GRADE 6

Mathematics

Teacher Toolkit: CAPS Planner and Tracker

2019 TERM 4

CONTENTS

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.

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

1. Find the textbook that YOU are using.

2. 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 6 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 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 6 is based on the requirements prescribed by the Department of Basic Education's Curriculum and Assessment Policy Statement (CAPS) for Mathematics in the Intermediate 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 Learner's Books, 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 Learner's Book, 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 Learner's Book. This is when the recommended exercises have more work than can be done in the time allocated to the lesson. ***Select** is marked at the top of the relevant pages in the tracker in these cases.

The tracker uses the latest print editions of the eight approved Learner's Books. It is important to note that page numbers may differ slightly from other print runs of the same book. 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 workbooks relevant to the content described for each day. The worksheets are referred to by worksheet number and page number. 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 six hours of Mathematics per week in Grade 6. In the tracker there are six one-hour lessons per week. 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 six hours of time for Mathematics is used constructively.

It is important to note that this tracker has been designed for a third term that is nine weeks long. The curriculum content should be covered in the first six weeks. This means that the prescribed eight weeks of content has been slightly condensed to fit into the shorter period, and you will have to work at a consistent pace to meet all the curriculum requirements. Weeks 7 and 8 are for your own programme of revision and for the

examination, and Week 9 for the return of examination papers and learner corrections. References to activities that could be used for revision are listed at the beginning of each LTSM's tracker. Should you use this tracker in a term of a different length, or should your school organise its assessment period differently, you will need to adjust your work programme accordingly.

Also note that, in order that new work is given appropriate attention in the shorter time available for covering the curriculum than is prescribed in the CAPS, the sequence in which the topics are taught has been changed on the advice of the district advisers in Pinetown and King Cetshwayo. Thus the term begins with Perimeter, Area and Volume. Whole Numbers is taught after Probability.

7. Sequence adherence

The content in the programme of lessons 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 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 4 of Grade 6, the formal assessment programme specified by CAPS requires the learners to do an assignment, an investigation and an end-of-year examination.

- An ***assessment*** is an extended piece of work that can be completed at home. It focuses on more demanding work and could include resource material
- An ***investigation*** promotes critical and creative thinking. It can be used to discover rules or concepts and can include inductive thinking, identifying and testing patterns, drawing conclusions and establishing general trends. It is assessed using a rubric.

The tracker indicates where in the series of lessons the CAPS assessment activities are to be done and when feedback should be given. The approved Learner's Books and Teacher's Guides provide exemplar tests and examinations which you can use with your class. Section D of this document, *Assessment Resources*, lists the formal and informal assessments that are included in each LTSM and on which pages in the Learner's Books or Teacher's Guides they can be found. 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 assignment and investigation in your set of LTSMs with due diligence making sure that you personalise them. If necessary, supplement them using other Learner's Books.

We have provided an examination and a memorandum which you could use instead of the examination 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 also find these resources in Section D of this document, *Assessment Resources*.

Where the test or examination 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. Where this is the case, you will need to use an examination from a Teacher's Guide from a different set of LTSMs, or set your own, or make use of the examination in the tracker, as mentioned above.

It is very important that you make time to review the formal assessment with the learners after you have marked it to address common errors and misconceptions.

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 year. You may prefer to use your own mark sheet created using your class list.

Note: The formal assessment programme given in this document is based on the requirements for formal assessment in the CAPS for Mathematics in the Intermediate Phase (DBE 2011). The DBE occasionally changes the requirements for formal assessment, and the timing of such changes might mean that they are not reflected here. In such cases, you should adjust this document's formal assessment programme to accord with the latest requirements.

9. Resources

The tracker makes clear which resources you will need each day in order to deliver the lesson. Several of the approved 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. The various LTSMs offer either suggestions or actual activities for remediation and extension. As these vary quite substantially, you might find it helpful to refer to some of the other LTSMs in addition to the one you have chosen for your classes.

In addition, a number of actual printable resources, as well as useful information about them, are provided in two books that are part of the Jika iMfundo maths toolkit for the Intermediate Phase and Grade 7. These books are:

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

Where appropriate, reference is made to these books in the tracker, but you should look through them carefully to see for yourself how you might make best use of them.

Teachers for Grades 4–7 will receive these books once. They will not be redistributed each year as the trackers are.

Teachers in Grade 4 will receive a copy of the maths dictionary. This is really a Foundation Phase resource, but will be useful in Grade 4 as learners make the transition from instruction in their home language to instruction in English.

Section D of the tracker has resources for assessment as discussed above.

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. Preparation 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 to use as illustrations in your lessons.
   - 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.

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, and you will also find enrichment cards and remediation activities that might be useful in the toolkit book *Remediation and Enrichment Activities*.

- 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. www.education.gov.za, www.thutong.doe.gov.za/InclusiveEducation
  - 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. www.education.gov.za, www.thutong.doe.gov.za/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. The following guide is for a 60-minute lesson.
   - **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 purpose of this activity is to focus on numeracy and to drill basic numeric concepts so that they can be easily recalled in other higher level work. ***Each day you need to prepare the Mental Mathematics activities for the learners.*** If the Mental Mathematics activities are in your Learner's Book, then you do not need to copy them for the learners. If they are in the Teacher's Guide, then you will need to make photocopies for the learners. Learners should do Mental Mathematics orally most days, but they could do it in written form once a week (choose a set day, such as Wednesday, for example, on which you do written Mental Mathematics on a weekly basis) so that there is some record of your daily Mental Mathematics activities. You will find many ideas for mental mathematics activities in the *Mental Maths Activities and Printable Resources* book which is part of the maths toolkit.

     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 during Mental Mathematics.

     Mental Mathematics skills improve hugely through repeated activity and enable learners to perform higher level tasks with greater ease.
   - **Step 2: Homework review/reflection (10 minutes):** This is the second activity of the lesson. We recommend that you take about 10 minutes (not more) 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 (15 minutes):** This is the third activity of the lesson. We recommend that you should actively teach your class for 15 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 is also 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 practice their mathematics and problem solving skills. It is important that you ***prepare yourself for the classwork activity and do every example in the exercise yourself*** – 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 numbers of each exercise 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 an exercise or activity which is too long and select 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 that 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 remediation activities**.** If learners successfully complete the daily classwork activities ahead of the rest of the class, be prepared to give them enrichment 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 in the next lesson 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 week's lesson. You will use these notes as you plan and prepare for your teaching.

C. TRACKERS FOR EACH SET OF APPROVED LTSMs

1. *Fabulous 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. Mental Mathematics (MM) link (page references in LB and TG provided, as well as activity numbers). Also refer to the *Mental Maths Activities and Printable Resources* book for additional mental mathematics ideas.
3. CAPS content linked to Learner's Book content.
4. CAPS page numbers at the start of each new CAPS topic.
5. Learner's Book exercises/activities that cover the CAPS content for the day.
6. Page reference in the Learner's Book (LB page reference).
7. Page reference in your Teacher's Guide for the day's activities (TG page reference).
8. DBE workbook link to related content (worksheet and page numbers are referenced).
9. Resources needed for the lesson (other than the Learner's Book, DBE workbook and basic stationery). **NB:** Where a resource is referred to by a number, such as (No. 5), this number is the number of the resource in the *Mental Maths Activities and Printable Resources* book that is part of the toolkit.
10. Date completed (complete this daily).

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 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.

Extra work

If you manage to complete all the exercises listed in the tracker, select work from this list for the learners to do. Also select from this list for the faster learners to work on.

Topics	Activities	Revision	Challenge	Extension and additional exercise
Unit 1: Whole numbers	Act. 1–4: LB pp. 249–250, TG pp. 199–200	LB p. 251, TG p. 201	LB p. 251, TG p. 201	
Unit 2: Multiplication	Act. 1: LB pp. 252–253, TG pp. 202–203	LB p. 255, TG p. 205	LB p. 255, TG p. 205	
Unit 3: Common fractions	Act. 1: LB pp. 256–257, TG p. 206	LB p. 261, TG p. 210	LB p. 261, TG p. 210	TG p. 210
Unit 4: Properties of 3-D objects	Act. 1: LB pp. 262–263, TG pp. 211–212	LB p. 266, TG p. 214		TG pp. 214–215
Unit 5: Area, perimeter & volume	Act. 1: LB p. 267, TG p. 216	LB p. 275, TG p. 220	LB p. 276, TG p. 220	TG p. 220
Unit 6: History of measurement	Act. 1–3: LB pp. 277–278, TG p. 221		LB p. 278, TG p. 222	TG p. 222
Unit 7: Division		LB p. 281, TG pp. 226–227	LB p. 281, TG p. 227	
Unit 8: Number sentences	Act. 1: LB pp. 282–283, TG pp. 228–229	LB p. 286, TG p. 229	LB p. 286, TG p. 229	TG p. 229
Unit 9: Transformations		LB p. 290, TG p. 231	LB p. 290, TG p. 231	TG p. 231
Unit 10: Position & movement		LB p. 296, TG p. 234		TG p. 236
Unit 11: Probability		LB p. 297, TG p. 236		

Fabulous Mathematics Week 1														
Lesson	**MM**	**CAPS concepts and skills**	**CAPS pp.**	**LB act.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**				
									Date completed				
1	LB p. 236 Act. 13 TG p. 189	**MEASUREMENT** **Unit 5: Area, perimeter and volume** Calculate perimeter from drawings	282–283	2	268	216–217	123a pp. 154–155	Rulers (No. 14) and other measuring instruments (to find the perimeter of shapes); squared paper (for calculating areas) (No. 20, 21); building blocks					
2	LB p. 236 Act. 14 TG p. 189	Calculate perimeter using grid paper; Perimeters in real life	282–283	3–4	269	217	123b pp. 156–157						
3	LB p. 237 Act. 16 TG p. 191	Area	282–283	5	270–271	218–219	124 pp. 158–159						
4	LB p. 238 Act. 17 TG p. 191	Tiling a house	282–283	6	272–273	218–219	125a pp. 160–161						
5	LB p. 238 Act. 18A TG p. 191	Capacity and volume	282–283	7	273–274	219	125b pp. 162–163						
6	LB p. 239 Act. 18B TG p. 192	Perimeter, area and volume	282–283	8	274–275	220	126 pp. 164–165						

Reflection	
Think about and make a note of: 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 next time? Why? **HOD:** **Date:**

Fabulous Mathematics Week 2

There is no MM for the days when assessment is being done

Lesson	MM	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Resources and notes (No.) is the resource's number in *MM Activities and Printable Resources* book	Class				
									Date completed				
7		**ASSIGNMENT: Investigation** Tangram Select enough work for the learners to complete in 1 hour; Suggestion – Task B and Task C				256–260		Photocopy the bottom half of TG p. 257 and p. 258 on one page, and TG p. 259 on another; Rubric and memo TG p. 260					
8	LB p. 240 Act. 20 TG p. 193	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Unit 7: Division** Properties of division	284–285	1	279–280	223–224	127a pp. 166–167	Number cards; counters; 100 wall chart (No. 3); multiplication tables up to 12 x 12					
9	LB p. 240 Act. 21 TG p. 193	Methods of division	284–285	2–3	280–281	224–225	127b pp. 168–169						
10	LB p. 240 Act. 22 TG p. 193	Problem solving	284–285	4	281	226	128 pp. 170–171						
11	LB p. 240 Act. 23a–d TG p. 193	**PATTERNS, FUNCTIONS AND ALGEBRA** **Unit 8: Number sentences** Expressing a rule	286–287	2	284–285	229	129a pp. 172–173	Place value cards (No. 4); multiplication chart; 100s chart (No. 3); beads/strings of beads					
12	LB p. 240 Act. 23e–h TG p. 193	**SPACE AND SHAPE** **Unit 9: Transformations** Reductions and enlargements	288	1	287–289	230–231	136 pp. 192–193						

