Oxford Successful Mathematics Week 9   |           |            |                |            |          |       |        |      |
|------------------------------------|--|-----------|------------|----------------|------------|----------|-------|--------|------|
| Day                                | CAPS concepts and skills   |           | LB         | LB             | TG         | DBE      |       | Class  |      |
|                                    |  |           | ex.        | pp.            | pp.        | WOIKDOOK |       |        |      |
|                                    |  |           |            |                |            |          | Date  | comple | eted |
| 41                                 | <b>Revision</b><br>Functions and relationships   |           | 1–8<br>1–4 | 232–233<br>235 | 157–159    |          |       |        |      |
| 42                                 | <b>Revision</b><br>Algebraic equations and expressions   |           | 1–7        | 249            | 168        |          |       |        |      |
| 43                                 | <b>Revision</b><br>Graphs  |           | 1, 2       | 264            | 176        |          |       |        |      |
| 44                                 | Revision<br>Geometry   |           | 1–4<br>1–6 | 281<br>296     | 184<br>191 |          |       |        |      |
| 45                                 | Revision   |           |            |                |            |          |       |        |      |
|                                    | Refle  | ection    |            |                |            |          |       |        |      |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>back on track? | What will | you chang  | ge next time   | ? Why?     |          |       |        |      |
|                                    |  | HOD:      |            |                |            |          | Date: |        |      |

|                                    | Oxford Successful Mathematics Wee  | ek 10: Re | evision ar   | nd test –    | plan you | r week   |       |          |        |      |
|------------------------------------|--|-----------|--------------|--------------|----------|----------|-------|----------|--------|------|
| Day                                | CAPS concepts and skills   |           | LB           | LB           | TG       | DBE      |       |          | Class  |      |
|                                    |  |           | ex.          | pp.          | pp.      | WORKDOOK |       |          |        |      |
|                                    |  |           |              |              |          |          |       | Date o   | comple | eted |
| 46                                 |  |           |              |              |          |          |       |          |        |      |
| 47                                 |  |           |              |              |          |          |       |          |        |      |
| 48                                 |  |           |              |              |          |          |       |          |        |      |
| 49                                 |  |           |              |              |          |          |       |          |        |      |
| 50                                 |  |           |              |              |          |          |       |          |        |      |
|                                    | Ret  | flection  | 1            | 1            | 1        |          | 1     | <u> </u> |        |      |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>back on track? | What wi   | ll you chang | je next time | ? Why?   |          |       |          |        |      |
|                                    |  | HOD:      |              |              |          |          | Date: |          |        |      |

| Oxford Successful Mathematics Wee  | k 11: Revision and remediation of test  |
|--|---|
| End-of-tern  | n reflection  |
| Think about and make a note of: <ol> <li>Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</li> </ol> | 3. What ONE change should you make to your teaching practice to help you teach more effectively next term?  |
| 2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?   | 4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in the future? What plan will you make to get back on track? |
| HOD:   | Date:   |

# 5. Platinum Mathematics

This section maps out how you should use your Teacher's Guide and Learner's Book in a way that enables you to cover the curriculum sequentially, aligning with the CAPS, for well-paced and meaningful teaching.

The following components are provided in the columns of the tracker table:

- 1. Day/lesson number.
- 2. CAPS page numbers and content linked to Learner's Book content.
- 3. Learner's Book exercises/activities that cover the CAPS content for the day.
- 4. Page reference in the Learner's Book (LB page reference).
- 5. Page reference in your Teacher's Guide for the day's activities (TG page reference).
- 6. DBE workbook link to related content (worksheet and page numbers are referenced).
- 7. Date completed (complete this daily).

**Note:** You will find useful ideas and resources in the toolkit book *Mental Maths Activities and Printable Resources.* 

### Weekly reflection

The tracker gives you space to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and discuss things that worked or did not go so well in your lesson. Together with your HOD you can think of ways of improving on the daily work that the learners in your class are doing. When you reflect you could think about things such as:

• Was your preparation for the lesson adequate? For instance, did you have all the necessary resources? Had you thought through the content so that you

understood it fully and so could teach it effectively?

- Did the purpose of the lesson succeed? For instance, did the learners reach a good understanding of the key concepts for the day? Could they use the language expected from them? Could they write what was expected from them?
- Did the learners cope with the work set for the day? For instance, did they finish the classwork? Was their classwork done adequately? Did you assign the homework?
- Are your learners' books up to date?
- Does what the learners have done in their books correlate with the tracked comments in the tracker?

Briefly write down your reflection weekly, following the prompts in the tracker.

- What went well?
- What did not go well?
- What did the learners find difficult or easy to understand or do?
- What will you do to support or extend learners?
- Did you complete all the work set for the week?
- If not, how will you get back on track?
- What will you change for next time? Why?

The reflection should be based on the daily lessons you have taught each week. It will provide you with a record for the next time you implement the same lesson again, and also forms the basis for collegial conversations with your head of department and your peers.

|                                    | Platinum Mathei   | matics      | Week 1                           |            |     |                      |       |        |        |   |
|------------------------------------|---|-------------|----------------------------------|------------|-----|----------------------|-------|--------|--------|---|
| Day                                | CAPS concepts and skills  |             | LB                               | LB         | TG  | DBE                  |       | Cla    | ss     |   |
|                                    |   |             | ex.                              | pp.        | pp. | workbook             |       |        |        |   |
|                                    |   |             |                                  |            |     |                      | Da    | te cor | nplete | d |
| 1                                  | <b>Investigate and extend patterns pp. 58–61</b><br>Relationship between numbers including patterns represented in physical or<br>diagram form  |             | Ex. 11.1<br>1a–c<br>2d–f<br>3a–c | 143        | 70  |                      |       |        |        |   |
| 2                                  | Relationship between numbers including patterns not limited to sequences including difference   |             | Ex. 11.2<br>1d–f<br>2e–g         | 143<br>144 | 70  | Worksheet 65<br>p. 2 |       |        |        |   |
| 3                                  | Relationship between numbers including patterns not limited to sequences including ratio  |             | Ex. 11.2<br>2a–c                 | 144        | 70  | Worksheet 66<br>p. 4 |       |        |        |   |
| 4                                  | Relationship between numbers including patterns of learners own creation  |             | Ex. 11.3<br>2                    | 145        | 71  |                      |       |        |        |   |
| 5                                  | Relationship between numbers including patterns represented in tables   |             | Ex. 11.3<br>3b–d                 | 145        | 71  | Worksheet 68<br>p. 8 |       |        |        |   |
|                                    | Refle   | ction       |                                  |            |     |                      |       |        |        |   |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did arners find difficult or easy to understand or do? What will you do to support or d learners? Did you complete the work set for the week? If not, what will you do t back on track? | l you chang | e next time                      | ? Why?     |     |                      |       |        |        |   |
|                                    |   | HOD:        |                                  |            |     |                      | Date: |        |        |   |

|                                   | Platinum Mathe  | matics  | Week 2                            |             |        |                        |       |        |        |      |
|-----------------------------------|---|---------|-----------------------------------|-------------|--------|------------------------|-------|--------|--------|------|
| Day                               | CAPS concepts and skills  |         | LB                                | LB          | TG     | DBE                    |       | (      | Class  |      |
|                                   |   |         | ex.                               | pp.         | pp.    | workbook               |       |        |        |      |
|                                   |   |         |                                   |             |        |                        | C     | Date o | comple | eted |
| 6                                 | Relationship between numbers including patterns represented in diagrams, table difference and ratio   | es,     | Ex. 11.5<br>2a–c<br>3a, d, g      | 148         | 72     | Worksheet 68<br>p. 9   |       |        |        |      |
| 7                                 | <ul><li>Revision</li><li>Numeric and geometric pattern</li></ul>  |         | 1a–c<br>2a–b 4a–c                 | 149         | 73     | Worksheet 72<br>p. 18  |       |        |        |      |
| 8                                 | FORMAL ASSESSMENT 1<br>Assignment   |         | Task                              | 150         | 74     | Worksheet 73<br>p. 20  |       |        |        |      |
| 9                                 | <b>Input and output values p. 62</b><br>Determine rules for patterns using flow diagrams, tables and formula  |         | Ex. 12.1<br>1a–c<br>3a–c<br>5a, b | 153         | 76     | Worksheet 71b<br>p. 16 |       |        |        |      |
| 10                                | Determine, interpret and justify equivalence of different descriptions of the same<br>represented verbally, in flow diagrams, in tables;<br>Formula by number sentence  | rule    | Ex. 12.3<br>1, 4a, 5a             | 156         | 77     | Worksheet 74<br>p. 22  |       |        |        |      |
|                                   | Refle   | ection  |                                   |             |        |                        |       |        |        |      |
| Think<br>the le<br>exten<br>to ge | about and make a note of: What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What wi | ill you change                    | e next time | ? Why? |                        |       |        |        |      |
|                                   |   | HOD:    |                                   |             |        |                        | Date: |        |        |      |

|                                    | Platinum Mathe   | ematics  | Week 3                             | 3           |        |                       |       |        |      |     |
|------------------------------------|--|----------|------------------------------------|-------------|--------|-----------------------|-------|--------|------|-----|
| Day                                | CAPS concepts and skills   |          | LB                                 | LB          | TG     | DBE                   |       | C      | ass  |     |
|                                    |  |          | ex.                                | pp.         | pp.    | WORKDOOK              |       |        |      |     |
|                                    |  |          |                                    |             |        |                       | Da    | ate co | mple | ted |
| 11                                 | Algebraic language p. 63<br>Recognise and interpret rules or relationships represented in symbolic form  |          | Ex. 13.1<br>1–10                   | 159         | 80     | Worksheet 74<br>p. 23 |       |        |      |     |
| 12                                 | Identify variables and constants in given formulae   |          | Ex. 13.2<br>1–5                    | 160         | 80     | Worksheet 77<br>p. 28 |       |        |      |     |
| 13                                 | Identify variables and constants in given equations  |          | Ex. 13.3<br>1a, b<br>2c, d<br>3a–e | 162         | 81     | Worksheet 79<br>p. 32 |       |        |      |     |
| 14                                 | <ul> <li>Number sentences p. 64</li> <li>Write number sentences to describe problem situations</li> <li>Analyse and interpret number sentences that describe a given situation</li> </ul>  |          | Ex. 14.1<br>1a–c<br>2a–f           | 165         | 83     | Worksheet 79<br>p. 33 |       |        |      |     |
| 15                                 | Solve and complete number sentences by:<br>• inspection<br>• trial and improvement   |          | Ex. 14.2<br>1–5                    | 166         | 84     | Worksheet 78<br>p. 30 |       |        |      |     |
|                                    | Refl   | ection   |                                    |             |        |                       |       |        |      |     |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>back on track? | What wil | l you chang                        | e next time | ? Why? |                       |       |        |      |     |
|                                    |  | HOD:     |                                    |             |        |                       | Date: |        |      |     |

|                                    | Platinum Mathe   | matics   | Week 4               | ł           |        |                        |       |             |
|------------------------------------|--|----------|----------------------|-------------|--------|------------------------|-------|-------------|
| Day                                | CAPS concepts and skills   |          | LB                   | LB          | TG     | DBE                    |       | Class       |
|                                    |  |          | ex.                  | pp.         | pp.    | workbook               |       |             |
|                                    |  |          |                      |             |        |                        | Date  | e completed |
| 16                                 | <ul> <li>Algebraic language p. 63</li> <li>Identify variables and constants in given formulae or equations</li> <li>Determine the numerical value of an expression by substitution</li> </ul>  |          | 1a, b<br>2c, d<br>5a | 167         | 85     | Worksheet 76<br>p. 30  |       |             |
| 17                                 | <b>Revision</b><br>Algebraic equations and number sentences  |          | 3a–c<br>4a, b        | 167         | 85     |                        |       |             |
| 18                                 | <ul> <li>Interpreting graphs p. 65</li> <li>Analyse and interpret global graphs of problem situations with special focus on:</li> <li>linear or non-linear (temperature and time graphs)</li> </ul>  |          | Ex. 15.1<br>2a–g     | 172         | 87     | Worksheet 80a<br>p. 34 |       |             |
| 19                                 | <ul> <li>Analyse and interpret global graphs of problem situations with special focus on:</li> <li>constant increasing (rainfall and time graphs)</li> </ul>   |          | Ex. 15.1<br>4        | 173         | 87     | Worksheet 80b<br>p. 36 |       |             |
| 20                                 | <ul> <li>Analyse and interpret global graphs of problem situations with special focus on:</li> <li>constant decreasing (time and distance travelled)</li> </ul>  |          | Ex. 15.1<br>3        | 172         | 87     | Worksheet 81<br>p. 38  |       |             |
|                                    | Refle  | ction    |                      |             |        |                        |       |             |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>back on track? | What wil | l you chang          | e next time | ? Why? |                        |       |             |
|                                    |  | HOD:     |                      |             |        |                        | Date: |             |

|                                    | Platinum Mathei  | matics   | Week 5           | 5           |        |                        |       |        |       |  |
|------------------------------------|--|----------|------------------|-------------|--------|------------------------|-------|--------|-------|--|
| Day                                | CAPS concepts and skills   |          | LB               | LB          | TG     | DBE                    |       | Class  |       |  |
|                                    |  |          | ex.              | pp.         | pp.    | WORKDOOK               |       |        |       |  |
|                                    |  |          |                  |             |        |                        | Date  | e comp | leted |  |
| 21                                 | <ul> <li>Analyse and interpret global graphs of problem situations with special focus on:</li> <li>linear or non-linear</li> <li>constant increasing or decreasing (drawing of graphs)</li> </ul>  |          | Ex. 15.2<br>1a–d | 175         | 88     | Worksheet 81<br>p. 39  |       |        |       |  |
| 22                                 | <ul> <li>2 Draw global graphs from given descriptions of a problem situation, by identifying features like:</li> <li>Inear and non-linear (drawing of graphs)</li> </ul>   |          | 5                | 176         | 89     | Worksheet 82<br>p. 40  |       |        |       |  |
| 23                                 | Draw global graphs from given descriptions of a problem situation, by identifying features like:<br>• constants (drawing of graphs)  |          | 3                | 176         | 88     | Worksheet 83a<br>p. 42 |       |        |       |  |
| 24                                 | <b>Revision</b><br>Algebraic equations, number sentences and graphs  |          | 1, 2, 4          | 176         | 88     |                        |       |        |       |  |
| 25                                 | Remediation of assignment  |          |                  |             |        |                        |       |        |       |  |
|                                    | Refle  | ction    |                  |             |        |                        |       |        |       |  |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>back on track? | What wil | l you chang      | e next time | ? Why? |                        |       |        |       |  |
|                                    |  | HOD:     |                  |             |        |                        | Date: |        |       |  |