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Fabulous Mathematics Week 3

There is no MM for the days when assessment is being done

Lesson	MM	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Resources and notes (No.) is the resource's number in *MM Activities and Printable Resources* book	Class				
									Date completed				
13		**Return investigation to learners** Hand assignment back and discuss answers with the learners						Learners do corrections					
14	LB p. 241 Act. 24e–h TG p. 194	Drawing enlargement and reductions	288	2	289–290	231	137a pp. 194–195						
15	LB p. 242 Act. 25a–d TG p. 194	**SPACE AND SHAPE** **Unit 10: Position and movement** Grids	288	1	291–292	232–233	137b pp. 196–197	Maps; an alpha-numeric grid; any object (e.g. a pattern block or counter)					
16	LB p. 242 Act. 25e–h TG p. 194	Reading a map; Revision	288	2	293–294	234	140 pp. 206–207						
17	LB p. 243 Act. 26a–d TG p. 194	**DATA HANDLING** **Unit 11: Probability** Probability scale; Listing outcomes	289	1–2	295–296	235	143 pp. 214–215	Dice or spinners (No. 19); coins					
18	LB p. 243 Act. 26e–h TG p. 194	Experimenting with a coin and a die	289	3	296	236	144 pp. 216–217						

Reflection

Think about and make a note of: 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 next time? Why? **HOD:** **Date:**

Fabulous Mathematics Week 4 There is no MM for the days when assessment is being done														
Lesson	**MM**	**CAPS concepts and skills**	**CAPS pp.**	**LB act.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**					
									Date completed					
19	LB p. 232 Act. 1 TG p. 186	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Unit 1: Whole numbers** Place value and number names; Rounding; Multiples, factors and prime numbers	278	4–6	250–251	200–201	105a pp. 108–109	Place value cards (No. 4); sets of base 10 blocks; abacus; Dienes blocks; 100 charts (No. 3); counters for counting; number lines (No. 5); beads/ strings of beads					
20		**ASSIGNMENT** (Number patterns)				250–255		Photocopy TG pp. 250–251 for the learners; Learners hand in at the end of the lesson						
21	LB p. 232 Act. 2a–h TG p. 186	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Unit 2: Multiplication** Methods of multiplication: Method 1: Expanded number method	278–279	2	253–254	203	105b pp. 110–111	Counters; 100s wall chart; multiplication tables 12 x 12						
22	LB p. 232 Act. 2i–o TG p. 186	Methods of multiplication: Method 2: Vertical column method	278–279	3	254–255	203–204	106a pp. 112–113							
23	LB p. 232 Act. 3 LB p. 186	Problem solving	278–279	4	255	204	106b pp. 114–115							
24	LB p. 233 Act. 4 no. 1 LB p. 187	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Unit 3: Common fractions, percentages and decimals** Change between fractions, decimals and percentages	280	2	257–258	207	107 pp. 116–117	Counters; fraction walls (No. 7); fraction circles (No. 6); fractions of mathematical shapes; magazine and newspaper advertisements						
Reflection														
Think about and make a note of: 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 next time? Why? **HOD:** **Date:**						

Fabulous Mathematics Week 5														
Lesson	**MM**	**CAPS concepts and skills**	**CAPS pp.**	**LB act.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**				
									Date completed				
25	LB p. 233 Act. 5 TG p. 187	Fractions, decimals and percentages of an amount	280	3	258–259	207–208	113 pp. 132–133						
26		**Return assignment to learners** Hand assignment back and discuss answers with the learners						Learners do corrections					
27	LB p. 233 Act. 6 TG p. 187	Order fractions and decimals	280	4	259–260	208–209	114 pp. 134–135						
28	LB p. 234 Act. 7 TG p. 187	Comparing fractions and decimals; Calculations with fractions, decimals and percentages	280	5 6 no. 1–2	260	209	115 pp. 136–137						
29	LB p. 234 Act. 8 TG p. 188	Calculations with fractions, decimals and percentages (cont.)	280	6 no. 3–7	260–261	209–210	116 pp. 138–139						
30	LB p. 235 Act. 9 TG p. 188	**SPACE AND SHAPE** **Unit 4: Properties of 3-D objects** What do you remember about 3-D objects?	281	1	262–263	211–212	117 pp. 140–141	3-D objects for learners to examine; different 3-D containers for unfolding; nets of 3-D shapes (No. 12, 13); cardboard, rulers (No. 14) and sticky tape; straws, pins (or needle and thread); pretzel sticks and gums; toothpicks and marshmallows/clay/ Styrofoam balls					

Reflection	
Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Fabulous Mathematics Week 6

There is no MM for the days when assessment is being done

Lesson	MM	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Resources and notes (No.) is the resource's number in *MM Activities and Printable Resources* book	Class				
									Date completed				
31		Build skeleton models	281	2	263–264	211–212	118 pp. 142–143						
32	LB p. 236 Act. 11 TG p. 188	Prisms	281	3	264–265	212–213	119 pp. 144–145						
33	LB p. 236 Act. 12 TG p. 188	Pyramids	281	4	265–266	213–214	120a pp. 146–147						
34	LB p. 243 Act. 27a–d TG p. 194	Catch-up – finish off work not yet completed; Add in your own planning here; Select from activities listed at the beginning of this tracker					120b pp. 148–149						
35		Catch-up – finish off work not yet completed; Add in your own planning here; Select from activities listed at the beginning of this tracker					121 p. 134–135						
36		Catch-up – finish off work not yet completed; Add in your own planning here; Select from activities listed at the beginning of this tracker					122 pp. 152–153						

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Fabulous Mathematics Weeks 7 and 8 Revision and end-of-year examination – plan your work

Where time is available, complete any DBE pages not done and work on exercises, revision, challenges as well as extension and additional exercises listed at the beginning of the *Fabulous Mathematics* tracker.

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
						Date completed				

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Fabulous Mathematics Week 9 Review of examination, remediation and learner corrections	
Reflect on the year	
Think about and make a note of: 1. Did you complete the curriculum according to the CAPS requirements? If not, why not and what could you do to cover all of the work next year?	4. What did learners struggle with? How can you help your group next year understand these concepts and develop these skills better?
2. Did the tracker help with curriculum planning and coverage? How could you use it even more effectively next year?	5. What needs to be communicated to the teacher who will teach this group of learners next year?
3. What concepts and skills did learners grasp well this year? What good practice could you use again next year?	6. What aspects of your teaching and assessment practices would you like to develop further next year? How will you go about this?
HOD:	**Date:**

2. *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. Mental Mathematics (MM) link (page references in LB and TG provided, as well as activity numbers). Also refer to the *Mental Maths Activities and Printable Resources* book for additional mental mathematics ideas.
3. CAPS content linked to Learner's Book content.
4. CAPS page numbers at the start of each new CAPS topic.
5. Learner's Book exercises/activities that cover the CAPS content for the day.
6. Page reference in the Learner's Book (LB page reference).
7. Page reference in your Teacher's Guide for the day's activities (TG page reference).
8. DBE workbook link to related content (worksheet and page numbers are referenced).
9. Resources needed for the lesson (other than the Learner's Book, DBE workbook and basic stationery). **NB:** Where a resource is referred to by a number, such as (No. 5), this number is the number of the resource in the *Mental Maths Activities and Printable Resources* book that is part of the toolkit.
10. Date completed (complete this daily).

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 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.

Extra work

If you manage to complete all the exercises listed in the tracker, select work from this list for the learners to do. Also select from this list for the faster learners to work on.

Topics	Activities	Extension	Revision
Unit 1: Whole numbers	Act. 1–4: LB p. 275, TG pp. 275–277	Square numbers & square roots: LB pp. 278–279, TG pp. 280–281	ASSESSMENT 9: LB pp. 300–301, TG pp. 296–298
Unit 2: Multiplication	Act. 1–3: LB pp. 282–283, TG pp. 281–283 Act. 7: LB p. 287, TG pp. 285–286	Multiplying decimal fractions: LB pp. 288–290, TG pp. 286–287	
Unit 3: Common fractions	Act. 1: LB p. 293, TG pp. 288–290 Act. 3 no. 4–8: LB p. 297, TG pp. 291–293 Act. 4 no. 6–10: LB pp. 298–299, TG pp. 294–295		
Unit 4: Properties of 3-D objects	Act. 1: LB pp. 310–311, TG pp. 305–307 Act. 2 no. 4–8: LB p. 313, TG pp. 308–309		ASSESSMENT 10: LB pp. 328–329, TG pp. 319–320
Unit 5: Area, perimeter & volume	Act. 1: LB pp. 310–311, TG pp. 305–307 Act. 2 no. 4–8: LB p. 313, TG pp. 308–309		
Unit 6: History of measurement	Act. 1: LB pp. 326–327, TG pp. 318–319		
Unit 7: Division	Act. 1–2: LB pp. 330–332, TG pp. 320–322	Foreign currency: LB p. 337, TG p. 325 Division game: LB pp. 337–338 Consecutive numbers: LB pp. 338–339, TG p. 325	ASSESSMENT 11: LB pp. 353–354, TG pp. 337–338
Unit 8: Number sentences	Act. 1–4: LB pp. 340–341, TG pp. 326–328		
Unit 9: More Transformations	Act. 1: LB p. 343, TG pp. 332–333 Act. 4: LB p. 346, TG pp. 322–333		
Unit 10: Position & movement			
Unit 11: Probability	Act. 1: LB pp. 350–351, TG p. 336		
			End of year revision: LB pp. 355–356, TG pp. 338–339 Exam practice 1: LB pp. 357–359; TG pp. 340–341 Exam practice 2: LB pp. 360–362; TG pp. 341–342 ANA questions: TG pp. 343–345

Oxford Headstart Mathematics Week 1													
Lesson	**MM**	**CAPS concepts and skills**	**CAPS pp.**	**LB act.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**				
									Date completed				
1	LB p. 292 F TG p. 288–289	**MEASUREMENT** **Unit 5: Perimeter, area and volume** Find the perimeter by counting and measuring	282–283	1	311–312	306–307	123a pp. 154–155	1 cm-square grid paper and dotted paper (TG p. 346) (No. 20, 22); rulers (No. 14), measuring tapes and rope; cut-outs of shapes of different sizes that fit on square grid paper; 3 posters: one that displays the concept of perimeter and area of 2-D shapes; one that displays the difference between volume and capacity; one that explains the surface area of a rectangular prism; cubes for the learners to use to investigate volume					
2	LB p. 292 G TG p. 288–289	Find the perimeter by calculation	282–283	2 no. 1–3	312–313	308	123b pp. 156–157	Tips TG p. 307					
3	LB p. 302 no. 1–2 TG p. 299	Area measured in grid squares	282–283	3	314–315	309–310	124 pp. 158–159	Tips TG p. 310					
4	LB p. 302 no. 3–4 TG p. 299	Areas of squares and rectangles	282–283	4	316–317	310–311	125a pp. 160–161						
5	LB p. 302 no. 5 TG pp. 299	Volume and capacity of objects	282–283	5	320–321	313–314	125b pp. 162–163						
6	LB p. 310 no. 1–8 TG pp. 306	Volume of rectangular prisms	282–283	6	322–323	314–315	126 pp. 164–165						

Reflection	
Think about and make a note of: 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 next time? Why? **HOD:** **Date:**

Oxford Headstart Mathematics Week 2

There is no MM for the days when assessment is being done

Lesson	MM	CAPS concepts and skills	CAPS pp.	LB Act.	LB pp.	TG pp.	DBE workbook	Resources and notes (No.) is the resource's number in *MM Activities and Printable Resources* book	Class Date completed				
7		**ASSESSMENT: Investigation** 4: Find how one dimension changes the volume 5: Find how one dimension changes the surface area			324–325	316–317		Learners finish the investigation at home and hand in on a date determined by the teacher					
8	LB p. 326 no. 1–4 TG pp. 318	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Unit 7: Division** Long division	284–285	3	333–334	322–323	127a pp. 166–167	Calculators Tips TG pp. 322, 323					
9	LB p. 330 A TG p. 321	Check answers to division calculations; Problem solving	284–285	4–5	335	323	127b pp. 168–169						
10	LB p. 330 B TG p. 321	Ratio and rate	284–285	6	336	324	128 pp. 170–171	Tips TG p. 324					
11	LB p. 330 C TG p. 321	**PATTERNS, FUNCTIONS AND ALGEBRA** **Unit 8: Number sentences** Expressing a rule and writing number sentences	286–287	5–7	341–342	326–328	130 pp. 176–177	0–9 number cards; number cards from 10 and up					
12	LB p. 330 D TG p. 321	**SPACE AND SHAPE** **Unit 9: Transformations** Enlargement	288	2	344	329–331	136 pp. 192–193	Cut-outs of 2-D shapes to translate, reflect, rotate, enlarge and reduce in size; examples of tiling patterns; patterns of reflections, translations and rotations from nature, modern everyday life and our cultural heritage (e.g. bracelets, beadwork, doilies, etc.); cut-outs of enlargements and reductions of the same 2-D shapes					

Reflection

Think about and make a note of: 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 next time? Why? **HOD:** **Date:**

Oxford Headstart Mathematics Week 3													
Lesson	**MM**	**CAPS concepts and skills**	**CAPS pp.**	**LB act.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**				
									Date completed				
13.		**ASSESSMENT** **Return investigations to learners**						Give learners time to correct their answers					
14	LB p. 330 G–H TG p. 321	Reductions	288	3	345	331–332	137a–b pp. 194–197	Tips TG p. 332					
15	LB p. 340 Act. 1 TG p. 327	**SPACE AND SHAPE** **Unit 10: Position and movement** Positions on a map	288	1	347	333–334	140 pp. 206–207	Coded grids, informal maps and formal maps to find positions and give directions between positions Tips TG p. 334					
16	LB p. 340 Act. 2 TG p. 327	Directions to move between positions on a map	288	2	349	334–335	141 pp. 208–209	Tips TG p. 335					
17	LB p. 341 no. 1 TG p. 329	**DATA HANDLING** **Unit 11: Probability** Chances are ….	289	2	351	336–337	143 pp. 214–215	Playing cards (No. 24), dice or spinners (No. 19)					
18	LB p. 341 no. 2, 3 TG p. 329	Play card games	289	3	352	337	144 pp. 216–217						

Reflection

Think about and make a note of: 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 next time? Why? **HOD:** **Date:**

Oxford Headstart Mathematics Week 4 *Select														
Lesson	**MM**	**CAPS concepts and skills**	**CAPS pp.**	**LB act.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class** **Date completed**					
19		**ASSESSMENT: Assignment** No assessment tasks given in this LTSM; Use one of the given investigations						Use one of the following as an assignment: 1. LB pp. 307–308, TG p. 304 2. LB pp. 318–319, TG p. 312 3. LB p. 319, TG p. 312						
20	LB p. 274 A–B TG p. 275	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Unit 1: Whole numbers** Reading and writing 9-digit numbers	278	3–4	276–277	277–280	105a pp. 108–109	Number grids (No. 3), number lines (No. 5), Dienes blocks, place value cards (No. 4), 0–9 number cards, calculators, newspapers showing prices of houses, cars, etc. Tips TG p. 278						
21	LB p. 274 C–D TG p. 275	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Unit 2: Multiplication** Rounding off and estimating	278–279	4–5	284–285	284–285	105b pp. 110–111	Tip TG p. 285						
22	LB p. 274 E TG p. 275	Methods of multiplication: Method 1: Break down numbers into place value parts and factors	278–279	6	285–286	285–286	106a pp. 112–113	Tips TG p. 286						
23	LB p. 274 F TG p. 275	Methods of multiplication: Method 2: Vertical column method	278–279	Repeat 6	286	285–286	106b pp. 114–115							
24	LB p. 280 A–B TG p. 281–282	Problem solving	278–279	8*	290–291	287–288	107 pp. 116–117	Tips TG p. 287						
Reflection														
Think about and make a note of: 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 next time? Why? **HOD:** **Date:**						

Oxford Headstart Mathematics Week 5 *Select														
Lesson	**MM**	**CAPS concepts and skills**	**CAPS pp.**	**LB act.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class** **Date completed**					
25		Return assignment to learners												
26	LB p. 280 E–F TG p. 281–282	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Unit 3: Common fractions** Add and subtract common fractions and mixed numbers	280	2 no. 1–2	294	290	114 pp. 134–135							
27	LB p. 280 G–I TG p. 281–282	Add and subtract common fractions and mixed numbers (cont.)	280	2 no. 3–7	295	291	115 pp. 136–137							
28	LB p. 280 J–K TG p. 281–282	Add and subtract decimal fractions and decimal numbers	280	3 no. 1–3	296–297	291–293	116 pp. 138–139							
29	LB p. 280 L–M TG p. 281–282	Calculate fractions and percentages of whole numbers	280	4 no. 1–5	298–299	294	117 pp. 140–141							
30	LB p. 280 N–O TG p. 281–282	Fractions and percentages of whole numbers	280	4 no. 6–10	299	294–295	118 pp. 142–143							

Reflection	
Think about and make a note of: 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 next time? Why? **HOD:** **Date:**

Oxford Headstart Mathematics Week 6														
Lesson	**MM**	**CAPS concepts and skills**	**CAPS pp.**	**LB act.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**					
									Date completed					
31	LB p. 292 A–B TG pp. 288–289	**SPACE AND SHAPE** **Unit 4: Properties of 3-D shapes** Build skeleton models of prisms and pyramids	281	1	303	299–300	119 pp. 144–145	Models of spheres (balls), cylinders (cans), cones (funnels); models of prisms and pyramids with bases up to octagons (including cubes and tetrahedrons); pictures and/or examples of 3-D objects from the world around us						
32	LB p. 292 C TG pp. 288–289	Describe, sort and compare 3-D objects	281	2–3	304–305	300–302	120a pp. 146–147							
33	LB p. 292 D TG pp. 288–289	Describe 3-D objects by its features	281	4	306	302–303	120b pp. 148–149							
34	LB p. 292 E TG pp. 288–289	Match nets with drawings of objects	281	5	309	305	121 pp. 150–151							
35	LB p. 292 F TG pp. 288–289	Catch-up – finish off work not yet completed; Add in your own planning here; Select from activities listed at the beginning of this tracker					122 pp. 152–153							
36	LB p. 292 G TG pp. 288–289	Catch-up – finish off work not yet completed; Add in your own planning here; Select from activities listed at the beginning of this tracker					138c pp. 202–203							

Reflection	
Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Oxford Headstart Mathematics Weeks 7 and 8 Revision and end-of-year examination – plan your work

Where time is available, complete any DBE pages not done and work on exercises, revision, challenges as well as extension and additional exercises listed at the beginning of the *Oxford Headstart Mathematics* tracker.

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
						Date completed				

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Oxford Headstart Mathematics Week 9 Review of examination, remediation and learner corrections	
Reflect on the year	
Think about and make a note of: 1. Did you complete the curriculum according to the CAPS requirements? If not, why not and what could you do to cover all of the work next year?	4. What did learners struggle with? How can you help your group next year understand these concepts and develop these skills better?
2. Did the tracker help with curriculum planning and coverage? How could you use it even more effectively next year?	5. What needs to be communicated to the teacher who will teach this group of learners next year?
3. What concepts and skills did learners grasp well this year? What good practice could you use again next year?	6. What aspects of your teaching and assessment practices would you like to develop further next year? How will you go about this?
HOD:	**Date:**

3. *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:

1. Day/lesson number.
2. Mental Mathematics (MM) link (page references in LB and TG provided, as well as activity numbers). Also refer to the *Mental Maths Activities and Printable Resources* book for additional mental mathematics ideas.
3. CAPS content linked to Learner's Book content.
4. CAPS page numbers at the start of each new CAPS topic.
5. Learner's Book exercises/activities that cover the CAPS content for the day.
6. Page reference in the Learner's Book (LB page reference).
7. Page reference in your Teacher's Guide for the day's activities (TG page reference).
8. DBE workbook link to related content (worksheet and page numbers are referenced).
9. Resources needed for the lesson (other than the Learner's Book, DBE workbook and basic stationery). **NB:** Where a resource is referred to by a number, such as (No. 5), this number is the number of the resource in the *Mental Maths Activities and Printable Resources* book that is part of the toolkit.
10. Date completed (complete this daily).

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 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.

Extra work

If you manage to complete all the exercises listed in the tracker, select work from this list for the learners to do. Also select from this list for the faster learners to work on.

Topics	Activities	Revision
Unit 4.1: Multiplication	Act. 4–5: LB pp. 230–231, TG pp. 183–184 Act. 9: LB pp. 234–235, TG pp. 187–188	REVISION 8: LB p. 245, TG p. 194
Unit 4.2: Common fractions	Act. 1–2: LB pp. 238–240, TG pp. 189–191	
Unit 4.3: 3-D Objects		REVISION 9: LB pp. 263–264, TG p. 202
Unit 4.4: Perimeter, area & volume		
Unit 4.5: Measurement long ago	Act. 1: LB pp. 260–261, TG p. 201	
Unit 4.6: Division	Act. 1: LB p. 265, TG pp. 203–204 Act. 4: LB pp. 268–269, TG pp. 205–206	
Unit 4.7: Number sentences		REVISION 10: LB pp. 292–295, TG pp. 219–221
Unit 4.8: Transformations		
Unit 4.9: Position & movement		
Unit 4.10: Probability		
		REVISION November: LB pp. 304–306, TG pp. 226–227 ANA questions: TG pp. 228–230

Oxford Successful Mathematics Week 1													
Lesson	**MM**	**CAPS concepts and skills**	**CAPS pp.**	**LB act.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**				
									Date completed				
1	LB p. 252 no. 2 TG p. 197	**MEASUREMENT** **Unit 4.4: Perimeter, area and volume** Working with perimeter	282–283	1	252–253	197–198	123a pp. 154–155	Rulers (No. 14), measuring tapes Teaching tips TG p. 178 Remedial TG p. 198					
2	LB p. 252 no. 3 TG p. 197	Working with area	282–283	2 no. 1–5	254–255	198–199	123b pp. 156–157						
3	LB p. 252 no. 4 TG p. 197	Working with area (cont.)	282–283	2 no. 6–9	255–256	199	124 pp. 158–159						
4	LB p. 260 no. 1a–d for 3 627 TG p. 201	Working with volume	282–283	3	256–259	200	125a–b pp. 160–163	Unit 4.4 Summary LB p. 259					
5	LB p. 260 no. 1e–h for 623 514 TG p. 201	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Unit 4.6: Division (4 digits by 3 digits)** Division sums with no remainder	284–285	2	266	204	126 pp. 164–165						
6	LB p. 260 no. 2 for 3 627 and 623 514 TG p. 201	Division sums with a remainder	284–285	3	267	204–205	127a pp. 166–167						