|                                      | Platinum Mather  | matics   | Week d                              | 5                 |          |  |     |       |        |   |
|--------------------------------------|--|----------|-------------------------------------|-------------------|----------|--|-----|-------|--------|---|
| Day                                  | CAPS concepts and skills   |          | LB                                  | LB                | TG       | DBE  |     | Class | ;      |   |
|                                      |  |          | ex.                                 | pp.               | pp.      | WORKDOOK   |     |       |        |   |
|                                      |  |          |                                     |                   |          |  | Dat | e com | oletec | ł |
| 26                                   | <b>Transformations p. 65</b><br>Identify and draw lines of symmetry in geometric figures   |          | Ex. 16.2<br>5, 7                    | 182               | 92       | Worksheet 86<br>p. 51 no. b<br>Worksheet 89<br>p. 56   |     |       |        |   |
| 27                                   | Recognise, describe and perform reflections and translations with geometric figur shapes on squared paper  | es and   | Ex. 16.1<br>1–10<br>Ex. 16.2<br>1–4 | 179<br>181<br>182 | 91<br>92 | Worksheet 86<br>p. 50<br>Worksheet 88<br>p. 54<br>Worksheet 86<br>p. 51 no. a<br>Worksheet 87<br>p. 52 |     |       |        |   |
| 28                                   | Recognise, describe and perform rotations with geometric figures and shapes on paper   | squared  | Ex. 16.3<br>2a–d<br>3a–d<br>4       | 184               | 93       | Worksheet 92<br>p. 62  |     |       |        |   |
| 29                                   | Draw enlargements and reductions of geometric figures on squared paper and co<br>them in terms of shape  | mpare    | Ex. 16.4<br>1a, 2                   | 187               | 94       | Worksheet 93<br>p. 64  |     |       |        |   |
| 30                                   | Draw enlargements and reductions of geometric figures on squared paper and co<br>them in terms of size   | mpare    | Ex. 16.4<br>3, 4a, b                | 187               | 94       | Worksheet 93<br>p. 65  |     |       |        |   |
|                                      | Refle  | ction    |                                     |                   |          |  |     |       |        |   |
| Think<br>the lea<br>extend<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did arners find difficult or easy to understand or do? What will you do to support or d learners? Did you complete the work set for the week? If not, what will you do to back on track? | What wil | l you chang                         | e next time       | ? Why?   |  |     |       |        |   |
| HOD: Date:                           |  |          |                                     |                   |          |  |     |       |        |   |

|                                   | Platinum Mathemat  | ics Wee                   | < 7          |          |                        |       |       |     |       |  |
|-----------------------------------|--|---------------------------|--------------|----------|------------------------|-------|-------|-----|-------|--|
| Day                               | CAPS concepts and skills   | LB                        | LB           | TG       | DBE                    | Class |       |     |       |  |
|                                   |  | ex.                       | pp.          | pp.      | WORKDOOK               |       |       |     |       |  |
|                                   |  |                           |              |          |                        | D     | ate c | omp | leted |  |
| 31                                | <b>Enlargements and reductions p. 65</b><br>Draw enlargements and reductions of geometric figures on squared paper and recogn<br>the production of congruent figures   | 5, 6                      | 190          | 95       | Worksheet 94<br>p. 66  |       |       |     |       |  |
| 32                                | Draw enlargements and reductions of geometric figures on squared paper and recogn<br>the change of size of figures by increasing or decreasing BUT keeping the same length<br>will produce similar instead of congruent figures  | ise 7, 8                  | 190          | 95       | Worksheet 94<br>p. 67  |       |       |     |       |  |
| 33                                | Draw enlargements and reductions of geometric figures on squared paper and find the factor of enlargement or reduction   | e Ex. 16.<br>7a–c<br>8a–c | 1 187        | 94       |                        |       |       |     |       |  |
| 34                                | FORMAL ASSESSMENT 2<br>Project   | Task                      | 192          | 96       | Worksheet 99<br>p. 76  |       |       |     |       |  |
| 35                                | Classifying 3-D objects p. 66<br>Describe, sort and compare polyhedral in terms of:<br>• shape<br>• number of faces  | Ex. 17.                   | 1 195        | 100      | Worksheet 100<br>p. 78 |       |       |     |       |  |
|                                   | Reflection   |                           |              |          | ·                      |       | · · · |     |       |  |
| Think<br>the le<br>exten<br>to ge | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | t will you cha            | nge next tin | ne? Why? |                        |       |       |     |       |  |
|                                   | НОГ  | D:                        |              |          |                        | Date: |       |     |       |  |

|                                    | Platinum Mather   | matics   | Week 8                                    | 3           |        |  |       |        |        |
|------------------------------------|---|----------|---|-------------|--------|--|-------|--------|--------|
| Day                                | CAPS concepts and skills  |          | LB  | LB          | TG     | DBE  |       | Clas   | 5      |
|                                    |   |          | ex.                                       | pp.         | pp.    | WORKDOOK   |       |        |        |
|                                    |   |          |   |             |        |  | Da    | te com | pleted |
| 36                                 | <ul> <li>Describe, sort and compare polyhedral in terms of:</li> <li>number of edges</li> <li>number of vertices</li> </ul>   |          | Ex. 17.1<br>2a–c                          | 195         | 100    | Worksheet 102a<br>p. 82                          |       |        |        |
| 37                                 | 7 Revision<br>Use nets to create models of geometric solids: prisms; cubes;<br>Draw sketches of nets using knowledge of shape and number of faces of solids   |          | Ex. 17.4<br>Ex. 17.2<br>1a–d<br>2<br>3a–e | 198<br>202  | 101    | Worksheet 101<br>p. 80<br>Worksheet 104<br>p. 88 |       |        |        |
| 38                                 | 3 Construction of nets is based on the number and shape of the solid and does not require measuring of internal angles of polygons  |          | Ex. 17.3<br>1, 2, 4                       | 198         | 101    | Worksheet 104<br>p. 89                           |       |        |        |
| 39                                 | Remediation of project  |          |   |             |        |  |       |        |        |
| 40                                 | Able to work out relative position of faces of the nets, using trial and error to matc<br>edges and vertices to build the 3-D object  | ch       | Ex. 17.5<br>1, 2a–f                       | 204         |        |  |       |        |        |
|                                    | Refle   | ction    |   |             |        |  | · ·   |        | · · ·  |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did arners find difficult or easy to understand or do? What will you do to support or d learners? Did you complete the work set for the week? If not, what will you do t back on track? | What wil | ll you chang                              | e next time | ? Why? |  |       |        |        |
|                                    |   | HOD:     |   |             |        |  | Date: |        |        |

|                                    | Platinum Mathe   | matics   | Week        | 9              |             |          |                |  |
|------------------------------------|--|----------|-------------|----------------|-------------|----------|----------------|--|
| Day                                | CAPS concepts and skills   |          | LB          | LB             | TG          | DBE      | Class          |  |
|                                    |  |          | ex.         | pp.            | pp.         | WORKDOOK |                |  |
|                                    |  |          |             |                |             |          | Date completed |  |
| 41                                 | Revision<br>Numeric and geometric patterns   |          | 2, 3, 5     | 149            | 73          |          |                |  |
| 42                                 | <b>Revision</b><br>Functions and relationships   |          | 1–4<br>1–8  | 157<br>163     | 78<br>82    |          |                |  |
| 43                                 | <b>Revision</b><br>Algebra<br>Graphs   |          | 1–6<br>1–8  | 167<br>176–177 | 85<br>88–89 |          |                |  |
| 44                                 | <b>Revision</b><br>Transformations<br>Geometry   |          | 1–12<br>1–7 | 190–191<br>205 | 95<br>104   |          |                |  |
| 45                                 | Revision   |          | Task        | 206            | 105         |          |                |  |
|                                    | Refle  | ection   |             | <u> </u>       |             | <u> </u> |                |  |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>back on track? | What wil | l you chang | ge next time   | ? Why?      |          |                |  |
|                                    |  | HOD:     |             |                |             |          | Date:          |  |

|                                   | Platinum Mathematics Week 10: Revision and test – plan your week  |         |              |              |        |          |       |      |        |      |  |  |
|-----------------------------------|---|---------|--------------|--------------|--------|----------|-------|------|--------|------|--|--|
| Day                               | CAPS concepts and skills  |         | LB           | LB           | TG     | DBE      | Class |      |        |      |  |  |
|                                   |   |         | ex.          | pp.          | pp.    | WOIKDOOK |       |      |        |      |  |  |
|                                   |   |         |              |              |        |          |       | Date | comple | eted |  |  |
| 46                                |   |         |              |              |        |          |       |      |        |      |  |  |
| 47                                |   |         |              |              |        |          |       |      |        |      |  |  |
| 48                                |   |         |              |              |        |          |       |      |        |      |  |  |
| 49                                |   |         |              |              |        |          |       |      |        |      |  |  |
| 50                                |   |         |              |              |        |          |       |      |        |      |  |  |
|                                   | Reflection  |         |              |              |        |          |       |      |        |      |  |  |
| Think<br>the le<br>exten<br>to ge | about and make a note of: What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What wi | ll you chang | je next time | ? Why? |          |       |      |        |      |  |  |
|                                   |   | HOD:    |              |              |        |          | Date: |      |        |      |  |  |

| Platinum Mathematics Week 11   | : Revision and remediation of test  |
|--|---|
| End-of-tern  | n reflection  |
| Think about and make a note of: <ol> <li>Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</li> </ol> | 3. What ONE change should you make to your teaching practice to help you teach more effectively next term?  |
| 2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?   | 4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in the future? What plan will you make to get back on track? |
| HOD:   | Date:   |

## 6. Premier Mathematics

This section maps out how you should use your Teacher's Guide and Learner's Book in a way that enables you to cover the curriculum sequentially, aligning with the CAPS, for well-paced and meaningful teaching.

The following components are provided in the columns of the tracker table:

- Day/lesson number.
- CAPS page numbers and content linked to Learner's Book content.
- Learner's Book exercises/activities that cover the CAPS content for the day.
- Page reference in the Learner's Book (LB page reference).
- Page reference in your Teacher's Guide for the day's activities (TG page reference).
- DBE workbook link to related content (worksheet and page numbers are referenced).
- Date completed (complete this daily).

**Note:** You will find useful ideas and resources in the toolkit book *Mental Maths Activities and Printable Resources.* 

### Weekly reflection

The tracker gives you space to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and discuss things that worked or did not go so well in your lesson. Together with your HOD you can think of ways of improving on the daily work that the learners in your class are doing. When you reflect you could think about things such as:

• Was your preparation for the lesson adequate? For instance, did you have all the necessary resources? Had you thought through the content so that you

understood it fully and so could teach it effectively?

- Did the purpose of the lesson succeed? For instance, did the learners reach a good understanding of the key concepts for the day? Could they use the language expected from them? Could they write what was expected from them?
- Did the learners cope with the work set for the day? For instance, did they finish the classwork? Was their classwork done adequately? Did you assign the homework?
- Are your learners' books up to date?
- Does what the learners have done in their books correlate with the tracked comments in the tracker?

Briefly write down your reflection weekly, following the prompts in the tracker.

- What went well?
- What did not go well?
- What did the learners find difficult or easy to understand or do?
- What will you do to support or extend learners?
- Did you complete all the work set for the week?
- If not, how will you get back on track?
- What will you change for next time? Why?

The reflection should be based on the daily lessons you have taught each week. It will provide you with a record for the next time you implement the same lesson again, and also forms the basis for collegial conversations with your head of department and your peers.

|                                   | Premier Mathema  | atics     | Week 1                                      |                |        |                      |       |       |     |       |
|-----------------------------------|--|-----------|---|----------------|--------|----------------------|-------|-------|-----|-------|
| Day                               | CAPS concepts and skills   |           | LB  | LB             | TG     | DBE                  | Class |       |     |       |
|                                   |  |           | ex.   | pp.            | pp.    | WORKDOOK             |       |       |     |       |
|                                   |  |           |   |                |        |                      | Da    | ate c | omp | leted |
| 1                                 | <b>Investigate and extend patterns pp. 58–61</b><br>Relationship between numbers including patterns represented in physical or<br>diagram form   |           | Ex. 1<br>1a–e<br>3                          | 80             | 64     |                      |       |       |     |       |
| 2                                 | Relationship between numbers including patterns not limited to sequences including difference  |           | Ex. 1<br>1f–j<br>2a–d                       | 81             | 64–65  | Worksheet 65<br>p. 2 |       |       |     |       |
| 3                                 | Relationship between numbers including patterns not limited to sequences including ratio   |           | Ex. 2<br>1–4                                | 81–82          | 65     | Worksheet 66<br>p. 4 |       |       |     |       |
| 4                                 | Relationship between numbers including patterns represented in tables  |           | Ex. 3<br>1–3                                | 83             | 65–66  | Worksheet 68<br>p. 8 |       |       |     |       |
| 5                                 | Relationship between numbers including patterns of learners own creation   |           | Ex. 2<br>5, 6<br>Ex. 3<br>4<br>Ex. 4<br>a–d | 82<br>83<br>83 | 65–66  | Worksheet 68<br>p. 9 |       |       |     |       |
|                                   | Reflecti   | ion       |   |                |        |                      |       |       |     |       |
| Think<br>the le<br>exten<br>to ge | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | Vhat will | you chang                                   | e next time    | ? Why? |                      |       |       |     |       |
|                                   | HOD: Date:   |           |   |                |        |                      |       |       |     |       |
|                                    | Premier Mathe  | matics        | Week 2        | 1           |                        |                       |       |        |       |  |
|------------------------------------|--|---------------|---------------|-------------|------------------------|-----------------------|-------|--------|-------|--|
| Day                                | CAPS concepts and skills   |               | LB            | LB          | TG                     | DBE                   |       | Class  |       |  |
|                                    |  |               | ex.           | pp.         | pp.                    | WORKDOOK              |       |        |       |  |
|                                    |  |               |               |             |                        |                       | Date  | e comp | leted |  |
| 6                                  | <b>Input and output values p. 62</b><br>Determine rules for patterns using flow diagrams, tables and formula   |               | Ex. 1<br>1a–e | 85          | 66                     | Worksheet 72<br>p. 18 |       |        |       |  |
| 7                                  | Input and output values p. 62<br>Determine rules for patterns using flow diagrams, tables and formula  |               | Ex. 1<br>2a–e | 85          | 66                     | Worksheet 72<br>p. 18 |       |        |       |  |
| 8                                  | <ul> <li>8 Input and output values p. 62<br/>Determine, interpret and justify equivalence of different descriptions of the same rule represented verbally, in flow diagrams, in tables;<br/>Formula by number sentence</li> <li>9 Algebraic language p. 63</li> </ul>      |               |               | 86          | 67                     | Worksheet 73<br>p. 20 |       |        |       |  |
| 9                                  | Algebraic language p. 63<br>Recognise and interpret rules or relationships represented in symbolic form  | Ex. 1<br>1a–j | 87            | 67          | Worksheet 71b<br>p. 16 |                       |       |        |       |  |
| 10                                 | Algebraic language p. 63<br>Recognise and interpret rules or relationships represented in symbolic form  |               | Ex. 1<br>2a–j | 88          | 67                     | Worksheet 74<br>p. 22 |       |        |       |  |
|                                    | Refle  | ection        |               |             |                        |                       |       |        |       |  |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>back on track? | What wil      | l you chang   | e next time | ? Why?                 |                       |       |        |       |  |
|                                    |  | HOD:          |               |             |                        |                       | Date: |        |       |  |