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Oxford Successful Mathematics Week 2 There is no MM for the days when assessment is being done													
Lesson	**MM**	**CAPS concepts and skills**	**CAPS pp.**	**LB act.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**				
									Date completed				
7	LB p. 265 no. 1a TG p. 203	Solve division problems	284–285	5	269–270	206	127b pp. 168–169	Remedial TG p. 206					
8	LB p. 265 no. 1b TG p. 203	Solve problems on ratio	284–285	6	271–272	207	128 pp. 170–171						
9	LB p. 265 no. 1c TG p. 109	Solve problems on rate	284–285	7	272–274	207–208	129a–b pp. 172–175	Unit 4.6 Summary LB p. 274					
10	LB p. 275 no. 1a TG p. 208	**PATTERNS, FUNCTIONS AND ALGEBRA** **Unit 4.7: Number sentences** Solve number sentences	286–287	1–2	275–277	208–209	130 pp. 176–177						
11	LB p. 275 no. 1b TG p. 208	Orders of operations; Number sentences	286–287	3–4	278–280	210–212	131 pp. 178–179	Unit 4.7 Summary LB p. 280					
12		**ASSESSMENT: Investigation** 2: Volume and surface area *Select activities so that the learners can finish in class*			302–303	226							

Reflection	
Think about and make a note of: 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 next time? Why? **HOD:** **Date:**

Oxford Successful Mathematics Week 3														
Lesson	**MM**	**CAPS concepts and skills**	**CAPS pp.**	**LB act.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**					
														Date completed
13	LB p. 275 no. 2a TG p. 208	**SPACE AND SHAPE** **Unit 4.8: Transformations** Enlargements	288	1	281–283	212–214	136 pp. 192–193	Dotted paper (No. 22)						
14	LB p. 275 no. 2b TG p. 208	Reduction of shapes	288	2	284	214	137a–b pp. 194–197	Unit 4.8 Summary LB p. 284						
15	LB p. 275 no. 2c TG p. 208	**SPACE AND SHAPE** **Unit 4.9: Position and movement** Finding positions on a grid	288	1	285–286	214–215	140 pp. 206–207	Grid paper (No. 20); road map book						
16	LB p. 281 no. 1a–d TG p. 212	A grid on a map	288	2	286–287	215–216	141 pp. 208–209	Unit 4.9 Summary LB p. 287						
17	LB p. 281 no. 1e–i TG p. 212	**DATA HANDLING** **Unit 4.10: Probability** Listing and recording outcomes	289	1 2 no. 1	288–289	216–217	143 pp. 215–217	Coins for experiments; dice; cardboard; toothpicks; spinners (No. 19)						
18	LB p. 285 no. 1a–f TG p. 214	Recording outcomes (cont.)	289	2 no. 2–5	289–291	217–218	144 pp. 216–217	Unit 4.10 Summary LB p. 291 Extension TG p. 218						

Reflection

Think about and make a note of: 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 next time? Why? **HOD:** **Date:**

Oxford Successful Mathematics Week 4

There is no MM for the days when assessment is being done

Lesson	MM	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Resources and notes (No.) is the resource's number in *MM Activities and Printable Resources* book	Class Date completed				
19		**ASSESSMENT** Return investigations to learners						Give learners time to correct their answers					
20	LB p. 285 no. 2a–f TG p. 214	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Unit 4.1: Whole numbers** Work with 9-digit whole numbers	278	1	228–229	179–181	105a–b pp. 108–111	Remedial TG p. 181					
21	LB p. 288 no. 1 TG p. 216	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Unit 4.1: Multiplication** Multiples and factors of 3-digit whole numbers	278–279	2–3	229–230	181–183	106a pp. 112–113	Remedial TG p. 184 Extension TG p. 184					
22	LB p. 228 Work with multiples < 10 TG p. 179	Using addition or subtraction to split up a number inside brackets	278–279	6	232	185	106b pp. 114–115	Remedial TG p. 186 Extension TG p. 186					
23	LB p. 228 Work with multiples < 20 TG p. 179	Use factors to split up numbers	278–279	7	233	186	107 pp. 116–117	Remedial TG p. 186					
24	LB p. 228 Work with multiples < 30 TG p. 179	The vertical column method	278–279	8	233–234	186	108 pp. 118–119	Remedial TG p. 187					

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Oxford Successful Mathematics Week 5

There is no MM for the days when assessment is being done

Lesson	MM	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Resources and notes (No.) is the resource's number in *MM Activities and Printable Resources* book	Class				
									Date completed				
25	LB p. 238 Factor pairs of 36 TG p. 190	Solve multiplication problems; Solve problems on ratio	278–279	10–11	235–236	188–189	109 pp. 120–121	Remedial TG p. 189 Unit 4.1 Summary LB p. 237					
26		**ASSESSMENT: Assignment** There is no assignment provided in this LTSM; you could use Investigation 3			303	303		Use Investigation 3 LB p. 303					
27	LB p. 228 Work with multiples < 40 TG p. 179	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Unit 4.2: Fractions** Calculations with fractions	280	3	241–242	191–192	114 pp. 134–135						
28	LB p. 228 Work with multiples < 50 TG p. 179	Finding a fraction of a number or a quantity	280	4	243–244	192–193	115 pp. 136–137						
29	LB p. 228 Work with multiples < 60 TG p. 179	**SPACE AND SHAPE** **Unit 4.3: 3-D Objects** Building prisms using straws and pipe cleaners	281	1	246–248	194–195	116 pp. 138–139	Remedial TG p. 193 Unit 4.2 Summary LB p. 244					
30	LB p. 238 Factor pairs of 48 TG p. 190	Straw models of pyramids	281	2	248–249	195–196	117 pp. 140–141	Drinking straws, toothpicks, pipe cleaners					

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Oxford Successful Mathematics Week 6 There is no MM for the days when assessment is being done													
Lesson	**MM**	**CAPS concepts and skills**	**CAPS pp.**	**LB act.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**				
									Date completed				
31	LB p. 238 Factor pairs of 64 TG p. 190	Making models of 3-D objects using toothpicks	281	3	250–251	196	118 pp. 142–143	Unit 4.3 Summary LB p. 251 Remedial TG p. 197					
32		**ASSESSMENT** Return investigations to learners						Give learners time to correct their answers					
33	LB p. 238 no. 2 TG p. 190	Catch-up – finish off work not yet completed; Add in your own planning here; Select from activities listed at the beginning of this tracker					119 pp. 144–145						
34	LB p. 246 no. 1 TG p. 190	Catch-up – finish off work not yet completed; Add in your own planning here; Select from activities listed at the beginning of this tracker					120a and 120b pp. 146–149						
35	LB p. 252 no. 1 TG p. 197	Catch-up – finish off work not yet completed; Add in your own planning here; Select from activities listed at the beginning of this tracker					121 pp. 150–151						
36	LB p. 246 no. 2 TG p. 194	Catch-up – finish off work not yet completed; Add in your own planning here; Select from activities listed at the beginning of this tracker					122 pp. 152–153						

Reflection	
Think about and make a note of: 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 next time? Why? **HOD:** **Date:**

Oxford Successful Mathematics Weeks 7 and 8 Revision and end-of-year examination – plan your work

Where time is available, complete any DBE pages not done and work on exercises, revision, challenges as well as extension and additional exercises listed at the beginning of the *Oxford Successful Mathematics* tracker.

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
						Date completed				

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Oxford Successful Mathematics Week 9 Review of examination, remediation and learner corrections	
Reflect on the year	
Think about and make a note of: 1. Did you complete the curriculum according to the CAPS requirements? If not, why not and what could you do to cover all of the work next year?	4. What did learners struggle with? How can you help your group next year understand these concepts and develop these skills better?
2. Did the tracker help with curriculum planning and coverage? How could you use it even more effectively next year?	5. What needs to be communicated to the teacher who will teach this group of learners next year?
3. What concepts and skills did learners grasp well this year? What good practice could you use again next year?	6. What aspects of your teaching and assessment practices would you like to develop further next year? How will you go about this?
HOD:	**Date:**

4. *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:

Day/lesson number.

1. Day/lesson number.
2. Mental Mathematics (MM) link (page references in LB and TG provided, as well as activity numbers). Also refer to the *Mental Maths Activities and Printable Resources* book for additional mental mathematics ideas.
3. CAPS content linked to Learner's Book content.
4. CAPS page numbers at the start of each new CAPS topic.
5. Learner's Book exercises/activities that cover the CAPS content for the day.
6. Page reference in the Learner's Book (LB page reference).
7. Page reference in your Teacher's Guide for the day's activities (TG page reference).
8. DBE workbook link to related content (worksheet and page numbers are referenced).
9. Resources needed for the lesson (other than the Learner's Book, DBE workbook and basic stationery). **NB:** Where a resource is referred to by a number, such as (No. 5), this number is the number of the resource in the *Mental Maths Activities and Printable Resources* book that is part of the toolkit.
10. Date completed (complete this daily).

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 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.

Extra work

If you manage to complete all the exercises listed in the tracker, select work from this list for the learners to do. Also select from this list for the faster learners to work on.

Topics	Exercises	Revision, extension and remediation
Topic 28: Whole numbers	Ex. 28.3: LB p. 169, TG p. 132	Revision of Topics 28–29: LB p. 173, TG p. 135
Topic 29: Multiplication		
Topic 30: Common fractions	Ex. 30.2: LB p. 175, TG p. 137	Revision of Topics 30–31: LB p. 187, TG p. 144
Topic 31: Properties of 3-D objects	Ex. 31.4–31.5: LB p. 185, TG p. 143	
Topic 32: The history of measurement	Ex. 32.1–32.3: LB pp. 188–189, TG pp. 145–146	Revision of Topics 32–33: LB p. 195, TG p. 151
Topic 33: Perimeter, area & volume		
Topic 34: Division		Revision of Topics 34–35: LB p. 207, TG p. 160
Topic 35: Number sentences	Ex. 35.1–35.3: LB pp. 202–203, TG pp. 156–157	
Unit 36: Transformations	Ex. 36.1: LB p. 208, TG pp. 161–162 Ex. 36.4: LB p. 211, TG p. 163	Revision of Topics 36–37: LB p. 217, TG p. 166
Unit 37: Position & Movement	Ex. 37.4: LB p. 216, TG p. 166	
Unit 38: Probability	Ex. 38.4: LB p. 221, TG p. 168	
		Formal Assessment: Exemplar Examination: TG pp. 178–179; Answers: TG p. 169 Extension and Remediation Worksheet Book: Worksheets 18A–23B, TG pp. 254–259

Platinum Mathematics Week 1													
Lesson	**MM TG**	**CAPS concepts and skills**	**CAPS pp.**	**LB act.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**				
									Date completed				
1	4.1 p. 227	**MEASUREMENT** **Topic 33: Perimeter, area and volume** Measure perimeter	282–283	33.1	190	147–148	123a pp. 154–155	Learners will need rulers marked in cm and mm (No. 14); Squared paper (No. 20, 21); Blocks or cubes to build objects					
2	4.2 p. 227	Area	282–283	33.2	191	148–149	123b pp. 156–157						
3	4.3 p. 228	The area of rectangles	282–283	33.3	192	149	124 pp. 158–159	Challenge LB p. 192, TG p. 149					
4	4.4 p. 228	Volume	282–283	33.4	193	149–150	125a pp. 160–161	Challenge LB p. 193, TG p. 150					
5	4.5 p. 229	Surface area of an object	282–283	33.5	194	150–151	125b pp. 162–163	Challenge LB p. 194, TG p. 151					
6	5.1 p. 229	Revision of perimeter and area	282–283	no. 1–2	195	151	126 pp. 164–165						

Reflection

Think about and make a note of: 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 next time? Why? **HOD:** **Date:**

Platinum Mathematics Week 2														
Lesson	**MM TG**	**CAPS concepts and skills**	**CAPS pp.**	**LB act.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**					
									Date completed					
7	5.2 p. 229	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Topic 34: Division** Use long division	284–285	34.1–34.2	196	152	127a pp. 166–167							
8	5.3 p. 229	Inverse operations	284–285	34.3–34.4	197	152–153	127b pp. 168–169	Challenge LB p. 197 (Answer 13 333)						
9	5.4 p. 229	Solve problems with division: comparing 2 different quantities (rate)	284–285	34.5	198	153–154	128 pp. 170–171	Challenge LB p. 198, TG p. 154						
10	5.5 p. 230	Solve problems with division: comparing quantities of the same type (ratio)	284–285	34.6	199	154	129b pp. 174–175	Challenge LB p. 199, TG p. 154						
11		**ASSESSMENT: Investigation** Use simple budgets and accounts			200–201	154–155		Select activities that learners can complete during this lesson						
12	6.1 p. 230	**PATTERNS, FUNCTIONS AND ALGEBRA** **Topic 35: Number sentences** Use number sentences when solving problems	286–287	35.4	204–205	158–159	130 pp. 176–177							

Reflection

Think about and make a note of: 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 next time? Why? **HOD:** **Date:**

Platinum Mathematics Week 3													
Lesson	**MM TG**	**CAPS concepts and skills**	**CAPS pp.**	**LB act.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**				
									Date completed				
13	6.2 p. 231	Multiple choice questions and revision	286–287	35.5	206–207	159–160	131 pp. 178–179						
14	6.3 p. 231	**SHAPE AND SPACE** **Topic 36: Transformations** Enlarge a shape	288	36.2	209	161–162	132 pp. 180–181	Collect pictures that show tessellating patterns and display them in your classroom; Ensure that grid paper is available for the learners to redraw patterns and to make it easier for them to describe					
15	6.4 p. 231	Reduce a shape	288	36.3	210	162–163	136 pp. 192–193						
16	6.5 p. 231	Compare the size and shape of triangles and quadrilaterals	288	36.4	211	163	137a–b pp. 194–197						
17		**ASSESSMENT** Return investigations to learners						Give learners time to correct their answers					
18	7.1 p. 232	**SHAPE AND SPACE** **Topic 37: Position and movement** Positions on maps and grids	288	37.1–37.2	212–213	164–165	140 pp. 206–207	Learners will need grid paper (No. 20, 21) and rulers (No. 14) to help them to determine the location of objects; examples of maps would be useful to show learners how grid references work					

Reflection	
Think about and make a note of: 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 next time? Why? **HOD:** **Date:**

Platinum Mathematics Week 4														
Lesson	**MM TG**	**CAPS concepts and skills**	**CAPS pp.**	**LB act.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**					
									Date completed					
19	7.2 p. 232	Work with street maps	288	37.3	214–215	165	141 pp. 208–209							
20	7.3 p. 232	**DATA HANDLING** **Topic 38: Probability** List and record outcomes	289	38.1– 38.2	218–219	167–168	143 pp. 214–215	Small denominator coins of different sizes; at least one dice or spinner (No. 19) per learner						
21	7.4 p. 233	Working with a spinner	289	38.3	220	168	144 pp. 216–217							
22	1.1 p. 223	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Topic 28: Count, order, compare and represent whole numbers** Work with 9-digit numbers	278	28.1 28.2 28.4	168–169	130–132	105a–b pp. 108–111	Chart showing a hundreds square (No. 3); copies of a hundreds square for each learner (LB p. 226); place value cards (No. 4) Challenge LB p. 169, TG p. 132						
23	1.2 p. 223	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Topic 29: Multiplication** Estimate and calculate answers	278–279	29.1	170	133	106a–b pp. 112–115							
24	1.3 p. 223	Multiply using the column method	278–279	29.2	171	133–134	107 pp. 116–117	Challenge LB p. 171, TG p. 134						

Reflection	
Think about and make a note of: 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 next time? Why? **HOD:** **Date:**

Platinum Mathematics Week 5

There is no MM for the days when assessment is being done

Lesson	MM TG	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Resources and notes (No.) is the resource's number in *MM Activities and Printable Resources* book	Class				
									Date completed				
25	1.4 p. 224	Solve problems with multiplication	278–279	29.3	172	134	108 pp. 118–119	Challenge LB p. 172, TG p. 134					
26	1.5 p. 224	Revision of whole numbers and multiplication			173	135	109 pp. 120–121						
27		**ASSESSMENT: Assignment** Percentages, profit and loss			180–181	140							
28	2.1 p. 224	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Topic 30: Common fractions** Find equivalent fractions and compare common fractions	280	30.1	174	136–137	114 pp. 134–135						
29	2.2 p. 225	Convert decimals and common fractions	280	30.4	176	137–138	115 pp. 136–137	Challenge LB p. 176, TG p. 138					
30	2.3 p. 225	Convert percentages and common fractions	280	30.5	177	138	116 pp. 138–139	Game LB p. 177, TG p. 138					

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Platinum Mathematics Week 6

There is no MM for the days when assessment is being done

Lesson	MM TG	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Resources and notes (No.) is the resource's number in *MM Activities and Printable Resources* book	Class				
									Date completed				
31	2.4 p. 225	Add and subtract fractions	280	30.6	178	139	117 pp. 140–141						
32	2.5 p. 226	Solve problems with fractions	280	30.7	179	139	118 pp. 142–143	Challenge LB p. 179, TG p. 139					
33		**Return assignment to learners** Discuss answers with the learners											
34	3.1 p. 226	**SPACE AND SHAPE** **Topic 31: Properties of 3-D objects** Model 3-D objects	281	31.1	182–183	141	119 pp. 144–145	Straws, thin string or cotton, glue, sticky tape, tissue paper in different colours (if possible), paper, a wall chart showing all the 3-D objects (No. 12, 13)					
35	3.2 p. 226	Sort and compare 3-D objects	281	31.3	184	142–143	121 pp. 150–151	Challenge LB p. 184, TG p. 143					
36	3.3 p. 226	Identify nets	281	31.6 31.7	186	143	122 pp. 152–153	Challenge LB p. 186, TG p. 144					

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Platinum Mathematics Weeks 7 and 8 Revision and end-of-year examination – plan your work

Where time is available, complete any DBE pages not done and work on exercises, revision, challenges as well as extension and additional exercises listed at the beginning of the *Platinum Mathematics* tracker.

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
						Date completed				

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Platinum Mathematics Week 9 Review of examination, remediation and learner corrections	
Reflect on the year	
Think about and make a note of: 1. Did you complete the curriculum according to the CAPS requirements? If not, why not and what could you do to cover all of the work next year?	4. What did learners struggle with? How can you help your group next year understand these concepts and develop these skills better?
2. Did the tracker help with curriculum planning and coverage? How could you use it even more effectively next year?	5. What needs to be communicated to the teacher who will teach this group of learners next year?
3. What concepts and skills did learners grasp well this year? What good practice could you use again next year?	6. What aspects of your teaching and assessment practices would you like to develop further next year? How will you go about this?
HOD:	**Date:**

5. *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:

1. Day/lesson number.
2. Mental Mathematics (MM) link (page references in LB and TG provided, as well as activity numbers). Also refer to the *Mental Maths Activities and Printable Resources* book for additional mental mathematics ideas.
3. CAPS content linked to Learner's Book content.
4. CAPS page numbers at the start of each new CAPS topic.
5. Learner's Book exercises/activities that cover the CAPS content for the day.
6. Page reference in the Learner's Book (LB page reference).
7. Page reference in your Teacher's Guide for the day's activities (TG page reference).
8. DBE workbook link to related content (worksheet and page numbers are referenced).
9. Resources needed for the lesson (other than the Learner's Book, DBE workbook and basic stationery). **NB:** Where a resource is referred to by a number, such as (No. 5), this number is the number of the resource in the *Mental Maths Activities and Printable Resources* book that is part of the toolkit.
10. Date completed (complete this daily).

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 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.

Extra work

If you manage to complete all the exercises listed in the tracker, select work from this list for the learners to do. Also select from this list for the faster learners to work on.

Topic	Exercises	Revision
Unit 28: Whole numbers	Ex. 1–4: LB p. 164, TG pp. 120–121	Revision for Units 28–38: LB pp. 210–217, TG pp. 154–159
Unit 29: Multiplication	Ex. 1–7: LB pp. 166–168, TG pp. 123–125	
Unit 31: Properties of 3-D shapes	Ex. 1: LB p. 174, TG p. 131	
Unit 33: History of measurement	LB pp. 188–190, TG p. 139	
Unit 35: Number sentences	Ex. 1–3: LB pp. 195–196, TG pp. 143–144	
Unit 36: Transformations	Ex. 2–3: LB pp. 200–203, TG pp. 147–149	

Premier Mathematics Week 1

There is no MM for the days on which assessment is being done

Lesson	MM TG	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Resources and notes (No.) is the resource's number in *MM Activities and Printable Resources* book	Class				
									Date completed				
1	Ex. 145 no. 11–20 p. 381 p. 304	**MEASUREMENT** **Unit 32: Perimeter, area and volume** Calculate the perimeter of geometric shapes	282–283	2	178–179	133–135	123a pp. 154–155						
2	Ex. 146 no. 1–10 p. 381 p. 304	Calculate perimeter of regular and irregular shapes	282–283	3–4	179–181	135	123b pp. 156–157						
3	Ex. 146 no. 11–20 p. 381 p. 304	Perimeter and area	282–283	4 and 1	181–182	135–136	124 pp. 158–159						
4	Ex. 147 no. 1–10 p. 382 p. 304	Calculate area by counting	282–283	2–3	182–185	136–137	125a pp. 160–161						
5	Ex. 147 no. 11–20 p. 382 p. 304	Finding the volume by counting	282–283	1–2	186–187	137–138	125b pp. 162–163						
6		**ASSESSMENT: Investigation** Perimeter and area		4	186	137, 236, 280		Photocopy TG p. 236 for learners; Learners finish the investigation in class					