|                                    | Premier Mathem   | natics   | Week 3                         | }           |        |                       |   |        |       |       |
|------------------------------------|--|----------|--------------------------------|-------------|--------|-----------------------|---|--------|-------|-------|
| Day                                | CAPS concepts and skills   |          | LB                             | LB          | TG     | DBE                   |   | (      | Class |       |
|                                    |  |          | ex.                            | pp.         | pp.    | workbook              |   |        |       |       |
|                                    |  |          |                                |             |        |                       | C | Date o | comp  | leted |
| 11                                 | Algebraic language p. 63<br>Identify variables and constants in given formulae   |          | Ex. 2<br>1a–e<br>2a–e          | 88          | 68     | Worksheet 74<br>p. 23 |   |        |       |       |
| 12                                 | Identify variables and constants in given equations  |          | Ex. 1<br>1,<br>2a–h            | 89          | 68     | Worksheet 77<br>p. 28 |   |        |       |       |
| 13                                 | <ul> <li>Number sentences p. 64</li> <li>Write number sentences to describe problem situations</li> <li>Analyse and interpret number sentences that describe a given situation</li> </ul>  |          | Ex. 2<br>1–5                   | 90          | 69–70  | Worksheet 79<br>p. 32 |   |        |       |       |
| 14                                 | <ul><li>Solve and complete number sentences by:</li><li>inspection</li><li>trial and improvement</li></ul>   |          | Ex. 3<br>1a–e<br>2e–i<br>3a–e  | 90<br>91    | 70     | Worksheet 79<br>p. 33 |   |        |       |       |
| 15                                 | <ul> <li>Algebraic language p. 63</li> <li>Identify variables and constants in given formulae or equations</li> <li>Determine the numerical value of an expression by substitution</li> </ul>  |          | Ex. 4<br>1 a–e<br>2a–e<br>3a–e | 91          | 71     |                       |   |        |       |       |
|                                    | Reflec   | tion     |                                |             |        |                       |   |        |       |       |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What wil | l you chang                    | e next time | ? Why? |                       |   |        |       |       |
|                                    | HOD: Date:   |          |                                |             |        |                       |   |        |       |       |

|                                   | Premier Mather   | natics    | Week 4                         | ļ           |        |                        |     |          |      |
|-----------------------------------|--|-----------|--------------------------------|-------------|--------|------------------------|-----|----------|------|
| Day                               | CAPS concepts and skills   |           | LB                             | LB          | TG     | DBE                    |     | Class    |      |
|                                   |  |           | ex.                            | pp.         | pp.    | WORKDOOK               |     |          |      |
|                                   |  |           |                                |             |        |                        | Dat | e comple | eted |
| 16                                | <b>Revision</b><br>Algebraic Equations and Number Sentences  |           | Ex. 4<br>1f –i<br>2f–i<br>3f–i | 91          | 71     | Worksheet 76<br>p. 30  |     |          |      |
| 17                                | <ul> <li>Interpreting graphs p. 65</li> <li>Analyse and interpret global graphs of problem situations with special focus on:</li> <li>linear or non-linear (temperature and time graphs)</li> </ul>  |           | Ex. 1<br>1a–k                  | 93–94       | 71–72  |                        |     |          |      |
| 18                                | <ul><li>Analyse and interpret global graphs of problem situations with special focus on:</li><li>constant increasing (rainfall and time graphs)</li></ul>  |           | Ex. 1<br>3a–l<br>4a–n          | 94–95       | 72     | Worksheet 80a<br>p. 34 |     |          |      |
| 19                                | <ul><li>Analyse and interpret global graphs of problem situations with special focus on:</li><li>constant decreasing (time and distance travelled)</li></ul>   |           | Ex 1<br>2a–l                   | 94          | 72     | Worksheet 80b<br>p. 36 |     |          |      |
| 20                                | <ul> <li>Analyse and interpret global graphs of problem situations with special focus on:</li> <li>linear or non-linear</li> <li>constant increasing or decreasing (drawing of graphs)</li> </ul>  |           | Ex. 1<br>5                     | 96          | 73     | Worksheet 81<br>p. 38  |     |          |      |
|                                   | Refle  | ction     |                                |             |        |                        |     |          |      |
| Think<br>the le<br>exten<br>to ge | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What will | l you chang                    | e next time | ? Why? |                        |     |          |      |
| HOD:                              |  |           |                                |             |        |                        |     |          |      |

|  | Premier Mather   | natics   | Week 5                | 5            |        |  |       |        |       |  |
|--|--|----------|-----------------------|--------------|--------|--|-------|--------|-------|--|
| Day  | CAPS concepts and skills   |          | LB                    | LB           | TG     | DBE  |       | Class  |       |  |
|  |  |          | ex.                   | pp.          | pp.    | WORKDOOK                                       |       |        |       |  |
|  |  |          |                       |              |        |  | Dat   | e comp | leted |  |
| 21   | Draw global graphs from given descriptions of a problem situation, by identifying features like:<br>• linear and non-linear (drawing of graphs)  |          | Ex. 2<br>1a–f<br>2a–h | 98–99        | 73–74  | Worksheet 81<br>p. 39                          |       |        |       |  |
| 22   | Draw global graphs from given descriptions of a problem situation, by identifying features like:<br>• constants (drawing of graphs)  |          | Ex. 2<br>3a–f         | 99           | 74     | Worksheet 82<br>p. 40                          |       |        |       |  |
| 23   | <ul> <li>23 FORMAL ASSESSMENT 1<br/>Assignment</li> <li>24 Revision</li> </ul>   |          |                       | 100–101      | 75–76  |  |       |        |       |  |
| 24 <b>Revision</b><br>Algebraic equations, number sentences and graphs |  |          |                       | 100          | 75     | Worksheet 83a<br>p. 42                         |       |        |       |  |
| 25   | <ul> <li>25 Transformations p. 65</li> <li>Recognise, describe and perform rotation with geometric figures and shapes on squared paper</li> </ul>  |          |                       | 102          | 77     | Worksheet 86<br>p. 50<br>Worksheet 88<br>p. 54 |       |        |       |  |
|  | Refle  | ction    |                       |              |        |  |       |        |       |  |
| Think<br>the le<br>exten<br>to get                                     | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What wil | l you chang           | ge next time | ? Why? |  |       |        |       |  |
| HOD:   |  |          |                       |              |        |  | Date: |        |       |  |

|                                    | Premier Mathe  | matics   | Week 6                | 5             |        |  |       |       |       |      |
|------------------------------------|--|----------|-----------------------|---------------|--------|--|-------|-------|-------|------|
| Day                                | CAPS concepts and skills   |          | LB                    | LB            | TG     | DBE  |       | C     | Class |      |
|                                    |  |          | ex.                   | pp.           | pp.    | workbook   |       |       |       |      |
|                                    |  |          |                       |               |        |  | D     | ate c | ompl  | eted |
| 26                                 | <b>Transformations p. 65</b><br>Recognise, describe and perform reflections with geometric figures and shapes of squared paper   | on       | Ex. 2<br>1a–c         | 103           | 77–78  | Worksheet 86<br>p. 51 no. b<br>Worksheet 89<br>p. 56 |       |       |       |      |
| 27                                 | <ul> <li>27 Transformations p. 65<br/>Recognise, describe and perform translations with geometric figures and shapes on<br/>squared paper</li> <li>28 Transformations p. 65</li> </ul>   |          | Ex. 3<br>1<br>2a–d    | 103–104       | 78     | Worksheet 86<br>p. 51 no. a                          |       |       |       |      |
| 28                                 | <b>Transformations p. 65</b><br>Recognise, describe and perform rotations,reflections and translations with geon<br>figures and shapes on squared paper  | netric   | Ex. 4<br>1a–f<br>2a–b | 104           | 78–79  | Worksheet 87<br>p. 52                                |       |       |       |      |
| 29                                 | 29       Transformations p. 65         Identify and draw lines of symmetry in geometric figures  |          |                       | 105<br>*TG 81 | 79–80  | Worksheet 92<br>p. 62                                |       |       |       |      |
| 30                                 | Remediation of assignment  |          |                       |               |        |  |       |       |       |      |
|                                    | Refle  | ection   |                       |               |        |  |       |       |       |      |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>back on track? | What wil | l you chang           | ge next time  | ? Why? |  |       |       |       |      |
| HOD:                               |  |          |                       |               |        |  | Date: |       |       |      |

|                                    | Premier Mathematics Week 7  |                |                                    |               |        |                        |       |       |        |  |
|------------------------------------|---|----------------|------------------------------------|---------------|--------|------------------------|-------|-------|--------|--|
| Day                                | CAPS concepts and skills  |                | LB                                 | LB            | TG     | DBE                    |       | Clas  | 5      |  |
|                                    |   |                | ex.                                | pp.           | pp.    | WORKDOOK               |       |       |        |  |
|                                    |   |                |                                    |               |        |                        | Dat   | e com | oleted |  |
| 31                                 | <b>Enlargements and reductions p. 65</b><br>Draw enlargements and reductions of geometric figures on squared paper and cor<br>them in terms of size   | mpare          | Ex. 6<br>1a–b<br>2a–c              | 106           | 80     | Worksheet 93<br>p. 64  |       |       |        |  |
| 32                                 | <b>Enlargements and reductions p. 65</b><br>Draw enlargements and reductions of geometric figures on squared paper and find<br>factor of enlargement or reduction   | d the          | Ex. 6<br>3a–c                      | 107           | 80     | Worksheet 94<br>p. 66  |       |       |        |  |
| 33                                 | <b>Enlargements and reductions p. 65</b><br>Draw enlargements and reductions of geometric figures on squared paper and rec<br>the change of size of figures by increasing or decreasing BUT keeping the same ler<br>will produce similar instead of congruent figures | ognise<br>ngth | Ex. 6<br>4a–c                      | 107           | 80     | Worksheet 94<br>p. 67  |       |       |        |  |
| 34                                 | Classifying 3-D objects p. 66<br>Describe, sort and compare polyhedral in terms of:<br>• shape<br>• number of faces<br>• number of edges<br>• number of vertices  |                | Ex. 1<br>1a–c<br>2<br>3a–b<br>4a–b | 108<br>*TG 85 | 82     | Worksheet 99<br>p. 76  |       |       |        |  |
| 35                                 | Classifying 3-D objects p. 66<br>Describe, sort and compare polyhedral in terms of:<br>• shape<br>• number of faces<br>• number of edges<br>• number of vertices  |                | Ex. 1<br>5a–c<br>6a–d              | 109–110       | 83     | Worksheet 100<br>p. 78 |       |       |        |  |
|                                    | Reflec  | tion           |                                    |               |        |                        |       |       |        |  |
| Think<br>the le<br>exten<br>to get | about and make a note of: What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What wil       | l you chang                        | ge next time  | ? Why? |                        |       |       |        |  |
|                                    |   | HOD:           |                                    |               |        |                        | Date: |       |        |  |

|                                    | Premier Mathema  | atics    | Week 8  | 3                   |        |   |       |             |  |
|------------------------------------|--|----------|---|---------------------|--------|---|-------|-------------|--|
| Day                                | CAPS concepts and skills   |          | LB  | LB                  | TG     | DBE   |       | Class       |  |
|                                    |  |          | ex.   | pp.                 | pp.    | WORKDOOK  |       |             |  |
|                                    |  |          |   |                     |        |   | Dat   | e completed |  |
| 36                                 | <b>Revision</b><br>Use nets to create models of geometric solids: <b>prisms; cubes;</b><br>Draw sketches of nets using knowledge of shape and number of faces of solids  |          | Ex. 2<br>1a–e<br>2a–h                           | 110–111             | 84     | Worksheet 101<br>p. 80<br>Worksheet 102a<br>p. 82 |       |             |  |
| 37                                 | Construction of nets is based on the number and shape of the solid and does not re<br>measuring of internal angles of polygons   | equire   | Ex. 2<br>3a–d                                   | 111                 | 84     | Worksheet 104<br>p. 88                            |       |             |  |
| 38                                 | Able to work out relative position of faces of the nets, using trial and error to match edges and vertices to build the 3-D object   | l        | Ex. 2<br>4                                      | 111<br>*TG<br>86–87 | 84     | Worksheet 104<br>p. 89                            |       |             |  |
| 39                                 | FORMAL ASSESSMENT 2<br>Project   |          | Task  | 112                 | 88     |   |       |             |  |
| 40                                 | <b>Revision</b><br>Numeric patterns<br>Using formula and tables<br>Algebraic expressions   |          | Ex. 1<br>1a–c<br>Ex. 2<br>1a–c<br>Ex. 3<br>1–11 | 113                 | 89     |   |       |             |  |
|                                    | Reflect  | tion     |   |                     |        |   |       |             |  |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | Vhat wil | l you chang                                     | ge next time        | ? Why? |   |       |             |  |
|                                    | н  | IOD:     |   |                     |        |   | Date: |             |  |

|                                   | Premier Mathe  | matics   | Week 9  | )            |                  |          |  |      |       |       |   |
|-----------------------------------|--|----------|---|--------------|------------------|----------|--|------|-------|-------|---|
| Day                               | CAPS concepts and skills   |          | LB  | LB           | TG               | DBE      |  |      | Class |       |   |
|                                   |  |          | ex.   | pp.          | pp.              | workbook |  |      |       |       |   |
|                                   |  |          |   |              |                  |          |  | Date | comp  | leted | I |
| 41                                | Revision<br>Algebra  |          | Ex. 4<br>1a–c<br>2a–c<br>3a–c<br>Ex. 5<br>(Graph) | 114          |                  |          |  |      |       |       |   |
| 42                                | <b>Revision</b><br>Transformation geometry   |          | Ex. 5<br>1a–f<br>2a–c<br>3a–c<br>1                | 114–116      | 89–90<br>(Ex. 6) |          |  |      |       |       |   |
| 43                                | Revision<br>Geometry of 3-D objects  |          | Ex. 6<br>2a–d<br>3a–b<br>1<br>4a–b<br>5           | 116–117      | 90<br>(Ex. 7)    |          |  |      |       |       |   |
| 44                                | Remediation of project   |          |   |              |                  |          |  |      |       |       |   |
| 45                                | Revision   |          |   |              |                  |          |  |      |       |       |   |
|                                   | Refle  | ection   |   |              |                  |          |  |      |       |       |   |
| Think<br>the le<br>exten<br>to ge | and the set of the set | What wil | l you chang                                       | ge next time | ? Why?           |          |  |      |       |       |   |
|                                   | HOD: Date:   |          |   |              |                  |          |  |      |       |       |   |

|                                   | Premier Mathematics Week 10: Revision and test – plan your week   |         |              |              |          |          |   |        |       |       |  |  |  |
|-----------------------------------|---|---------|--------------|--------------|----------|----------|---|--------|-------|-------|--|--|--|
| Day                               | CAPS concepts and skills  |         | LB           | LB           | TG       | DBE      |   | (      | Class |       |  |  |  |
|                                   |   |         | ex.          | pp.          | pp.      | WORKDOOK |   |        |       |       |  |  |  |
|                                   |   |         |              |              |          |          |   | Date o | comp  | leted |  |  |  |
| 46                                |   |         |              |              |          |          |   |        |       |       |  |  |  |
| 47                                |   |         |              |              |          |          |   |        |       |       |  |  |  |
| 48                                |   |         |              |              |          |          |   |        |       |       |  |  |  |
| 49                                |   |         |              |              |          |          |   |        |       |       |  |  |  |
| 50                                |   |         |              |              |          |          |   |        |       |       |  |  |  |
|                                   | Refi  | ection  | <u> </u>     | 1            | <u> </u> | 1        | 1 |        | [     |       |  |  |  |
| Think<br>the le<br>exten<br>to ge | about and make a note of: What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What wi | ll you chang | ge next time | ? Why?   |          |   |        |       |       |  |  |  |
| HOD: Date:                        |   |         |              |              |          |          |   |        |       |       |  |  |  |

| Premier Mathematics Week 11: Revision and remediation of test  |   |  |  |  |  |  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|--|--|--|--|--|
| End-of-terr  | n reflection  |  |  |  |  |  |  |  |  |  |  |  |
| Think about and make a note of: <ol> <li>Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</li> </ol> | 3. What ONE change should you make to your teaching practice to help you teach more effectively next term?  |  |  |  |  |  |  |  |  |  |  |  |
| 2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?   | 4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in the future? What plan will you make to get back on track? |  |  |  |  |  |  |  |  |  |  |  |
| HOD:   | Date:   |  |  |  |  |  |  |  |  |  |  |  |

## 7. Solutions for All Mathematics

This section maps out how you should use your Teacher's Guide and Learner's Book in a way that enables you to cover the curriculum sequentially, aligning with the CAPS, for well-paced and meaningful teaching.

The following components are provided in the columns of the tracker table:

- Day/lesson number.
- CAPS page numbers and content linked to Learner's Book content.
- Learner's Book exercises/activities that cover the CAPS content for the day.
- Page reference in the Learner's Book (LB page reference).
- Page reference in your Teacher's Guide for the day's activities (TG page reference).
- DBE workbook link to related content (worksheet and page numbers are referenced).
- Date completed (complete this daily).

**Note:** You will find useful ideas and resources in the toolkit book *Mental Maths Activities and Printable Resources.* 

#### Weekly reflection

The tracker gives you space to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and discuss things that worked or did not go so well in your lesson. Together with your HOD you can think of ways of improving on the daily work that the learners in your class are doing. When you reflect you could think about things such as:

• Was your preparation for the lesson adequate? For instance, did you have all the necessary resources? Had you thought through the content so that you

understood it fully and so could teach it effectively?

- Did the purpose of the lesson succeed? For instance, did the learners reach a good understanding of the key concepts for the day? Could they use the language expected from them? Could they write what was expected from them?
- Did the learners cope with the work set for the day? For instance, did they finish the classwork? Was their classwork done adequately? Did you assign the homework?
- Are your learners' books up to date?
- Does what the learners have done in their books correlate with the tracked comments in the tracker?

Briefly write down your reflection weekly, following the prompts in the tracker.

- What went well?
- What did not go well?
- What did the learners find difficult or easy to understand or do?
- What will you do to support or extend learners?
- Did you complete all the work set for the week?
- If not, how will you get back on track?
- What will you change for next time? Why?

The reflection should be based on the daily lessons you have taught each week. It will provide you with a record for the next time you implement the same lesson again, and also forms the basis for collegial conversations with your head of department and your peers.

|                                    | Solutions for All Mathematics Week 1   |         |                          |              |         |                      |       |       |      |       |  |
|------------------------------------|--|---------|--------------------------|--------------|---------|----------------------|-------|-------|------|-------|--|
| Day                                | CAPS concepts and skills   |         | LB                       | LB           | TG      | DBE                  |       | C     | lass |       |  |
|                                    |  |         | ex./act.                 | pp.          | pp.     | workbook             |       |       |      |       |  |
|                                    |  |         |                          |              |         |                      | D     | ate c | omp  | leted |  |
| 1                                  | <b>Investigate and extend patterns pp. 58–61</b><br>Relationship between numbers including patterns represented in physical or<br>diagram form   |         | Act. 19.1<br>1–7         | 221–222      | 137     |                      |       |       |      |       |  |
| 2                                  | Relationship between numbers including patterns not limited to sequences including difference  |         | Ex. 19.1<br>1a–d<br>2a–e | 220–221      | 136–137 | Worksheet 65<br>p. 2 |       |       |      |       |  |
| 3                                  | Relationship between numbers including patterns not limited to sequences including ratio   |         | Ex. 19.2<br>1–3          | 223–224      | 138     | Worksheet 66<br>p. 4 |       |       |      |       |  |
| 4                                  | Relationship between numbers including patterns of learners own creation   |         | Ex. 19.2<br>4–5          | 223–224      | 138     |                      |       |       |      |       |  |
| 5                                  | Relationship between numbers including patterns represented in tables  |         | Act. 19.2<br>1–2         | 222          | 137     | Worksheet 68<br>p. 8 |       |       |      |       |  |
|                                    | Refle  | ection  |                          |              |         |                      |       |       |      |       |  |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What wi | ll you chang             | je next time | ? Why?  |                      |       |       |      |       |  |
|                                    |  | HOD:    |                          | -            |         |                      | Date: |       |      |       |  |

|                                    | Solutions for All Mathematics Week 2   |         |                    |              |         |                        |  |      |       |      |   |
|------------------------------------|--|---------|--------------------|--------------|---------|------------------------|--|------|-------|------|---|
| Day                                | CAPS concepts and skills   |         | LB                 | LB           | TG      | DBE                    |  |      | Class |      |   |
|                                    |  |         | ex./act.           | pp.          | pp.     | workbook               |  |      |       |      | _ |
|                                    |  |         |                    |              |         |                        |  | Date | comp  | eted |   |
| 6                                  | Relationship between numbers including patterns represented in diagrams, table difference and ratio  | s,      | Ex.<br>19.3<br>1–2 | 227          | 140     | Worksheet 68<br>p. 9   |  |      |       |      |   |
| 7                                  | <b>Input and output values p. 62</b><br>Determine rules for patterns using flow diagrams, tables and formula   |         | Act. 20.1<br>1a–d  | 230–231      | 143–144 | Worksheet 72<br>p. 18  |  |      |       |      |   |
| 8                                  | Determine, interpret and justify equivalence of different descriptions of the same represented verbally, in flow diagrams, in tables;<br>Formula by number sentence  | rule    | Act. 20.2<br>1–2   | 231–232      | 144     | Worksheet 73<br>p. 20  |  |      |       |      |   |
| 9                                  | <ul> <li>9 Revision <ul> <li>Numeric and geometric patterns</li> <li>Input/output values</li> </ul> </li> </ul>  |         | Ex.<br>20.2<br>3–4 | 234          | 146     | Worksheet 71b<br>p. 16 |  |      |       |      |   |
| 10                                 | Algebraic language p. 63<br>Recognise and interpret rules or relationships represented in symbolic form  |         | Act. 21.1<br>1–2   | 239          | 151     | Worksheet 74<br>p. 22  |  |      |       |      |   |
|                                    | Refle  | ection  |                    |              |         |                        |  |      |       |      |   |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What wi | ll you chang       | je next time | ? Why?  |                        |  |      |       |      |   |
| HOD: Date:                         |  |         |                    |              |         |                        |  |      |       |      |   |

|                                   | Solutions for All Ma  | athemat  | tics We                                | ek 3           |            |                          |       |      |       |       |  |
|-----------------------------------|---|----------|--|----------------|------------|--------------------------|-------|------|-------|-------|--|
| Day                               | CAPS concepts and skills  |          | LB                                     | LB             | TG         | DBE                      |       |      | Class |       |  |
|                                   |   |          | ex./act.                               | pp.            | pp.        | WORKDOOK                 |       |      |       |       |  |
|                                   |   |          |  |                |            |                          |       | Date | comp  | leted |  |
| 11                                | Identify variables and constants in given formulae  |          | Ex.<br>21.1<br>1–4                     | 240            | 151–152    | Worksheet 74<br>p. 23    |       |      |       |       |  |
| 12                                | <ul> <li>Number sentences p. 64</li> <li>Write number sentences to describe problem situations</li> <li>Analyse and interpret number sentences that describe a given situation</li> </ul>   |          | Act.<br>21.1<br>1–5<br>Act 21.3<br>1–4 | 240–241        | 152        | Worksheet 77<br>p. 28    |       |      |       |       |  |
| 13                                | Solve and complete number sentences by:<br>• inspection<br>• trial and improvement  |          | Ex.<br>21.2<br>1–3                     | 242            | 153        | Worksheet 79<br>p. 32–33 |       |      |       |       |  |
| 14                                | <ul> <li>Algebraic language p. 63</li> <li>Identify variables and constants in given formulae or equations</li> <li>Determine the numerical value of an expression by substitution</li> </ul>   |          | Act.<br>22.1<br>1–3<br>Ex. 22.1        | 246<br>247–248 | 157<br>158 |                          |       |      |       |       |  |
| 15                                | <ul> <li>Algebraic language p. 63</li> <li>Identify variables and constants in given formulae or equations</li> <li>Determine the numerical value of an expression by substitution</li> </ul>   |          | Ex 22.2<br>1–3<br>Act. 22.2<br>1–5     | 249–250        | 158        |                          |       |      |       |       |  |
|                                   | Refle   | ection   |  |                |            |                          |       |      |       |       |  |
| Think<br>the le<br>exten<br>to ge | a <b>about and make a note of:</b> What went well? What did not go well? What did<br>parners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What wil | l you chang                            | ge next time   | ? Why?     |                          |       |      |       |       |  |
|                                   |   | HOD:     |  |                |            |                          | Date: |      |       |       |  |

|                                   | Solutions for All Ma   | athemat   | ics We                            | ek 4         |         |                                  |       |        |       |      |
|-----------------------------------|--|-----------|-----------------------------------|--------------|---------|----------------------------------|-------|--------|-------|------|
| Day                               | CAPS concepts and skills   |           | LB                                | LB           | TG      | DBE                              |       | (      | Class |      |
|                                   |  |           | ex./act.                          | pp.          | pp.     | workbook                         |       |        |       |      |
|                                   |  |           |                                   |              |         |                                  | C     | Date o | compl | eted |
| 16                                | <b>Algebraic language p. 63</b><br>Determine the numerical value of an expression by substitution  |           | Ex. 22.3<br>1–2<br>Ex 22.4<br>1–5 | 252<br>253   | 159     | Worksheet 76<br>p. 30            |       |        |       |      |
| 17                                | <b>Revision</b><br>Algebraic equations and number sentences  |           | 1–5                               | 254–255      | 310     |                                  |       |        |       |      |
| 18                                | FORMAL ASSESSMENT 1<br>Assignment  |           | Task                              | _            | 308–309 |                                  |       |        |       |      |
| 19                                | <ul> <li>Interpreting graphs p. 65</li> <li>Analyse and interpret global graphs of problem situations with special focus on:</li> <li>linear or non-linear (temperature and time graphs)</li> <li>constant increasing (rainfall and time graphs)</li> </ul>                  |           | Act. 23.1<br>1a–q                 | 257          | 161     | Worksheet 80a<br>& b<br>p. 34–36 |       |        |       |      |
| 20                                | <ul><li>Analyse and interpret global graphs of problem situations with special focus on:</li><li>constant decreasing (time and distance travelled)</li></ul>   |           | Act. 23.4<br>1–4                  | 262–263      | 168     | Worksheet 81<br>p. 38            |       |        |       |      |
|                                   | Refle  | ection    |                                   |              |         |                                  |       |        |       |      |
| Think<br>the le<br>exten<br>to ge | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What will | l you chang                       | je next time | ? Why?  |                                  |       |        |       |      |
|                                   |  | HOD:      |                                   |              |         |                                  | Date: |        |       |      |

|  | Solutions for All Ma   | thema   | tics We                              | ek 5           |                |  |       |        |      |      |  |
|--|--|---------|--------------------------------------|----------------|----------------|--|-------|--------|------|------|--|
| Day  | CAPS concepts and skills   |         | LB                                   | LB             | TG             | DBE  |       | С      | lass |      |  |
|  |  |         | ex./act.                             | pp.            | pp.            | WORKDOOK                                       |       |        |      |      |  |
|  |  |         |                                      |                |                |  | D     | ate co | ompl | eted |  |
| 21   | <ul> <li>Analyse and interpret global graphs of problem situations with special focus on:</li> <li>linear or non-linear</li> <li>constant increasing or decreasing (drawing of graphs)</li> </ul>  |         | Ex.<br>23.2<br>1–4                   | 264            | 168–169<br>5   | Worksheet 81<br>p. 39                          |       |        |      |      |  |
| 22   | Draw global graphs from given descriptions of a problem situation, by identifying features like:<br>• linear and non-linear (drawing of graphs)  | 9       | Act. 23.1<br>2<br>Ex.<br>23.2<br>1–2 | 258–259        | 165            | Worksheet 82<br>p. 40                          |       |        |      |      |  |
| <ul> <li>23 Draw global graphs from given descriptions of a problem situation, by identifying features like:</li> <li>constants (drawing of graphs)</li> </ul> |  |         |                                      | 260–261<br>261 | 165–167<br>168 | Worksheet 83a<br>p. 42                         |       |        |      |      |  |
| 24   | <b>Revision</b><br>Analyse, interpret and draw graphs  |         | 1-4                                  | 266–267        | 169–170        |  |       |        |      |      |  |
| 25   | <b>Transformations p. 65</b><br>Recognise, describe and perform translations with geometric figures and shapes<br>squared paper  | on      | Ex.<br>24.2<br>1–3                   | 271            | 172            | Worksheet 86<br>p. 50<br>Worksheet 88<br>p. 54 |       |        |      |      |  |
|  | Refle  | ection  |                                      |                |                |  |       |        |      |      |  |
| Think<br>the le<br>exten<br>to ge  | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What wi | ll you chang                         | ge next time   | ? Why?         |  |       |        |      |      |  |
|  |  | HOD:    |                                      |                |                |  | Date: |        |      |      |  |