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Premier Mathematics Week 2

There is no MM for the days on which assessment is being done

Lesson	MM TG	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Resources and notes (No.) is the resource's number in *MM Activities and Printable Resources* book	Class				
									Date completed				
7	Ex. 148 p. 382 p. 304	Volume of containers	282–283	3	187–188	138	126 pp. 164–165						
8	Ex. 149 p. 383 p. 305	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Unit 34: Division** Revision of decimals	284–285	1	191	140	127a pp. 166–167						
9	Ex. 150 no. 1–10 p. 383 p. 305	Factors and multiples	284–285	2	191–192	141	127b pp. 168–169						
10	Ex. 150 no. 11–20 p. 383 p. 305	Rounding off and dividing	284–285	3–4	192–193	141–142	128 pp. 170–171						
11	Ex. 151 no. 1–10 p. 384 p. 305	More division	284–285	5	193	142	129a pp. 172–173						
12		**Return investigation to learners** Discuss answers with the learners						Allow the learners time to correct their answers					

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Premier Mathematics Week 3													
Lesson	**MM TG**	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**				
									Date completed				
13	Ex. 151 no. 11–20 p. 384 p. 305	**PATTERNS, FUNCTIONS AND ALGEBRA** **Unit 35: Number sentences** Working with number sentences	286–287	4–5	196–197	144–145	130 pp. 176–177						
14	Ex. 152 no. 1–10 p. 384 p. 305	**SPACE AND SHAPE** **Unit 36: Transformations** More enlargement	288	1	198–200	145–147	136 pp. 192–193						
15	Ex. 152 no. 11–20 p. 384 p. 305	Area and enlargement	288	4	203–204	149	137a pp. 194–195						
16	Ex. 153 no. 1–10 p. 385 p. 305	**SPACE AND SHAPE** **Unit 37: Location and direction** Shapes on a grid; Find hidden treasure	288	1–2	204–206	150–151	140 pp. 206–207						
17	Ex. 153 no. 11–20 p. 385 p. 305	Positions of items on a map; Finding the shortest path; Playing a dice game	288	3–5	206–208	151–152	141 pp. 208–209	Photocopy the table for the learners TG p. 178					
18	Ex. 154 no. 1–10 p. 385 p. 305	**DATA HANDLING** **Unit 38: Probability** Tossing a coin and rolling a dice	289	1–3	208–209	152–153	142a pp. 210–211	Dice or spinner (No. 19)					

Reflection	
Think about and make a note of: 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 next time? Why? **HOD:** **Date:**

Premier Mathematics Week 4														
Lesson	**MM TG**	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**					
									Date completed					
19	Ex. 154 no. 11–20 p. 385 p. 305	Rolling a dice 50 times; Working with a tally table	289	4–5	209	153	143 pp. 214–215							
20	Ex. 155 no. 1–10 p. 386 p. 305	Tossing a coin 50 times; Rolling a dice 25 times	289	6–7	210	153–154	144 pp. 216–217	Extension activity TG pp. 154, 179						
21	Ex. 155 no. 11–20 p. 386 p. 305	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Unit 28: Whole numbers** Ordering numbers, prime numbers, rounding numbers and writing numbers in digits	278	5–8	164–165	121–122	105a pp. 108–109							
22	Ex. 156 no. 1–10 p. 386 p. 305	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Unit 29: Multiplication** Round off numbers; Factors	278–279	8–9	168	125–126	105b pp. 110–111							
23	Ex. 156 no. 11–20 p. 386 p. 305	Distributive law; Vertical method	278–279	10–11	169	126	106a pp. 112–113							
24	Ex. 139 no. 1–10 p. 378 p. 302	Word problems	278–279	12	169–170	126–127	106b pp. 114–115							

Reflection

Think about and make a note of: 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 next time? Why? **HOD:** **Date:**

Premier Mathematics Week 5

There is no MM for the days on which assessment is being done

Lesson	MM TG	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Resources and notes (No.) is the resource's number in *MM Activities and Printable Resources* book	Class				
									Date completed				
25		**ASSESSMENT: Assignment** Build 3-D objects out of straws		6	178	133, 235, 280		Photocopy TG p. 235 for the learners to use; Learners finish at home and hand in on a date determined by the teacher					
26	Ex. 139 no. 11–20 p. 378 p. 302	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Unit 30: Common fractions** Number lines, compare fractions	280	1–2	170–171	127–128	114 pp. 134–135						
27	Ex. 140 no. 1–10 p. 378 p. 303	Equivalent fractions and equivalent values	280	3–4	171	128–129	115 pp. 136–137						
28	Ex. 140 no. 11–20 p. 378 p. 303	Adding fractions; Word problems	280	5–6	171–172	129–130	116 pp. 138–139						
29	Ex. 141 no. 1–10 p. 379 p. 304	Fraction calculations	280	7	172–173	130	117 pp. 140–141						
30	Ex. 141 no. 11–20 p. 379 p. 304	**SPACE AND SHAPE** **Unit 31: Properties of 3-D objects** Nets of 3-D objects; Edges, faces and vertices	281	2–3	174–176	131–132	121 pp. 150–151						

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Premier Mathematics Week 6														
Lesson	**MM TG**	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**					
									Date completed					
31	Ex. 142 no. 11–20 p. 379 p. 304	Edges, faces and vertices (cont.)	281	4	177	132	122 pp. 152–153	Photocopy the table for the learners to use TG p. 177						
32	Ex. 143 no. 1–10 p. 380 p. 304	Nets	281	5	177 218–219	132–133	118 pp. 142–143							
33		**Return assignment to the learners** Hand assignment back and discuss the models with the learners												
34	Ex. 143 no. 11–20 p. 380 p. 304	Catch-up – finish off work not yet completed; Add in your own planning here; Select from activities listed at the beginning of this tracker					119 pp. 144–145							
35	Ex. 144 no. 1–10 p. 380 p. 304	Catch-up – finish off work not yet completed; Add in your own planning here; Select from activities listed at the beginning of this tracker					120a pp. 144–145							
36	Ex. 144 no. 11–20 p. 380 p. 304	Catch-up – finish off work not yet completed; Add in your own planning here; Select from activities listed at the beginning of this tracker					120b pp. 148–149							

Reflection	
Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Premier Mathematics Weeks 7 and 8 Revision and end-of-year examination – plan your work

Where time is available, complete any DBE pages not done and work on exercises, revision, challenges as well as extension and additional exercises listed at the beginning of the *Premier Mathematics* tracker.

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
						Date completed				

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Premier Mathematics Week 9 Review of examination, remediation and learner corrections	
Reflect on the year	
Think about and make a note of: 1. Did you complete the curriculum according to the CAPS requirements? If not, why not and what could you do to cover all of the work next year?	4. What did learners struggle with? How can you help your group next year understand these concepts and develop these skills better?
2. Did the tracker help with curriculum planning and coverage? How could you use it even more effectively next year?	5. What needs to be communicated to the teacher who will teach this group of learners next year?
3. What concepts and skills did learners grasp well this year? What good practice could you use again next year?	6. What aspects of your teaching and assessment practices would you like to develop further next year? How will you go about this?
HOD:	**Date:**

6. *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:

1. Day/lesson number.
2. Mental Mathematics (MM) link (page references in LB and TG provided, as well as activity numbers). Also refer to the *Mental Maths Activities and Printable Resources* book for additional mental mathematics ideas.
3. CAPS content linked to Learner's Book content.
4. CAPS page numbers at the start of each new CAPS topic.
5. Learner's Book exercises/activities that cover the CAPS content for the day.
6. Page reference in the Learner's Book (LB page reference).
7. Page reference in your Teacher's Guide for the day's activities (TG page reference).
8. DBE workbook link to related content (worksheet and page numbers are referenced).
9. Resources needed for the lesson (other than the Learner's Book, DBE workbook and basic stationery). **NB:** Where a resource is referred to by a number, such as (No. 5), this number is the number of the resource in the *Mental Maths Activities and Printable Resources* book that is part of the toolkit.
10. Date completed (complete this daily).

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 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.

Extra work

If you manage to complete all the exercises listed in the tracker, select work from this list for the learners to do. Also select from this list for the faster learners to work on.

Topics	Activities	Revision
Unit 1: Whole numbers & multiplication	Getting started – Revising place value: LB p. 259, TG pp. 194–197 Ex. 1: LB pp. 261–262, TG p. 199	Check what you know: LB pp. 264–265, TG pp. 201–202
Unit 2: Fractions, percentages & decimals	Getting started – Fractions: LB p. 266, TG pp. 203–205 Ex. 2: LB p. 272, TG p. 209 Act. 5: LB p. 274, TG p. 210	Check what you know: LB pp. 275–276, TG pp. 210–211
Unit 3: Properties of 3-D objects	Getting started – What do you know about 3-D objects? LB p. 277, TG pp. 212–214 Act. 4: LB p. 282, TG pp. 217 Ex. 1: LB p. 283, TG p. 217	Check what you know: LB p. 284, TG pp. 217–218
Unit 4: Area, perimeter & volume	Getting started – Area and perimeter: LB p. 285, TG pp. 219–222	
Unit 5: History of measurement	Act. 1: LB pp. 297–298, TG pp. 227–228	
Unit 6: Division	Getting started – Multiplying and dividing: LB p. 299, TG pp. 229–231 Ex. 1: LB p. 301, TG pp. 232–233 Act. 2: LB p. 302, TG p. 233	Check what you know: LB p. 307, TG pp. 235–236
Unit 7: Number sentences	Getting started – Simple number sentences: LB pp. 308–309, TG pp. 237–241 Act. 1: LB p. 310, TG p. 241 Act. 2: LB p. 313, TG p. 242 Ex. 2: LB pp. 313–314; TG p. 242	Check what you know: LB p. 314, TG p. 213
Unit 8: Transformations		Check what you know: LB pp. 318–319, TG p. 248
Unit 9: Location & directions	Act. 2: LB p. 322, TG p. 251	Check what you know: LB p. 323, TG p. 251
Unit 10: Probability	Act. 1 no. 2: LB p. 324, TG p. 254 Act. 2 no. 1: LB p. 325, TG pp. 254–256	
		Unit 11 Revision: LB pp. 328–338, TG pp. 258–264

Solutions for All Mathematics Week 1

There is no MM for the days on which assessment is being done

Lesson	MM	CAPS concepts and skills	CAPS pp.	LB act./ex.	LB pp.	TG pp.	DBE workbook	Resources and notes (No.) is the resource's number in *MM Activities and Printable Resources* book	Class				
									Date completed				
1	165 LB p. 367 TG p. 331	**MEASUREMENT** **Unit 4: Area, perimeter and volume** Making it bigger	282–283	Act. 1	286–287	219–222	123a pp. 154–155						
2	166 LB p. 367 TG p. 331	Drawing area and perimeter	282–283	Ex. 1	288	222–223	123b pp. 156–157						
3	168 LB p. 367 TG p. 331	More about area and perimeter	282–283	Act. 2 Ex. 2	289–291	223–224	124 pp. 158–159						
4	169 LB p. 368 TG p. 332	What is volume?; More volume	282–283	Act. 4 Ex. 3	293–294	225	125a pp. 160–161						
5	170 LB p. 368 TG p. 332	More volume	282–283	Ex. 3	294	225	125b pp. 162–163						
6	171 LB p. 368 TG p. 332	Check what you know	282–283		295–296	225–226	126 pp. 164–165						