|                                    | Solutions for All Mat  | themat   | tics We                            | ek 6        |                    |  |       |        |        |      |
|------------------------------------|--|----------|------------------------------------|-------------|--------------------|--|-------|--------|--------|------|
| Day                                | CAPS concepts and skills   |          | LB                                 | LB          | TG                 | DBE  |       | Cla    | ass    |      |
|                                    |  |          | ex./act.                           | pp.         | pp.                | workbook   |       |        |        |      |
|                                    |  |          |                                    |             |                    |  | Da    | ate co | mplete | ed 🛛 |
| 26                                 | 26       Transformations p. 65         Recognise, describe and perform reflections and rotations with geometric figures         shapes on squared paper  |          | Act. 24.2<br>Ex. 24.3<br>1–2       | 272<br>274  | 173<br>173         | Worksheet 86<br>p. 50<br>Worksheet 88<br>p. 54       |       |        |        |      |
| 27                                 | Recognise, describe and perform translations, reflections and rotations with geomo<br>figures and shapes on squared paper  | etric    | Act. 24.3<br>1–4<br>Ex 24.4<br>1–3 | 275<br>276  | 173–174<br>174–175 | Worksheet 86<br>p. 51 no. a<br>Worksheet 87<br>p. 52 |       |        |        |      |
| 28                                 | Revision<br>Transformations  |          | 1–5                                | 277–278     | 175                |  |       |        |        |      |
| 29                                 | Draw enlargements of geometric figures on squared paper and compare them in t of shape   | terms    | Act. 25.1                          | 280<br>281  | 177<br>178         | Worksheet 92<br>p. 62                                |       |        |        |      |
| 30                                 | Draw enlargements and reductions of geometric figures on squared paper and con<br>them in terms of size  | mpare    | Ex. 25.2<br>1–2                    | 283–284     | 178–179            | Worksheet 93<br>p. 64                                |       |        |        |      |
|                                    | Reflec   | ction    |                                    |             |                    |  |       |        |        |      |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What wil | ll you chang                       | e next time | ? Why?             |  |       |        |        |      |
|                                    |  | HOD:     |                                    |             |                    |  | Date: |        |        |      |

|                                    | Solutions for All Math   | nemati             | ics We                               | ek 7               |                |                        |       |      |       |       |
|------------------------------------|--|--------------------|--------------------------------------|--------------------|----------------|------------------------|-------|------|-------|-------|
| Day                                | CAPS concepts and skills   |                    | LB                                   | LB                 | TG             | DBE                    |       |      | Class |       |
|                                    |  |                    | ex./act.                             | pp.                | pp.            | workbook               |       |      |       |       |
|                                    |  |                    |                                      |                    |                |                        | I     | Date | comp  | leted |
| 31                                 | <b>Enlargements and reductions p. 65</b><br>Draw enlargements and reductions of geometric figures on squared paper and recog<br>the production of congruent figures  | gnise              | Ex. 25.2<br>2                        | 283                | 178–179        | Worksheet 94<br>p. 66  |       |      |       |       |
| 32                                 | Revision<br>Enlargements and reductions  |                    | 1, 2                                 | 284                | 179            |                        |       |      |       |       |
| 33                                 | <ul> <li>Classifying 3-D objects p. 66</li> <li>Describe, sort and compare polyhedral in terms of:</li> <li>shape</li> <li>number of faces</li> </ul>  |                    | Act 26.1<br>1–2<br>Act. 26.2<br>1–6  | 286–287<br>287     | 181–182<br>182 | Worksheet 99<br>p. 76  |       |      |       |       |
| 34                                 | Describe, sort and compare polyhedral in terms of:<br>• number of edges<br>• number of faces<br>• number of vertices   |                    | Ex. 26.2<br>Act. 26.3                | 288                | 182–183        | Worksheet 100<br>p. 78 |       |      |       |       |
| 35                                 | Describe, sort and compare polyhedral in terms of:<br>• number of edges<br>• number of faces<br>• number of vertices   |                    | Act. 26.4<br>1–5<br>Act. 26.5<br>1–2 | 290–291<br>291–292 |                |                        |       |      |       |       |
|                                    | Reflection   | ion                |                                      |                    |                |                        |       |      |       |       |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | /hat will <u>y</u> | you chang                            | e next time        | ? Why?         |                        |       |      |       |       |
|                                    | н  | OD:                |                                      |                    |                |                        | Date: |      |       |       |

|                                    | Solutions for All Mat  | hemati             | cs We                              | ek 8                  |                       |                         |       |       |        |  |
|------------------------------------|--|--------------------|------------------------------------|-----------------------|-----------------------|-------------------------|-------|-------|--------|--|
| Day                                | CAPS concepts and skills   |                    | LB<br>ov /act                      | LB                    | TG                    | DBE                     |       | Class | ;      |  |
|                                    |  |                    | ex./act.                           | pp.                   | pp.                   | WORKDOOK                |       |       |        |  |
|                                    |  |                    |                                    |                       |                       |                         | Dat   | e com | pleted |  |
| 36                                 | Revise using nets to create models of geometric solids: <b>cubes; prisms;</b><br>Draw sketches of nets using knowledge of shape and number of faces of solids  |                    | Act. 27.3<br>Ex. 27.2<br>Act. 27.4 | 298<br>299<br>299–300 | 189–190<br>191<br>191 | Worksheet 102a<br>p. 82 |       |       |        |  |
| 37                                 | Use nets to create models of different geometric solids:<br>Draw sketches of nets using knowledge of shape and number of faces of solids   |                    | Ex 27.3<br>1–2                     | 301                   | 190–191               | Worksheet 104<br>p. 89  |       |       |        |  |
| 38                                 | FORMAL ASSESSMENT 2<br>Project   |                    | Task                               | —                     | 292–296               |                         |       |       |        |  |
| 39                                 | Revision<br>3-D objects  |                    | 1–5                                | 302–303               | 192                   | Worksheet 101<br>p. 80  |       |       |        |  |
| 40                                 | <b>Revision</b><br>Numeric and geometric patterns  |                    | 1–6                                | 304–305               | 192–193               |                         |       |       |        |  |
|                                    | Reflect  | tion               |                                    |                       |                       |                         |       |       |        |  |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What will <u>y</u> | you chang                          | e next time           | ? Why?                |                         |       |       |        |  |
|                                    | F  | HOD:               |                                    |                       |                       | I                       | Date: |       |        |  |

|                                   | Solutions for All Ma   | athemat  | tics We      | ek 9                |                    |          |       |        |        |
|-----------------------------------|--|----------|--------------|---------------------|--------------------|----------|-------|--------|--------|
| Day                               | CAPS concepts and skills   |          | LB           | LB                  | TG                 | DBE      |       | Class  | ;      |
|                                   |  |          | ex./act.     | pp.                 | pp.                | WORKDOOK |       |        |        |
|                                   |  |          |              |                     |                    |          | Dat   | e comp | oleted |
| 41                                | Revision<br>Functions and relationships<br>Algebraic expressions   |          | 1–5<br>1–5   | 306–307<br>307– 308 | 193<br>193–194     |          |       |        |        |
| 42                                | Revision<br>Algebraic equations<br>Graphs  |          | 1–7<br>1–4   | 308–309             | 194–195<br>195–196 |          |       |        |        |
| 43                                | Revision<br>Graphs   |          | 1–4          | 309–310             | 195–196            |          |       |        |        |
| 44                                | Revision<br>Transformations (Unit 24 & 25)<br>Geometry 3-D objects   |          | 1–6<br>1–6   | 311–314<br>314–315  | 196–198<br>198–199 |          |       |        |        |
| 45                                | Revision   |          | Task         | -                   | 297–302            |          |       |        |        |
|                                   | Refle  | ection   |              |                     |                    |          |       |        |        |
| Think<br>the le<br>exten<br>to ge | a <b>about and make a note of:</b> What went well? What did not go well? What did<br>earners find difficult or easy to understand or do? What will you do to support or<br>id learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What wil | ll you chang | ge next time        | ? Why?             |          |       |        |        |
|                                   |  | HOD:     |              |                     |                    |          | Date: |        |        |

|                                    | Solutions for All Mathematics Week   | 10: Rev  | vision and   | d test – p  | olan your | week     |       |        |       |       |  |
|------------------------------------|--|----------|--------------|-------------|-----------|----------|-------|--------|-------|-------|--|
| Day                                | CAPS concepts and skills   |          | LB           | LB          | TG        | DBE      |       | (      | Class |       |  |
|                                    |  |          | ex./act.     | pp.         | pp.       | WORKDOOK |       |        |       |       |  |
|                                    |  |          |              |             |           |          |       | Date o | comp  | leted |  |
| 46                                 |  |          |              |             |           |          |       |        |       |       |  |
| 47                                 |  |          |              |             |           |          |       |        |       |       |  |
| 48                                 |  |          |              |             |           |          |       |        |       |       |  |
| 49                                 |  |          |              |             |           |          |       |        |       |       |  |
| 50                                 |  |          |              |             |           |          |       |        |       |       |  |
|                                    | Refl   | ection   |              |             |           |          |       |        |       |       |  |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>back on track? | What wil | ll you chang | e next time | ? Why?    |          |       |        |       |       |  |
|                                    |  | HOD:     |              |             |           |          | Date: |        |       |       |  |

| Solutions for All Mathematics Week   | 11: Revision and remediation of test  |
|--|---|
| End-of-terr  | n reflection  |
| Think about and make a note of: <ol> <li>Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</li> </ol> | 3. What ONE change should you make to your teaching practice to help you teach more effectively next term?  |
| 2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?   | 4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in the future? What plan will you make to get back on track? |
| HOD:   | Date:   |

## 8. Spot On Mathematics

This section maps out how you should use school Teacher's Guide and Learner's Book in a way that enables you to cover the curriculum sequentially, aligning with the CAPS, for well-paced and meaningful teaching.

The following components are provided in the columns of the tracker table:

- 1. Day/lesson number.
- 2. CAPS page numbers and content linked to Learner's Book content.
- 3. Learner's Book exercises/activities that cover the CAPS content for the day.
- 4. Page reference in the Learner's Book (LB page reference).
- 5. Page reference in your Teacher's Guide for the day's activities (TG page reference).
- 6. DBE workbook link to related content (worksheet and page numbers are referenced).
- 7. Date completed (complete this daily).

**Note:** You will find useful ideas and resources in the toolkit book *Mental Maths Activities and Printable Resources.* 

#### Weekly reflection

The tracker gives you space to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and discuss things that worked or did not go so well in your lesson. Together with your HOD you can think of ways of improving on the daily work that the learners in your class are doing. When you reflect you could think about things such as:

• Was your preparation for the lesson adequate? For instance, did you have all the necessary resources? Had you thought through the content so that you

understood it fully and so could teach it effectively?

- Did the purpose of the lesson succeed? For instance, did the learners reach a good understanding of the key concepts for the day? Could they use the language expected from them? Could they write what was expected from them?
- Did the learners cope with the work set for the day? For instance, did they finish the classwork? Was their classwork done adequately? Did you assign the homework?
- Are your learners' books up to date?
- Does what the learners have done in their books correlate with the tracked comments in the tracker?

Briefly write down your reflection weekly, following the prompts in the tracker.

- What went well?
- What did not go well?
- What did the learners find difficult or easy to understand or do?
- What will you do to support or extend learners?
- Did you complete all the work set for the week?
- If not, how will you get back on track?
- What will you change for next time? Why?

The reflection should be based on the daily lessons you have taught each week. It will provide you with a record for the next time you implement the same lesson again, and also forms the basis for collegial conversations with your head of department and your peers.

|                                    | Spot On Mathema  | atics        | Week 1                                |             |            |                      |       |        |      |      |  |
|------------------------------------|--|--------------|---------------------------------------|-------------|------------|----------------------|-------|--------|------|------|--|
| Day                                | CAPS concepts and skills   |              | LB                                    | LB          | TG         | DBE                  |       | Cl     | ass  |      |  |
|                                    |  |              | act.                                  | pp.         | pp.        | WORKDOOK             |       |        |      |      |  |
|                                    |  |              |                                       |             |            |                      | D     | ate co | mple | eted |  |
| 1                                  | <b>Investigate and extend patterns pp. 58–61</b><br>Relationship between numbers including patterns represented in physical or<br>diagram form   | A            | Act. 12.1<br>1, 2, 3                  | 170         | 198        |                      |       |        |      |      |  |
| 2                                  | Relationship between numbers including patterns not limited to sequences including difference  | Д            | Act. 12.1<br>4a–f,<br>5a–b            | 170         | 198        | Worksheet 65<br>p. 2 |       |        |      |      |  |
| 3                                  | Relationship between numbers including patterns not limited to sequences including ratio   | А            | Act. 12.2<br>1–2                      | 171         | 199        | Worksheet 66<br>p. 4 |       |        |      |      |  |
| 4                                  | Relationship between numbers including patterns of learners own creation   | А            | Act. 12.3<br>3                        | 173         | 200        |                      |       |        |      |      |  |
| 5                                  | Relationship between numbers including patterns represented in tables  | А<br>А       | Act. 12.4<br>1, 2<br>Act. 12.6<br>2 3 | 175<br>178  | 201<br>203 | Worksheet 68<br>p. 8 |       |        |      |      |  |
|                                    | Reflecti   | tion         | 2,0                                   |             |            |                      |       |        |      |      |  |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | Vhat will yo | ou chang                              | e next time | ? Why?     |                      |       |        |      |      |  |
|                                    | н  | IOD:         |                                       |             |            |                      | Date: |        |      |      |  |

|                                   | Spot On Mathema  | atics Wee                    | <b>&lt; 2</b>  |            |                        |       |          |     |
|-----------------------------------|--|------------------------------|----------------|------------|------------------------|-------|----------|-----|
| Day                               | CAPS concepts and skills   | LB                           | LB             | TG         | DBE                    |       | Class    |     |
|                                   |  | act.                         | pp.            | pp.        | WORKDOOK               |       |          |     |
|                                   |  |                              |                |            |                        | Dat   | e comple | ted |
| 6                                 | Relationship between numbers including patterns represented in diagrams, tables, difference and ratio  | Act. 12<br>1, 3<br>Act 12.   | 3 173<br>5 177 | 200<br>202 | Worksheet 68<br>p. 9   |       |          |     |
| 7                                 | <b>Input and output values p. 62</b><br>Determine rules for patterns using flow diagrams, tables and formula   | Act. 13<br>1a–b<br>2a–c<br>3 | 1 185          | 208        | Worksheet 72<br>p. 18  |       |          |     |
| 8                                 | Determine, interpret and justify equivalence of different descriptions of the same rul<br>represented verbally, in flow diagrams, in tables;<br>Formula by number sentence   | le Act. 13<br>1–3            | 2 187          | 209        | Worksheet 73<br>p. 20  |       |          |     |
| 9                                 | <ul><li>Revision</li><li>Numeric and geometric patterns</li><li>Input/output values</li></ul>  | 1, 2, 3a,<br>1, 3, 7         | 6 181<br>189   | 205<br>210 | Worksheet 71b<br>p. 16 |       |          |     |
| 10                                | Algebraic language p. 63<br>Recognise and interpret rules or relationships represented in symbolic form  | Act. 14<br>3<br>Act. 14<br>1 | 1 192<br>2 193 | 214<br>215 | Worksheet 74<br>p. 22  |       |          |     |
|                                   | Reflecti   | ion                          |                | <b>I</b>   | 1                      | 1 1   |          | I   |
| Think<br>the le<br>exten<br>to ge | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>back on track? | /hat will you cha            | nge next i     | ime? Why?  |                        |       |          |     |
|                                   | Н  | OD:                          |                |            |                        | Date: |          |     |

|                                    | Spot On Mathen   | natics   | Week 3                                | 3            |                |                       |       |      |       |       |
|------------------------------------|--|----------|---------------------------------------|--------------|----------------|-----------------------|-------|------|-------|-------|
| Day                                | CAPS concepts and skills   |          | LB                                    | LB           | TG             | DBE                   |       | (    | Class |       |
|                                    |  |          | act.                                  | pp.          | pp.            | workbook              |       |      |       |       |
|                                    |  |          |                                       |              |                |                       | 0     | Date | comp  | leted |
| 11                                 | Identify variables and constants in given formulae   |          | Act. 14.1<br>1–2                      | 192          | 214            | Worksheet 74<br>p. 23 |       |      |       |       |
| 12                                 | Algebraic language p. 63<br>Recognise and interpret rules or relationships represented in symbolic form  |          | Act. 14.2<br>2–8                      | 194          | 215            | Worksheet 77<br>p. 28 |       |      |       |       |
|                                    | Algebraic language p. 63<br>Recognise and interpret rules or relationships represented in symbolic form  |          | Act 14.4<br>1–4                       | 196          | 216            |                       |       |      |       |       |
| 13                                 | <ul> <li>Number sentences p. 64</li> <li>Write number sentences to describe problem situations</li> <li>Analyse and interpret number sentences that describe a given situation</li> </ul>  |          | Act. 15.1<br>1–4                      | 201          | 220            | Worksheet 79<br>p. 32 |       |      |       |       |
| 14                                 | <ul><li>Solve and complete number sentences by:</li><li>inspection</li><li>trial and improvement</li></ul>   |          | Act. 15.2<br>1a–e<br>2a–c<br>3a–e     | 202–203      | 221            | Worksheet 79<br>p. 33 |       |      |       |       |
| 15                                 | <ul> <li>Algebraic language p. 63</li> <li>Identify variables and constants in given formulae or equations</li> <li>Determine the numerical value of an expression by substitution</li> </ul>  |          | Act. 15.3<br>1–4<br>Act. 15.4<br>1a–e | 205<br>206   | 222–223<br>224 |                       |       |      |       |       |
|                                    | Reflec   | ction    |                                       |              |                |                       |       |      |       |       |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>back on track? | What wil | l you chang                           | ge next time | ? Why?         |                       |       |      |       |       |
|                                    |  | HOD:     |                                       |              |                |                       | Date: |      |       |       |

|                                   | Spot On Mathem   | natics           | Week 4                    | 1            |                        |                       |       |        |       |
|-----------------------------------|--|------------------|---------------------------|--------------|------------------------|-----------------------|-------|--------|-------|
| Day                               | CAPS concepts and skills   |                  | LB                        | LB           | TG                     | DBE                   |       | Class  |       |
|                                   |  |                  | act.                      | pp.          | pp.                    | WORKDOOK              |       |        |       |
|                                   |  |                  |                           |              |                        |                       | Dat   | e comp | leted |
| 16                                | <b>Revision</b><br>Algebraic equations and number sentences  |                  | 1–7<br>1–3                | 198<br>208   | 218<br>226             | Worksheet 76<br>p. 30 |       |        |       |
| 17                                | <ul><li>Interpreting graphs p. 65</li><li>Analyse and interpret global graphs of problem situations with special focus on:</li><li>linear or non-linear</li></ul>  | Act. 16.1<br>1–2 | 211                       | 228          | Worksheet 80a<br>p. 34 |                       |       |        |       |
| 18                                | <ul><li>Analyse and interpret global graphs of problem situations with special focus on:</li><li>constant increasing</li></ul>   | Act. 16.2<br>1   | 212                       | 229          | Worksheet 80b<br>p. 36 |                       |       |        |       |
| 19                                | <ul> <li>Analyse and interpret global graphs of problem situations with special focus on:</li> <li>constant increasing (rainfall and time graphs)</li> </ul>   | Act. 16.2<br>2   | 213                       | 229          | Worksheet 81<br>p. 38  |                       |       |        |       |
| 20                                | Draw global graphs from given descriptions of a problem situation, by identifying features like: linear and non-linear drawing of graphs (time and distance travelled)   |                  | Act. 16.3<br>1a–f<br>2a–b | 214–215      | 230                    | Worksheet 81<br>p. 39 |       |        |       |
|                                   | Reflec   | ction            |                           |              |                        |                       |       |        |       |
| Think<br>the le<br>exten<br>to ge | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>back on track? | What wil         | l you chang               | je next time | ? Why?                 |                       |       |        |       |
|                                   |  | HOD:             |                           |              |                        | I                     | Date: |        |       |

|                                     | Spot On Mathem   | natics            | Week S               | 5            |                        |  |       |        |       |      |  |
|-------------------------------------|--|-------------------|----------------------|--------------|------------------------|--|-------|--------|-------|------|--|
| Day                                 | CAPS concepts and skills   |                   | LB                   | LB           | TG                     | DBE  |       | (      | Class |      |  |
|                                     |  |                   | act.                 | pp.          | pp.                    | WOIKDOOK                                       |       |        |       |      |  |
|                                     |  |                   |                      |              |                        |  | 0     | Date o | ompl  | eted |  |
| 21                                  | Draw global graphs from given descriptions of a problem situation, by identifying features like:<br>• linear and non-linear (drawing of graphs)  | Act. 16.3<br>2a–b | 215                  | 232          | Worksheet 82<br>p. 40  |  |       |        |       |      |  |
| 22                                  | Draw global graphs from given descriptions of a problem situation, by identifying features like:<br>• constants (drawing of graphs)  | Act. 16.3<br>3–4  | 215                  | 231          | Worksheet 83a<br>p. 42 |  |       |        |       |      |  |
| 23                                  | <b>Revision</b><br>Algebraic equations, number sentences and graphs  | 4–6<br>1a–j, 2    | 208<br>217–218       | 233          |                        |  |       |        |       |      |  |
| 24                                  | FORMAL ASSESSMENT 1<br>Assignment  |                   | Task                 | -            | 234                    |  |       |        |       |      |  |
| 25                                  | <b>Transformations p. 65</b><br>Identify and draw lines of symmetry in geometric figures   |                   | Act. 17.1<br>2, 3, 5 | 220–221      | 238                    | Worksheet 86<br>p. 50<br>Worksheet 88<br>p. 54 |       |        |       |      |  |
|                                     | Reflec   | tion              |                      |              |                        |  |       |        |       |      |  |
| Think<br>the le<br>exten-<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What wil          | l you chang          | ge next time | ? Why?                 |  |       |        |       |      |  |
|                                     |  | HOD:              |                      |              |                        |  | Date: |        |       |      |  |

|                                   | Spot On Mathema  | atics \     | Week 6                                | )           |            |  |       |      |       |       |   |
|-----------------------------------|--|-------------|---------------------------------------|-------------|------------|--|-------|------|-------|-------|---|
| Day                               | CAPS concepts and skills   |             | LB                                    | LB          | TG         | DBE  |       |      | Class |       |   |
|                                   |  |             | act.                                  | pp.         | pp.        | WORKDOOK   |       |      |       |       |   |
|                                   |  |             |                                       |             |            |  |       | Date | comp  | letec | 1 |
| 26                                | Remediation of assignment  |             |                                       |             |            |  |       |      |       |       |   |
| 27                                | Recognise, describe and perform translation and rotations with geometric figures an shapes on squared paper  | nd A        | Act. 17.2<br>1, 2<br>Act. 17.3<br>1–3 | 222<br>223  | 239<br>240 | Worksheet 86<br>p. 51 no. b<br>Worksheet 89<br>p. 56<br>Worksheet 86<br>p. 51 no. a<br>Worksheet 87<br>p. 52 |       |      |       |       |   |
| 28                                | Recognise, describe and perform reflections with geometric figures and shapes on squared paper   | Δ           | Act. 17.4<br>1–3                      | 225         | 241        | Worksheet 92<br>p. 62  |       |      |       |       |   |
| 29                                | Draw enlargements and reductions of geometric figures on squared paper and comp<br>them in terms of shape  | ipare A     | Act. 17.5<br>1                        | 226         | 242        | Worksheet 93<br>p. 64  |       |      |       |       |   |
| 30                                | Draw enlargements and reductions of geometric figures on squared paper and comp<br>them in terms of size   | ipare A     | Act. 17.5<br>3                        | 227         | 242        |  |       |      |       |       |   |
|                                   | Reflection   | ion         |                                       |             |            |  |       |      |       |       |   |
| Think<br>the le<br>exten<br>to ge | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | /hat will y | ou chang                              | e next time | ? Why?     |  |       |      |       |       |   |
|                                   | н  | IOD:        |                                       |             |            |  | Date: | :    |       |       |   |

|                                    | Spot On Mathemat   | tics W            | /eek 7          | 7            |        |                        |       |        |       |       |
|------------------------------------|--|-------------------|-----------------|--------------|--------|------------------------|-------|--------|-------|-------|
| Day                                | CAPS concepts and skills   | L                 | LB              | LB           | TG     | DBE                    |       | (      | Class |       |
|                                    |  | a                 | act.            | pp.          | pp.    | WORKDOOK               |       |        |       |       |
|                                    |  |                   |                 |              |        |                        | 0     | Date o | comp  | leted |
| 31                                 | <b>Enlargements and reductions p. 65</b><br>Draw enlargements and reductions of geometric figures on squared paper and recogr<br>the production of congruent figures   | nise 2a           | t. 17.5<br>!a–b | 227          | 242    | Worksheet 94<br>p. 66  |       |        |       |       |
| 32                                 | Draw enlargements and reductions of geometric figures on squared paper and recogr<br>the change of size of figures by increasing or decreasing BUT keeping the same length<br>will produce similar instead of congruent figures  | nise Act.<br>h 4a | t. 17.5<br>a–b  | 227          | 242    | Worksheet 94<br>p. 67  |       |        |       |       |
| 33                                 | Revision<br>Transformations  | 1                 | 1–7             | 229–230      | 244    |                        |       |        |       |       |
| 34                                 | Classifying 3-D objects p. 66<br>Describe, sort and compare polyhedral in terms of:<br>• shape<br>• number of faces<br>• number of edges<br>• number of vertices   | Act.<br>1         | t. 18.1<br>1, 2 | 233          | 246    | Worksheet 99<br>p. 76  |       |        |       |       |
| 35                                 | Describe, sort and compare polyhedral in terms of:<br>• number of edges<br>• number of vertices  | Act.<br>1         | t. 18.2<br>1–2  | 235          | 247    | Worksheet 100<br>p. 78 |       |        |       |       |
|                                    | Reflection   | n                 |                 |              |        |                        |       |        |       |       |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>: back on track? | at will you       | u chang         | je next time | ? Why? |                        |       |        |       |       |
|                                    | НО   | D:                |                 |              |        |                        | Date: |        |       |       |

|                                    | Spot On Mathem   | atics    | Week 8                             | }           |            |   |       |             |
|------------------------------------|--|----------|------------------------------------|-------------|------------|---|-------|-------------|
| Day                                | CAPS concepts and skills   |          | LB                                 | LB          | TG         | DBE   |       | Class       |
|                                    |  |          | act.                               | pp.         | pp.        | workbook  |       |             |
|                                    |  |          |                                    |             |            |   | Date  | e completed |
| 36                                 | Revise using nets to create models of geometric solids: <b>cubes; prisms;</b><br>Draw sketches of nets using knowledge of shape and number of faces of solids  |          | Act. 18.3<br>1–2<br>Act. 18.4<br>1 | 237<br>238  | 248<br>249 | Worksheet 104<br>p. 88<br>Worksheet 102a<br>p. 82 |       |             |
| 37                                 | Construction of nets is based on the number and shape of the solid and does not re<br>measuring of internal angles of polygons   | equire   | Act. 18.4<br>2                     | 238         | 249        | Worksheet 104<br>p. 89                            |       |             |
| 38                                 | Able to work out relative position of faces of the nets, using trial and error to match edges and vertices to build the 3-D object   | ı        | Act. 18.4<br>3                     | 238         | 249        | Worksheet 101<br>p. 80                            |       |             |
| 39                                 | FORMAL ASSESSMENT 2<br>Project   |          | Task                               | -           | 253        |   |       |             |
| 40                                 | <b>Revision</b><br>Numeric and geometric patterns  |          | 1–6                                | 242         | 256        |   |       |             |
|                                    | Reflect  | tion     |                                    |             |            |   |       |             |
| Think<br>the le<br>exten<br>to get | <b>about and make a note of:</b> What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What wil | l you chang                        | e next time | ? Why?     |   |       |             |
|                                    | н  | HOD:     |                                    |             |            |   | Date: |             |

|                                   | Spot On Mathen  | natics    | Week 9     | )           |            |          |       |        |     |
|-----------------------------------|---|-----------|------------|-------------|------------|----------|-------|--------|-----|
| Day                               | CAPS concepts and skills  |           | LB         | LB          | TG         | DBE      |       | Class  |     |
|                                   |   |           | act.       | pp.         | pp.        | WORKDOOK |       |        |     |
|                                   |   |           |            |             |            |          | Date  | comple | ted |
| 41                                | Revision<br>Functions and relationships   |           | 1–5        | 243         | 257        |          |       |        |     |
| 42                                | <b>REVISION</b><br>Algebraic expressions and equations  |           | 1–8<br>1–6 | 244<br>245  | 258<br>259 |          |       |        |     |
| 43                                | <b>REVISION</b><br>Graphs and transformation geometry   |           | 1–2<br>1–4 | 246<br>247  | 260<br>261 |          |       |        |     |
| 44                                | Revision<br>Geometry of 3-D objects   |           | 1–6<br>1–3 | 248<br>240  | 262<br>251 |          |       |        |     |
| 45                                | Revision  |           | Task       | -           | 263        |          |       |        |     |
|                                   | Reflec  | ction     |            |             |            | <u>`</u> |       |        |     |
| Think<br>the le<br>exten<br>to ge | about and make a note of: What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What will | you chang  | e next time | ? Why?     |          |       |        |     |
|                                   |   | HOD:      |            |             |            |          | Date: |        |     |

|                                   | Spot On Mathematics Week 10: Revision and test – plan your week   |         |              |              |        |          |       |        |        |      |
|-----------------------------------|---|---------|--------------|--------------|--------|----------|-------|--------|--------|------|
| Day                               | CAPS concepts and skills  |         | LB           | LB           | TG     | DBE      |       | (      | Class  |      |
|                                   |   |         | act.         | pp.          | pp.    | WORKDOOK |       |        |        |      |
|                                   |   |         |              |              |        |          | ו     | Date o | comple | eted |
| 46                                |   |         |              |              |        |          |       |        |        |      |
| 47                                |   |         |              |              |        |          |       |        |        |      |
| 48                                |   |         |              |              |        |          |       |        |        |      |
| 49                                |   |         |              |              |        |          |       |        |        |      |
| 50                                |   |         |              |              |        |          |       |        |        |      |
|                                   | Reflection  |         |              |              |        |          |       |        |        |      |
| Think<br>the le<br>exten<br>to ge | about and make a note of: What went well? What did not go well? What did<br>arners find difficult or easy to understand or do? What will you do to support or<br>d learners? Did you complete the work set for the week? If not, what will you do<br>t back on track? | What wi | ll you chang | je next time | ? Why? |          |       |        |        |      |
|                                   |   | HOD:    |              |              |        |          | Date: |        |        |      |

| Spot On Mathematics Week 11:   | Revision and remediation of test  |
|--|---|
| End-of-tern  | n reflection  |
| Think about and make a note of: <ol> <li>Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</li> </ol> | 3. What ONE change should you make to your teaching practice to help you teach<br>more effectively next term?   |
| 2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?   | 4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in the future? What plan will you make to get back on track? |
| HOD:   | Date:   |

# **D. ASSESSMENT RESOURCES**

### 1. Assessment Term Plan

Formal assessment tasks are marked and formally recorded for promotion purposes. In Term 3 an **assignment, project and test** are specified by the CAPS (p 154) for formal assessment. Table 1 below shows the formal assessment tasks that are provided in each set of LTSMs, and where they fit into the work for the term. In addition to these, as noted before, an exemplar test is provided in this section for you to use instead of the

Table 1: TERM 3 FORMAL ASSESSMENT TASKS INCLUDED IN EACH SET OF LTSMs

test in your chosen LTSMs. The exemplar test has been carefully designed to ensure that it is in line with the CAPS policy requirements.