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Solutions for All Mathematics **Week 2** There is no MM for the days on which assessment is being done														
Lesson	**MM**	**CAPS concepts and skills**	**CAPS pp.**	**LB act./ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**					
									Date completed					
7		**ASSESSMENT: Investigation** An amazing number property; Learners finish at home and hand in on a date determined by the teacher				302–303		Photocopy investigation on LB p. 302 and rubric on LB p. 303 for the learners; Use the rubric and teacher's notes LB p. 303 to assess the investigation						
8	172 LB p. 368 TG p. 332	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Unit 6: Whole numbers and division** Dividing bigger numbers	284–285	Act. 1	300–301	229–232	127a pp. 166–167							
9	173 LB p. 368 TG p. 332	Long division	284–285	Act. 3	302–303	234	127b pp. 168–169							
10	174 LB p. 368 TG p. 332	Divide them	284–285	Ex. 2	304–305	234	128 pp. 170–171							
11	175 LB p. 369 TG p. 332	Checking quotients	284–285	Act. 4	305	235	129a pp. 172–173							
12	176 LB p. 369 TG p. 333	**PATTERNS, FUNCTIONS AND ALGEBRA** **Unit 7: Number sentences** Writing and using number sentences	286–287	Ex. 1	311–312	241–242	130 pp. 176–177							
Reflection														
Think about and make a note of: 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 next time? Why? **HOD:** **Date:**						

Solutions for All Mathematics Week 3														
Lesson	**MM**	**CAPS concepts and skills**	**CAPS pp.**	**LB act./ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**					
									Date completed					
13		**Return investigation to the learners** Discuss the answers with the learners						Give learners time to correct their answers						
14	177 LB p. 369 TG p. 333	**SPACE AND SHAPE** **Unit 8: Transformations** Getting started (same size and shape)	288		315–316	244–246	136 pp. 192–193							
15	178 LB p. 369 TG p. 333	Enlarging quadrilaterals	288	Act. 1 Act. 2	317–318	246–247	137a–b pp. 194–197							
16	179 LB p. 369 TG p. 333	**SPACE AND SHAPE** **Unit 9: Locations and directions** Theatre tickets	288	Act. 1	320–322	249–251	140 pp. 206–207							
17	180 LB p. 369 TG p. 333	Check what you know (locations and directions)	288		323	251	141 pp. 208–209							
18	181 LB p. 370 TG p. 333	**DATA HANDLING** **Unit 10: Probability** Making spinners; How likely?	289	Act. 1 no. 1 Act. 2 no. 2	324–325	252–256	142a pp. 210–211	Spinners (No. 19)						

Reflection

Think about and make a note of: 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 next time? Why?

HOD: **Date:**

Solutions for All Mathematics Week 4

There is no MM for the days on which assessment is being done

Lesson	MM	CAPS concepts and skills	CAPS pp.	LB act./ex.	LB pp.	TG pp.	DBE workbook	Resources and notes (No.) is the resource's number in *MM Activities and Printable Resources* book	Class				
									Date completed				
19	182 LB p. 370 TG p. 333	Possible outcomes; How fair is your die?	289	Ex. 1 Act. 3	326	256–257	143 pp. 214–215	Dice or spinners (No. 19)					
20	183 LB p. 370 TG p. 334	Check what you know	289		327	257	144 pp. 216–217						
21	184 LB p. 370 TG p. 334	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Unit 1: Counting, whole numbers and multiplication** Breaking up 3-digit numbers to multiply	278–279	Act. 1	260	198	105a pp. 108–109						
22	151 LB p. 364 TG p. 330	Approximating answers	278–279	Act. 2	262	199	105b pp. 110–111						
23	152 LB p. 364 TG p. 330	Column multiplication	278–279	Act. 3	263	200	106a pp. 112–113						
24	153 LB p. 364 TG p. 330	Multiplication using calculators	278–279	Act. 4	263–264	200–201	106b pp. 114–115						

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Solutions for All Mathematics Week 5														
Lesson	**MM**	**CAPS concepts and skills**	**CAPS pp.**	**LB act./ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**					
									Date completed					
25		**ASSESSMENT: Assignment** A revision of whole numbers, addition, time zones, nets and probability *Select questions so that the learners can complete the assignment in this lesson*				304–308		Photocopy TG pp. 304–305 for the learners; Memo TG pp. 306–307						
26	154 LB p. 364 TG p. 330	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Unit 2: Fractions, percentages and decimals** Mixed numbers; Fractions and mixed numbers	280	Act. 1 Ex. 1	267–268	203–206	114 pp. 134–135							
27	155 LB p. 364 TG p. 330	Compare and order fractions	280	Act. 2	269	206–207	115 pp. 136–137							
28	156 LB p. 364 TG p. 330	Comparing fractions, decimals and percentages	280	Act. 3	269–270	207–208	116 pp. 138–139							
29	157 LB p. 365 TG p. 330	Adding and subtracting fractions	280	Act. 4	272–274	209	117 pp. 140–141							
30	158 LB p. 365 TG p. 330	Adding and subtracting fractions and percentages	280	Ex. 3	275	210	118 pp. 142–143							

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Solutions for All Mathematics Week 6

There is no MM for the days on which assessment is being done

Lesson	MM	CAPS concepts and skills	CAPS pp.	LB act./ex.	LB pp.	TG pp.	DBE workbook	Resources and notes (No.) is the resource's number in *MM Activities and Printable Resources* book	Class				
									Date completed				
31		**Return assignment to the learners** Discuss the answers with the learners						Give learners time to correct their answers					
32	159 LB p. 365 TG p. 330	**SPACE AND SHAPE** **Unit 3: Properties of 3-D objects** Properties of 3-D objects	281	Act. 1	278–279	213–215	119 pp. 144–145						
33	160 LB p. 365 TG p. 331	Nets of 3-D objects	281	Act. 2	279–280	215	120a pp. 146–147						
34	161 LB p. 366 TG p. 331	More about nets	281	Act. 3	281	216	120b pp. 148–149						
35	162 LB p. 366 TG p. 331	Catch-up – finish off work not yet completed; Add in your own planning here; Select from activities listed at the beginning of this tracker					121 pp. 150–151						
36	163 LB p. 366 TG p. 331	Catch-up – finish off work not yet completed; Add in your own planning here; Select from activities listed at the beginning of this tracker					122 pp. 152–153						

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Solutions for All Mathematics Weeks 7 and 8 Revision and end-of-year examination – plan your work

Where time is available, complete any DBE pages not done and work on exercises, revision, challenges as well as extension and additional exercises listed at the beginning of the *Solutions for All Mathematics* tracker.

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
						Date completed				

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Solutions for All Mathematics Week 9 Review of examination, remediation and learner corrections	
Reflect on the year	
Think about and make a note of: 1. Did you complete the curriculum according to the CAPS requirements? If not, why not and what could you do to cover all of the work next year?	4. What did learners struggle with? How can you help your group next year understand these concepts and develop these skills better?
2. Did the tracker help with curriculum planning and coverage? How could you use it even more effectively next year?	5. What needs to be communicated to the teacher who will teach this group of learners next year?
3. What concepts and skills did learners grasp well this year? What good practice could you use again next year?	6. What aspects of your teaching and assessment practices would you like to develop further next year? How will you go about this?
HOD:	**Date:**

7. Study and Master 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. Mental Mathematics (MM) link (page references in LB and TG provided, as well as activity numbers). Also refer to the *Mental Maths Activities and Printable Resources* book for additional mental mathematics ideas.
3. CAPS content linked to Learner's Book content.
4. CAPS page numbers at the start of each new CAPS topic.
5. Learner's Book exercises/activities that cover the CAPS content for the day.
6. Page reference in the Learner's Book (LB page reference).
7. Page reference in your Teacher's Guide for the day's activities (TG page reference).
8. DBE workbook link to related content (worksheet and page numbers are referenced).
9. Resources needed for the lesson (other than the Learner's Book, DBE workbook and basic stationery). **NB:** Where a resource is referred to by a number, such as (No. 5), this number is the number of the resource in the *Mental Maths Activities and Printable Resources* book that is part of the toolkit.
10. Date completed (complete this daily).

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 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.

Extra work

If you manage to complete all the exercises listed in the tracker, select work from this list for the learners to do. Also select from this list for the faster learners to work on.

Topics	Activities	Revision
Whole numbers & multiplication	Mental Maths: LB pp. 320–325, TG pp. 358–362 Act 2.1 no. 4–6: LB p. 326, TG pp. 363–365 Act 3.1: LB pp. 327–328, TG pp. 365–367	Assessment 4.1: TG pp. 375–378; Photocopy TG pp. 375–376 for the learners
Common fractions		Assessment 4.2: TG pp. 389–392; Photocopy TG pp. 389–390 for the learners
Properties of 3-D objects	Act 13.1: LB pp. 345–346, TG p. 394	
Area, perimeter & volume	Act 15.1: LB p. 351, TG p. 398 Act 15.2 no. 5–7: LB pp. 354–355, TG p. 398 Act 16.3 no. 1: LB p. 358, TG pp. 400 Act 17.1 no. 1: LB p. 362, TG pp. 401–402 Act 17.3 no. 3: LB p. 364, TG pp. 402–403	Assessment 4.3: TG pp. 406–410; Photocopy TG pp. 406–408 for the learners
The history of measurement	LB pp. 365–369, TG pp. 404–406	
Division	Mental Maths: LB pp. 370–372, TG pp. 411–414 Act 20.1: LB pp. 372–373, TG pp. 414–416 Act 24.1: LB p. 377, TG pp. 422–424	Assessment 4.4: TG pp. 427–428; Photocopy TG p. 427 for the learners
Number sentences	Act 26.1: LB pp. 379–380, TG pp. 429–431 Act 27.1: LB pp. 380–381, TG pp. 432–433	Assessment 4.5: TG pp. 437–438; Photocopy TG p. 437 for the learners
Transformations	Act 30.3: LB pp. 393–394, TG pp. 446–447	Revision: LB pp. 394–395, TG pp. 447–448 Assessment 4.6: TG pp. 453–457; Photocopy TG pp. 453–455 for the learners
Location & directions	Act 31.1: LB p. 396, TG p. 450	
Probability		Revision: LB p. 404, TG pp. 459–460 Assessment 4.7: TG pp. 461–162; Photocopy TG pp. 389–390 for the learners

Study and Master Mathematics Week 1														
Lesson	**MM**	**CAPS concepts and skills**	**CAPS pp.**	**LB act.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**				
									Date completed				
1	LB p. 349 no. 1–4 TG p. 397	**MEASUREMENT** **Perimeter, area and volume** Unit 15: Perimeter	282–283	15.2 no. 1–4	351–353	398	123a pp. 154–155						
2	LB p. 356 TG p. 399	Unit 16: Area	282–283	16.1–16.2	355–356	399	123b pp. 156–157						
3	LB p. 358 TG p. 399	Unit 16: Areas of other shapes	282–283	16.3 no. 2–3	357–359	399–401	124 pp. 158–159						
4	LB p. 358 Act. 16.3 no. 1a–c TG p. 400	Unit 16: What is the connection between perimeter and area?	282–283	16.4	359–360	401	125a pp. 160–161						
5	LB p. 362 Act. 17.1 no. 1 TG p 401	Unit 17: Volume	282–283	17.1 no. 2–5	360–363	401–402	125b pp. 162–163						
6	LB p. 364 Act. 17.2 no. 1 TG p. 402	Unit 17: Calculate surface area	282–283	17.2 no. 1–2	363–364	402–403	126 pp. 164–165						

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Study and Master Mathematics Week 2