Note that if the test is given in the Learner's Book, you can use it for practice or revision, but not for formal assessment, as learners will have a chance to prepare for it in advance. In such cases, you should set your own test, use one from a Teacher's Guide in a different LTSM, or use the exemplar provided in this document.

| LTSM Assignment  |   | Project                                   | <b>Test: To cover all Term 3 topics</b><br>*Useful for practice, not for formal assessment |  |  |
|--|---|---|--|--|--|
| Clever Keeping   | Week 4 options  |   |  | Week 6   | Week 10  |
| Mathematics Simple   | <b>Data Handling</b><br>LB p. 275<br>TG p. 252  | <b>Geometry</b><br>LB p. 276<br>TG p. 253 | <b>Patterns</b><br>LB p. 277<br>TG p. 254  | <b>Geometry</b><br>LB p. 278<br>TG p. 255  | *LB pp. 279–280<br>TG pp. 256–258                        |
| Mathematics TodayWeek 4<br>Patterns<br>LB p. 193–194<br>TG p. 69 |   |   |  | Week 7<br>Golden Ratio<br>LB p. 222<br>TG p. 85  | Week 10<br>LB – only in TG<br>TG pp. 90–91<br>Memo p. 92 |
| Oxford Headstart<br>Mathematics                                  | Oxford HeadstartWeek 3MathematicsPatterns, functions and algebraLB p. 245TG p. 201                            |   |  | Week 6<br>Geometry<br>LB p. 289<br>TG p. 228   | Week 10<br>LB – only in TG<br>TG pp. 230–232             |
| Oxford Successful  | Week 4 options  |   |  | Week 6   | Week 10  |
| Mathematics  | Patterns         Agebra           LB pp. 383–384         LB pp. 385–386           TG p. 264         TG p. 266 |   |  | Functions and Relationships<br>LB pp. 386–387<br>TG p. 267<br>OR<br>Transformations<br>LB pp. 388–389<br>TG p. 268 | LB – only in TG<br>TG pp. 269–270<br>Memo pp. 270–271    |
| Platinum Mathematics   | Week 2<br>Number Patterns<br>LB p. 150<br>TG p. 74  |   |  | Week 7<br>Graphs<br>LB p. 192<br>TG p. 96  | <b>Week 10</b><br>*LB p. 206<br>TG p. 105                |

| LTSM                             | Assignment   | Project   | <b>Test: To cover all Term 3 topics</b><br>*Useful for practice, not for formal assessment |
|----------------------------------|--|---|--|
| Premier Mathematics              | Week 5         Week 8           Graphs         3-D Models           LB pp. 100–101         LB p. 112           TG pp. 75–76         TG p. 88 |   | <b>Week 10</b><br>LB – only in TG<br>TG pp. 91–93<br>Memo pp. 94–95                        |
| Solutions for All<br>Mathematics | Week 4<br>Number Patterns<br>LB – only in TG<br>TG p. 308<br>Memo p. 309   | Week 7<br>3-D Models<br>LB – only in TG<br>TG pp. 292–296   | <b>Week 10</b><br>LB – only in TG<br>TG pp. 297–300<br>Memo pp. 301–302                    |
| Spot On Mathematics              | Week 5<br>Graphs<br>LB – only in TG<br>TG p. 234<br>Memo p. 236  | Week 8<br>Nets of 3-D objects<br>LB – only in TG<br>TG p. 253<br>Guidelines p. 252<br>Memo p. 254 | <b>Week 10</b><br>LB – only in TG<br>TG pp. 263–265<br>Memo pp. 266–267                    |
2. Grade 7 Mathematics Exemplar Test Term 3

| Sur       | name:      |               |                      |             |               |             |                               |           |
|-----------|------------|---------------|----------------------|-------------|---------------|-------------|-------------------------------|-----------|
| Nar       | me:        |               |                      |             |               |             |                               |           |
| Dat       | te of bi   | irth:         |                      |             |               | Δ           | ate:                          | 55        |
|           |            |               |                      |             |               |             |                               |           |
| Ž         | STRUCI     | TIONS         | TO LEARN             | IERS:       |               |             |                               |           |
| <u></u>   | Answei     | r all the     | e questions          | in the spac | tes provided. |             |                               |           |
| 5         | No cale    | culator       | s may be us          | sed.        |               |             |                               |           |
| с.        | Show A     | ALL calc      | culations wh         | nere neces: | sary.         |             |                               |           |
| 4.        | Time: {    | 60 minu       | ltes.                |             |               |             |                               |           |
| <u></u> . | Total: 5   | 55 mark       | S.                   |             |               |             |                               |           |
| SEC       | CTION      | A: MI         | ULTIPLE C            | CHOICE      |               |             |                               | (3 marks, |
| Circl     | le the le  | etter of      | the correct          | answer.     |               |             |                               |           |
| Exar      | nple:      | 7 × 1!<br>105 |                      | 110         | U             | 115         | D 120                         |           |
| <u></u>   | )<br>A rec | ctangul       | ar room is p         | o metres lo | ng and q met  | res wide. M | /hich of the following formul | S         |
|           | cann       | iot be i      | used to det          | ermine the  | perimeter of  | the room?   |                               |           |
|           | ۲          | d + d         | b + d + d            |             |               |             |                               |           |
|           | Ю          | $2 \times p$  | $+ 2 \times q$       |             |               |             |                               |           |
|           | Ċ          | (5 + d)       | $\gamma > 2$         |             |               |             |                               |           |
|           | Ū.         | $b \times d$  | $b \times d +$       |             |               |             |                               | (1)       |
| 2.        | Whic       | ch one (      | of these is <b>r</b> | ot true?    |               |             |                               |           |
|           | Ä          | 1 × 1         | ÷ 1 × 1 = 1          |             |               |             |                               |           |
|           | B          | 2 ÷ 2         | $1 + 2 \div 2 = 2$   | 0           |               |             |                               |           |
|           | Ċ          | 3 × 3         | - 3 + 3 = 3          |             |               |             |                               |           |
|           | Ū.         | (4 – 4        | t) ÷ 4 + 4 =         | 4           |               |             |                               | (1        |
| с.        | What       | t is the      | value of 'a'         | in the tabl | e?            |             |                               |           |
|           |            | -             | 2                    | ε           | 4             | :           | a                             |           |
|           |            | 4             | 9                    | ∞           | 10            | :           | 64                            |           |
|           | Ŕ          | 31            |                      |             |               |             |                               |           |
|           | B          | 16            |                      |             |               |             |                               |           |
|           | Ċ          | Q             |                      |             |               |             |                               |           |
|           | Ū.         | 57            |                      |             |               |             |                               | (1        |

| SEC         | TION   | B: NUM               | ERIC ,              | AND                   | GEC            | DMET                    | 'RIC         | PATTERNS         |                  | 0               | (7 marks) |
|-------------|--------|----------------------|---------------------|-----------------------|----------------|-------------------------|--------------|------------------|------------------|-----------------|-----------|
| <del></del> | Rosy L | unos səsr            | iters to            | form                  | the fc         | llowin                  | ig pat       | terns:           |                  |                 |           |
|             | 0      | 0                    | 00                  | $\bigcirc^{\bigcirc}$ |                | $\circ^{\circ}_{\circ}$ |              | 00               |                  |                 |           |
|             | Patte  | rn 1                 | Patte               | rn 2                  |                | Pat                     | tern         | e                | Pattern 4        |                 |           |
|             | Comp   | olete the t          | able th             | nat giv               | /es th         | e num                   | ber of       | f counters for c | certain terms:   |                 |           |
|             | Patte  | ern no.              |                     | -                     | 2              | m                       | 4            | Ŋ                | 10               | 100             |           |
|             | No. 0  | of counte            | ırs                 | m                     | 2              | 7                       | 6            | a)               | (q               | c)              | (3)       |
|             | ਿ      | Describe             | e the ru            | ule use               | ed in t        | the sec                 | dnenc        | ġ                |                  |                 | ] .       |
|             |        |                      |                     |                       |                |                         |              |                  |                  |                 | (1)       |
| ம்          | Contir | nue the fc           | llowin              | g nur                 | nber p         | attern                  | is for t     | two more term    | .:               |                 |           |
|             | a)     | 1; 1; 2; 3           | ; 5; 8; _           |                       |                |                         |              |                  |                  |                 | (2)       |
|             | (q     | Explain t            | the pat             | tern y                | sn no/         | ed to                   | contir       | nue the sequen   | Ice.             |                 |           |
|             |        |                      |                     |                       |                |                         |              |                  |                  |                 | (1)       |
| SEC         | TION ( | C: FUNC              | CTION               | IS AI                 | ND R           | ELAT                    | NOI          | SHIPS            |                  | C               | (6 marks) |
| 2.          | Study  | the follov           | wing ta             | ble:                  |                |                         |              |                  |                  |                 |           |
|             | a)     | Complet<br>blocks fi | te the t<br>or Patt | table l<br>ern 3      | below<br>and P | , by fill<br>attern     | ing in<br>4. | Pattern 4 and    | writing down the | number of shade | g         |
|             |        | Pattern              | unmk                | ber                   | -              | $\vdash$                |              |                  | m                | 4 i)            |           |
|             |        | Patterr              | -                   |                       |                |                         |              |                  |                  |                 |           |
|             |        | Numbe<br>shaded      | er of<br>I block    | s                     | 6              |                         | -            | 4<br>(ii         |                  |                 | (3)       |
|             | (q     | Using th             | e table             | , com                 | plete          | the sp                  | biderg       | Jram below.      |                  |                 |           |
|             |        | Pattern              | numb€               | er (n)                |                |                         |              | Number           | of blocks (Tn)   |                 |           |
|             |        |                      |                     |                       |                |                         |              | 6                | ~                |                 |           |
|             |        | 5                    |                     |                       |                |                         |              |                  | 4                |                 |           |
|             |        |                      | (i                  |                       |                | (ii                     |              |                  |                  |                 |           |
|             |        | ()<br>()<br>()       |                     |                       |                |                         |              |                  | (!)              |                 |           |
|             |        | 4                    |                     |                       |                |                         |              | .2               | ()               |                 | (2)       |
|             |        | \(\)                 | /rite ou            | ut the                | rule fc        | or this                 | humb         | ver pattern.     |                  |                 |           |
|             |        |                      |                     |                       |                |                         |              |                  |                  |                 | (1)       |

| ALGEBRAIC EQUATIONS AND NUMBER SENTEN<br>who of the following equations by trial-and-improvement.<br>our answers as, for example, <i>p</i> =<br>our solution by writing each equation with the correct numbe<br>- 3 = -13<br><i>p</i> = 9<br><i>p</i> = 9<br><i>p</i> = 9<br><i>ALGEBRAIC EXPRESSIONS</i><br><i>ALGEBRAIC EXPRESSIONS</i><br><i>ALGEBRAIC EXPRESSIONS</i><br><i>ALGEBRAIC EXPRESSIONS</i><br><i>ALGEBRAIC EXPRESSIONS</i><br><i>Argues and a bag of cauliflower is</i> 12 kg and the mass of a the<br>the mass of a bag of cauliflower is 12 kg and the mass of a the<br>words translation, reflection and rotation to describe each<br>words translation, reflection and rotation to describe each<br>words translation, reflection and rotation to describe each<br>words translation, reflection and rotation to describe each<br>by by b | CES (4 marks)                         | r in the place of the variable.  |       | <b>(2 marks)</b><br>flower and <b>b</b> bags of gem<br>ag of gem squash is 2 kg.   | (2) | ( <b>13 marks)</b><br>pattern.   |   |
|---|---------------------------------------|--|-------|--|-----|--|---|
|   | ALGEBRAIC EQUATIONS AND NUMBER SENTEN | for answers as, for example, $p =$<br>our answers as, for example, $p =$<br>our solution by writing each equation with the correct numbe<br>-3 = -13 | 6 = 0 | <b>ALGEBRAIC EXPRESSIONS</b><br>• expression for the total mass in kilograms of <i>m</i> bags of caulif<br>f the mass of a bag of cauliflower is 12 kg and the mass of a b |     | <b>TRANSFORMATION GEOMETRY</b><br>words <b>translation, reflection</b> and <b>rotation</b> to describe each <sub>f</sub> | a)<br>a)<br>b)<br>b)<br>b)<br>b)<br>b)<br>b)<br>b)<br>b)<br>b)<br>b |



# SECTION G: GEOMETRY OF 3-D OBJECTS

(10 marks)

12. Complete the table.

|    |                        | A triangular<br>pyramid | A square-based pyramid | A hexagonal pyramid |
|----|------------------------|-------------------------|------------------------|---------------------|
| a) | Shape of base          |                         |                        | Hexagon             |
| (q | Number of faces        |                         | ß                      |                     |
| C) | Number of vertices     | 4                       |                        |                     |
| q) | Number of edges        |                         |                        | 12                  |
| e) | Shape of lateral faces | All triangles           |                        |                     |

| S            |  |
|--------------|--|
| Ηd           |  |
| Z            |  |
| G            |  |
| Ï            |  |
| Z            |  |
| 5            |  |
| $\mathbf{b}$ |  |
| SE           |  |

13.

Use the graph paper on the next page to draw a graph showing the average minimum temperature in our town over one year as listed in the following table: -a)

| Month     | Average minimum temperature in |
|-----------|--------------------------------|
|           | our town in degrees centigrade |
| Jan       | 17                             |
| Feb       | 17                             |
| Mar       | 15                             |
| Apr       | 12                             |
| May       | 6                              |
| Jun       | \$                             |
| Jul       | 5                              |
| Aug       | \$                             |
| Sep       | 6                              |
| Oct       | 11                             |
| Nov       | 13                             |
| Dec       | 15                             |
| Make sure | that your graph has a heading. |

Make sure that you label the x-axis.

(E) (E) (E)

Make sure you label the y-axis.

Describe what your graph shows you about the average minimum temperature in our town. q

(1)

## TOTAL: 55 MARKS

(9)

| ح        |                |  |  |  |  |  |  |  |  |  |  |  |  |
|----------|----------------|--|--|--|--|--|--|--|--|--|--|--|--|
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| - 0      | $\blacksquare$ |  |  |  |  |  |  |  |  |  |  |  |  |
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| <b>_</b> |                |  |  |  |  |  |  |  |  |  |  |  |  |
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| פוס      |                |  |  |  |  |  |  |  |  |  |  |  |  |
| 123      |                |  |  |  |  |  |  |  |  |  |  |  |  |
|          |                |  |  |  |  |  |  |  |  |  |  |  |  |
| zues     |                |  |  |  |  |  |  |  |  |  |  |  |  |
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| L        |                |  |  |  |  |  |  |  |  |  |  |  |  |
|          | Date           |  |  |  |  |  |  |  |  |  |  |  |  |
|          |                |  |  |  |  |  |  |  |  |  |  |  |  |

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### 3. Grade 7 Mathematics Test Term 3: Memorandum

**Note:** The last column in the memorandum shows the cognitive level for each question in the test. The levels are:

| К  | Knowledge: straight recall; use of mathematical facts and vocabulary; rounding off.       |
|----|---|
| RP | Routine procedure: perform well known procedures; simple applications.                    |
| СР | Complex procedure: problems involving complex calculations and/or higher order reasoning. |
| PS | Problem solving: non-routine problems; higher order understanding and processes.          |
|    |   |

| Qı | lestion         | Expe    | cted a | answo  | er    |                |                |                 | Marks | Cognitive<br>level |
|----|-----------------|---------|--------|--------|-------|----------------|----------------|-----------------|-------|--------------------|
| Se | ction A         |         |        |        |       |                |                |                 |       |                    |
| 1. | D               |         |        |        |       |                |                |                 | 1     | RP                 |
| 2. | С               |         |        |        |       |                |                |                 | 1     |                    |
| 3. | А               |         |        |        |       |                |                |                 | 1     |                    |
| Se | ction B         |         |        |        |       |                |                |                 |       |                    |
| 4. | Pattern<br>no.  | 1       | 2      | 3      | 4     | 5              | 10             | 100             |       | RP                 |
|    | No. of counters | 3       | 5      | 7      | 9     | a) <b>11 🗸</b> | b) <b>21 🗸</b> | c) <b>201 🗸</b> |       |                    |
|    | d) Two tin      | nes th  | e pati | tern n | umbe  | er plus 1      | more 🗸         |                 | 1     | С                  |
| 5. | a) 1; 1; 2;     | 3; 5; 8 | ; 13;  | 21     |       |                |                |                 | 11    | RP                 |
|    | b) Sequer       | nce us  | ed: A  | dd th  | ne tw | o previo       | ous term       | ns to get       | 1     | С                  |
|    | the ne          | xt ter  | m.     |        |       |                |                |                 |       |                    |

More information about these levels can be found in the CAPS (p. 157).



| Que    | stion Expect   | ted answer  |                                       |                           | Marks               | Cognitive<br>level |
|--------|--|---|---------------------------------------|---------------------------|---------------------|--------------------|
| 10. a) |  |   | b)                                    |                           | 1                   | С                  |
| 11. a) | Seven regular<br>one in the cer                      | hexagons (3 o<br>ntre)                                | dark grey, 3 lig                      | ght grey and              | 11                  | С                  |
| b)     | Twelve trapez<br>plus 6 differer<br>triangles) in th | iums – 2 in each<br>nt ones (each c<br>ne centre hexa | ch of the dark<br>one made up<br>Igon | grey hexagons<br>of three | 5 55                | Р                  |
| c)     | Nine triangles                                       | 5   |                                       |                           | 11                  |                    |
| d)     | Six diamonds<br>centre hexago                        | (each one ma<br>on                                    | de up of 2 tria                       | angles) in the            | 11                  |                    |
| Secti  | on G   |   |                                       |                           |                     |                    |
| 12.    |  | A triangular<br>pyramid                               | A square-<br>based<br>pyramid         | A<br>hexagonal<br>pyramid | 1 ✓<br>each<br>= 10 | К                  |
|        | a) Shape of<br>base                                  | Triangle √  | Square 🗸                              | Hexagon                   |                     |                    |
|        | b) Number<br>of faces                                | 4 🗸   | 5                                     | 7 🗸                       |                     |                    |
|        | c) Number<br>of vertices                             | 4   | 5 🗸                                   | 7√                        |                     |                    |
|        | d) Number<br>of edges                                | 6 🗸   | 8                                     | 12 🗸                      |                     |                    |
|        | e) Shape<br>of lateral<br>faces                      | All triangles   | All<br>triangles √                    | All<br>triangles √        |                     |                    |



### 4. Analysis of Cognitive Levels

The CAPS (p. 157) specifies the weighting of the cognitive levels for tests and examinations. The following table shows these weightings for Senior Phase Mathematics.

### Table 2: WEIGHTING OF THE COGNITIVE LEVELS AS SPECIFIED BY THE CAPS FOR ASSIGNMENTS, PROJECTS AND TESTS

| LEVELS  | VERBS  | SAMPLE TASKS  | CAPS<br>WEIGHTING |
|---|--|---|-------------------|
| <b>KNOWLEDGE</b><br>Learn terms, facts, methods,<br>procedures, concepts                                      | Draw, Recognize, Count, Group,<br>Reproduce, Memorize, State,<br>Tabulate, Identify, Point, Follow<br>directions, Arrange  | <ol> <li>Can you identify the different place values in the metric system?</li> <li>State the mode, mean, median, and range from your set of data</li> <li>How do you reproduce a circle using a compass?</li> <li>Arrange the following in descending order</li> </ol> | 25 %              |
| <b>COMPREHENSION</b><br>Understand uses and implications of<br>terms, facts, methods, procedures,<br>concepts | Change, Classify, Convert,<br>Estimate, Interpret, Measure,<br>Put in order, Show, Suggest,<br>Express in other terms      | <ol> <li>Classify polygons by regularity, concavity, and line symmetry</li> <li>Explain how to convert between fractions, decimals, and percentages</li> <li>What is your interpretation of the data expressed on the graph?</li> </ol>                                 |                   |
| ROUTINE PROCEDURES  |  |   | 45%               |
| Practice theory, solve problems, use information in the new situations  | Calculate, Compute, Construct,<br>Demonstrate, Derive, Graph,<br>Manipulate, Operate, Practice,<br>Prove, Solve, Find      | <ol> <li>How do you calculate the percentage of a given whole?</li> <li>Solve for area of a rectangle by using A = l x w</li> <li>What information do you consider when graphing data derived from a survey?</li> <li>Find the value of</li> </ol>                      |                   |
| COMPLEX PROCEDURES  |  |   | 20%               |
| Analyse structure, recognize<br>assumptions, breaking down material<br>into parts                             | Break down, Deduce, Diagram,<br>Distinguish, Formulate, Group,<br>Order, Separate, Simplify, Sort                          | <ol> <li>What methods can be used to compare and order fractions?</li> <li>Analyse the relationship between variables on a graph</li> <li>What factors do you consider when formulating a plan for problem solving?</li> </ol>  |                   |
| <b>SYNTHESIS</b><br>Putting information together into a<br>new and creative way                               | Construct, Create, Derive,<br>Develop, Document, Generate,<br>Integrate, Plan, Predict, Prepare,<br>Propose, Specify, Tell | <ol> <li>Describe some patterns that you recognized in the construction of<br/>Pascal's Triangle</li> <li>What kind of table can you create that represents change in temperature?</li> <li>What prediction can you make from this graph?</li> </ol>                    |                   |
| PROBLEM SOLVING   |  |   | 10%               |
| Set standards, judge with purpose,<br>accept or reject on basis of criteria                                   | Appraise, Choose, Compare,<br>Conclude, Decide, Describe,<br>Evaluate, Justify, Measure,<br>Validate                       | <ol> <li>Evaluate the expression after changing the order of operations</li> <li>Describe how to solve a problem using the 4-step method</li> <li>Justify your reason for choosing the strategy selected</li> </ol>   |                   |

Table 3: WEIGHTING OF MARKS ACROSS THE COGNITIVE LEVELS IN THE TEST FOR TERM 3 COMPARED WITH WEIGHTING REQUIRED BY THE CAPS

|   | Knowledge | Routine<br>procedures | Complex<br>procedures | Problem<br>solving |
|---|-----------|-----------------------|-----------------------|--------------------|
| CAPS %  | 25        | 45                    | 20                    | 10                 |
| Marks required per<br>level for a test out<br>of 55 | 14        | 25                    | 11                    | 6                  |
| Marks in the test<br>(Total = 55)                   | 12        | 24                    | 12                    | 7                  |

Table 4: WEIGHTING OF MARKS FOR DIFFERENT CONTENT AREAS IN THE TERM 3 TEST AS COMPARED WITH THE CAPS WEIGHTING

|        | Numeric &<br>geometric<br>patterns | Functions &<br>relationships | Algebraic<br>expressions | Algebraic<br>equations | Transformation<br>geometry | 3-D objects | Graphs |
|--------|------------------------------------|------------------------------|--------------------------|------------------------|----------------------------|-------------|--------|
| 1.     |                                    |                              |                          | 1                      |                            |             |        |
| 2.     |                                    |                              | 1                        |                        |                            |             |        |
| 3.     | 1                                  |                              |                          |                        |                            |             |        |
| 4.     | 4                                  |                              |                          |                        |                            |             |        |
| 5.     | 3                                  |                              |                          |                        |                            |             |        |
| 6a) i) |                                    | 1                            |                          |                        |                            |             |        |
| ii)    |                                    | 1                            |                          |                        |                            |             |        |
| iii)   |                                    | 1                            |                          |                        |                            |             |        |

|                                      | Numeric &<br>geometric<br>patterns | Functions &<br>relationships | Algebraic<br>expressions | Algebraic<br>equations | Transformation<br>geometry | 3-D objects | Graphs |
|--------------------------------------|------------------------------------|------------------------------|--------------------------|------------------------|----------------------------|-------------|--------|
| 6b) i)                               |                                    | 1                            |                          |                        |                            |             |        |
| ii)                                  |                                    | 1                            |                          |                        |                            |             |        |
| v)                                   |                                    | 1                            |                          |                        |                            |             |        |
| 7.                                   |                                    |                              |                          | 4                      |                            |             |        |
| 8.                                   |                                    |                              | 2                        |                        |                            |             |        |
| 9.                                   |                                    |                              |                          |                        | 3                          |             |        |
| 10.                                  |                                    |                              |                          |                        | 2                          |             |        |
| 11.                                  |                                    |                              |                          |                        | 8                          |             |        |
| 12.                                  |                                    |                              |                          |                        |                            | 10          |        |
| 14.                                  |                                    |                              |                          |                        |                            |             | 10     |
| Term 3 test marks<br>Total = 55      | 8                                  | 6                            | 3                        | 5                      | 13                         | 10          | 10     |
| CAPS %                               | 15                                 | 8                            | 8                        | 8                      | 23                         | 23          | 15     |
| Marks as a % for a test<br>out of 55 | 8                                  | 4                            | 4                        | 4                      | 13                         | 13          | 8      |

## 5. Suggested Assessment Record Sheet

| MARK RECORDING SHEET    |                   |            |        | SCHOOL: CLASS:                              |               |        |             |              |            |         |        |              |            |               |              |               |               |     |         |  |
|-------------------------|-------------------|------------|--------|---|---------------|--------|-------------|--------------|------------|---------|--------|--------------|------------|---------------|--------------|---------------|---------------|-----|---------|--|
| SUBJECT: Mathematics    |                   |            |        | GRADE 7 MATHEMATICS FORMAL ASSESSMENT TASKS |               |        |             |              |            |         |        |              |            |               |              |               |               |     |         |  |
| GRADE: 7                |                   | Т          | TERM 1 |   |               | TERM 2 |             |              | TERM 3     |         |        | TERM 4       |            |               |              | %0            |               |     |         |  |
| YEAR:                   |                   | ASSIGNMENT | TEST 1 | TOTAL TERM 1                                | INVESTIGATION | TEST 2 | EXAMINATION | TOTAL TERM 2 | ASSIGNMENT | PROJECT | TEST 3 | TOTAL TERM 3 | ASSIGNMENT | INVESTIGATION | TOTAL TERM 4 | SBA TOTAL 40% | EXAMINATION 6 |     | COMMENT |  |
| DATE OF ASSESSMENT TASK |                   |            |        |   |               |        |             |              |            |         |        |              |            |               |              |               |               |     |         |  |
| TOTAL POSSIBLE MARKS    |                   |            |        |   |               |        |             |              |            |         |        |              |            |               |              |               |               |     |         |  |
| No.                     | SURNAME           | NAME       |        |   |               |        |             |              |            |         |        |              |            |               |              |               | 40%           | 60% | 100%    |  |
| 1                       |                   |            |        |   |               |        |             |              |            |         |        |              |            |               |              |               |               |     |         |  |
| 2                       |                   |            |        |   |               |        |             |              |            |         |        |              |            |               |              |               |               |     |         |  |
| 3                       |                   |            |        |   |               |        |             |              |            |         |        |              |            |               |              |               |               |     |         |  |
| 4                       |                   |            |        |   |               |        |             |              |            |         |        |              |            |               |              |               |               |     |         |  |
| 5                       |                   |            |        |   |               |        |             |              |            |         |        |              |            |               |              |               |               |     |         |  |
| 6                       |                   |            |        |   |               |        |             |              |            |         |        |              |            |               |              |               |               |     |         |  |
| 7                       |                   |            |        |   |               |        |             |              |            |         |        |              |            |               |              |               |               |     |         |  |
| 8                       |                   |            |        |   |               |        |             |              |            |         |        |              |            |               |              |               |               |     |         |  |
| 9                       |                   |            |        |   |               |        |             |              |            |         |        |              |            |               |              |               |               |     |         |  |
| 10                      |                   |            |        |   |               |        |             |              |            |         |        |              |            |               |              |               |               |     |         |  |
| 11                      |                   |            |        |   |               |        |             |              |            |         |        |              |            |               |              |               |               |     |         |  |
| 12                      |                   |            |        |   |               |        |             |              |            |         |        |              |            |               |              |               |               |     |         |  |
| 13                      |                   |            |        |   |               |        |             |              |            |         |        |              |            |               |              |               |               |     |         |  |
| HOD signature           |                   |            |        |   |               |        |             |              |            |         |        |              |            |               |              |               |               |     |         |  |
| Date                    |                   |            |        |   |               |        |             |              |            |         |        |              |            |               |              |               |               |     |         |  |
| TEA                     | FEACHER signature |            |        |   |               |        |             | -            |            |         |        |              |            |               |              |               |               | -   |         |  |
| Date                    |                   |            |        |   |               |        |             |              |            |         |        |              |            |               |              |               |               |     |         |  |