There is no MM for the days on which assessment is being done

Lesson	MM	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Resources and notes (No.) is the resource's number in *MM Activities and Printable Resources* book	Class				
									Date completed				
7		**ASSESSMENT: Investigation** Perimeter and area of shapes *Select questions so that the learners can finish the work in this lesson*				405		Photocopy TG p. 405 for the learners; Develop own memo and rubric NOTE: The rectangles in (2) all have the same perimeter					
8	LB p. 374 TG p. 416	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Division** Unit 21: Division word problems	284–285	21.1	374	416–418	127a pp. 166–167						
9	LB p. 375 TG p. 418	Unit 22: Ratio and division	284–285	22.1	375–376	418–420	127b pp. 168–169						
10	LB p. 376 TG p. 420	Unit 23: More division	284–285	23.1	376–377	420–421	128 pp. 170–171						
11	LB p. 377 TG p. 422	Unit 24: More division strategies	284–285	24.1	377	422–424	129a pp. 172–173						
12	LB p. 378 TG p. 424	Unit 25: Long division	284–285	25.1	378	424–426	129b pp. 174–175						

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Study and Master Mathematics Week 3

There is no MM for the days on which assessment is being done

Lesson	MM	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Resources and notes (No.) is the resource's number in *MM Activities and Printable Resources* book	Class				
									Date completed				
13	LB p. 382 TG pp. 434–435	**PATTERNS, FUNCTIONS AND ALGEBRA** **Number sentences** Unit 28: Solving real-life problems	286–287	28.1	382–383	434–436	130 pp. 176–177						
14		**Return investigation to the learners**						Give the learners time to correct their answers					
15	LB p. 384 no. 1 TG p. 439	**SPACE AND SHAPE** **Transformations** Unit 30: Enlarging shapes	288	30.1	386–388	439–444	136 pp. 192–193	Triangular dotted grid TG p. 489 (No. 23) Square dotted grid TG p. 488 (No. 20, 21)					
16	LB p. 384 no. 2 TG p. 439	Unit 30: Reducing shapes	288	30.2	389–392	445–446	137a pp. 194–195	Investigation TG p. 449 Remedial activities TG p. 449 Extension activities TG p. 449					
17	LB p. 384 no. 3 TG p. 439	**SHAPE AND SPACE** **Location and direction** Unit 32: Working with maps	288	32.1–32.2	397–398	450–451	140 pp. 206–207						
18	LB p. 393 no. 2 TG pp. 446–447	Revision	288		398–399	451–452	141 pp. 208–209	Assignment LB p. 399, TG p. 452 Remedial activity TG p. 452 Extension activity TG p. 452					

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Study and Master Mathematics Week 4

There is no MM for the days on which assessment is being done

Lesson	MM	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Resources and notes (No.) is the resource's number in *MM Activities and Printable Resources* book	Class Date completed				
19		**ASSESSMENT: Assignment** Read a map of the area around your school			399	452		Teacher to provide map and to develop own memo					
20	LB p. 401	**DATA HANDLING** **Probability** Unit 33: Possible outcomes	289	33.1 33.2	400–402	458	142a pp. 210–211	Possible MM answers: 17 + 33 + 50 = 100 19 + 31 + 50 = 100 21 + 31 + 48 = 100 21 + 33 + 44 = 100 21 + 35 + 44 = 100					
21	LB p. 403 TG p. 459	Unit 34: Recording actual outcomes	289	34.1 34.2	403	459	143 pp. 214–215	Remedial activity TG p. 140 Extension activity TG p. 460					
22	Practise the 13x table	Revision	289		404	459–460	144 pp. 216–217						
23	LB p. 323 TG p. 363	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Whole numbers and multiplication** Unit 2: Multiplication and ratio	278–279	2.1 no. 1–3	325	363–365	105a pp. 108–109						
24	LB p. 329 TG p. 368	Unit 4: Multiplication rules	278–279	4.1	329–330	368–370	105b pp. 110–111						

Reflection

Think about and make a note of: 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 next time? Why?

HOD: **Date:**

Study and Master Mathematics Week 5														
Lesson	**MM**	**CAPS concepts and skills**	**CAPS pp.**	**LB act.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**					
									Date completed					
25		**Return assignment to the learners**						Give the learners time to correct their answers						
26	LB p. 331 TG pp. 370–371	Unit 5: Vertical multiplication	278–279	5.1	331–332	370–372	106a pp. 112–113							
27	LB p. 332 no. 1–3 TG p. 372	Unit 6: Solving word problems	278–279	6.1	333–334	372–374	106b pp. 114–115							
28	LB p. 335 no. 3 TG p. 380	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Fractions** Unit 7: Fun with fractions	280	MM no. 4–5	335–336	379–381	114 pp. 134–135							
29	LB p. 336 no. 6 TG p. 382	Unit 8: Fractions of wholes	280	8.1	336–337	382	115 pp. 136–137							
30	LB p. 339 TG p. 384	Unit 10: Fractions and ratios	280	10.1	340–341	384–385	116 pp. 138–139							

Reflection

Think about and make a note of: 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 next time? Why? **HOD:** **Date:**

Study and Master Mathematics Week 6														
Lesson	**MM**	**CAPS concepts and skills**	**CAPS pp.**	**LB act.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**					
									Date completed					
31	LB p. 341 no. 2 TG p. 386	Unit 11: Fractions, decimals and percentages	280	11.1	342	386–388	117 pp. 140–141							
32	LB p. 343 TG p. 393	**SPACE AND SHAPE** **Properties of 3-D objects** Unit 12: Describing and sorting 3-D objects	281	12.1 12.2	343–344	393–394	118 pp. 142–143							
33	LB p. 345 TG p. 394	Unit 13: Faces, edges and vertices	281	13.2	345	394–395	119 pp. 144–145							
34	LB pp. 347–348 TG p. 395	Unit 14: Models of 3-D objects	281	14.1	348	395–396	120a–b pp. 146–149	Remedial activity and Extension activity TG p. 396						
35	Practise the 7x and 9x tables	Catch-up – finish off work not yet completed; Add in your own planning here; Select from activities listed at the beginning of this tracker					121 pp. 150–151							
36	Practise the 6x and 8x tables	Catch-up – finish off work not yet completed; Add in your own planning here; Select from activities listed at the beginning of this tracker					122 pp. 152–153							

Reflection	
Think about and make a note of: 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 next time? Why? **HOD:** **Date:**

Study and Master Mathematics Weeks 7 and 8 Revision and end-of-year examination – plan your work

Where time is available, complete any DBE pages not done and work on exercises, revision, challenges as well as extension and additional exercises listed at the beginning of the *Study and Master Mathematics* tracker.

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
						Date completed				

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Study and Master Mathematics Week 9 Review of examination, remediation and learner corrections	
Reflect on the year	
Think about and make a note of: 1. Did you complete the curriculum according to the CAPS requirements? If not, why not and what could you do to cover all of the work next year?	4. What did learners struggle with? How can you help your group next year understand these concepts and develop these skills better?
2. Did the tracker help with curriculum planning and coverage? How could you use it even more effectively next year?	5. What needs to be communicated to the teacher who will teach this group of learners next year?
3. What concepts and skills did learners grasp well this year? What good practice could you use again next year?	6. What aspects of your teaching and assessment practices would you like to develop further next year? How will you go about this?
HOD:	**Date:**

8. *Viva 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. Mental Mathematics (MM) link (page references in LB and TG provided, as well as activity numbers). Also refer to the *Mental Maths Activities and Printable Resources* book for additional mental mathematics ideas.
3. CAPS content linked to Learner's Book content.
4. CAPS page numbers at the start of each new CAPS topic.
5. Learner's Book exercises/activities that cover the CAPS content for the day.
6. Page reference in the Learner's Book (LB page reference).
7. Page reference in your Teacher's Guide for the day's activities (TG page reference).
8. DBE workbook link to related content (worksheet and page numbers are referenced).
9. Resources needed for the lesson (other than the Learner's Book, DBE workbook and basic stationery). **NB:** Where a resource is referred to by a number, such as (No. 5), this number is the number of the resource in the *Mental Maths Activities and Printable Resources* book that is part of the toolkit.
10. Date completed (complete this daily).

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 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.

Extra work

If you manage to complete all the exercises listed in the tracker, select work from this list for the learners to do. Also select from this list for the faster learners to work on.

Topics	Activities	Revision
Unit 1: Whole numbers	Act. 1 no. 1–4: LB p. 198, TG p. 117	Assessment Units 1–3: LB. pp. 213–214, TG pp. 129–130
Unit 2: Multiplication	Act. 1–2: LB pp. 252–253, TG pp. 202–203	
Unit 3: Common fractions	Act. 1: LB pp. 202–203, TG pp. 121–122	
Unit 4: Properties of 3-D objects		Assessment Units 4–6: LB p. 232, TG p. 138
Unit 5: Perimeter, area & volume		
Unit 6: History of measurement	LB p. 231, TG p. 138	
Unit 7: Division	Act. 1–4: LB pp. 234–237, TG pp. 140–141	
Unit 8: Number sentences	Act. 1 no. 2–3: LB p. 242, TG pp. 144–145 Act. 2 no. 1: LB p. 243, TG p. 145	
Unit 9: Transformations	Act. 1: LB p. 246, TG p. 147	
Mental Maths with vocabulary	LB p. 254, TG p. 179	

Viva Mathematics Week 1

There is no MM for the days on which assessment is being done

Lesson	MM	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Resources and notes (No.) is the resource's number in *MM Activities and Printable Resources* book	Class				
									Date completed				
1	Week 5: Mon. LB p. 221 TG p. 176	**MEASUREMENT** **Perimeter, area and volume** Perimeter of 2-D shapes	282–283	1	222	134–135	123a pp. 154–155	Squared paper TG p. 191 (No. 20, 21); measurement instruments					
2	Week 5: Tues. LB p. 221 TG p. 176	Area of 2-D shapes	282–283	2	224–225	135	123b pp. 156–157						
3	Week 5: Wed. LB p. 221 TG p. 176	Calculate the areas of squares and rectangles	282–283	1–2	227	136–137	124 pp. 158–159	Remedial support TG p. 135 Enrichment TG p. 135					
4	Week 5: Thurs. LB p. 221 TG p. 176	Doubling and halving 2-D shapes	282–283	3	228	137	125a pp. 160–161	Squared paper TG p. 191 (No. 20, 21); different sized containers					
5	Week 5: Fri. LB p. 221 TG p. 176	Volume	282–283	4	229	137–138	125b pp. 162–163	Learners make 2 cubes from a net for homework					
6		**ASSESSMENT: Investigation** Number square fun			200	118		Learners finish work in class and hand in at the end of the lesson					

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Viva Mathematics Week 2														
Lesson	**MM**	**CAPS concepts and skills**	**CAPS pp.**	**LB act.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**					
									Date completed					
7	Week 6: Mon. LB p. 226 TG p. 176	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Division** Revision of 4-digit by 2-digit numbers	284–285	5	238	142	126 pp. 164–165							
8	Week 6: Tues. LB p. 226 TG p. 176	Revision of 4-digit by 2-digit numbers	284–285	5	238	142	127a pp. 166–167							
9	Week 7: Mon. LB p. 233 TG p. 177	Dividing 4-digit numbers by 3-digit numbers	284–285	6	239	142	127b pp. 168–169							
10	Week 7: Tues. LB p. 233 TG p. 177	Fun with division	284–285	7	240	142	128 pp. 170–171	Remedial support TG p. 142 Enrichment TG p. 142						
11	Week 7: Wed. LB p. 233 TG p. 177	**PATTERNS, FUNCTIONS AND ALGEBRA** **Number sentences** Properties of numbers and solving equations	286–287	1 no. 1 2 no. 2–3	242–243	144–145	130 pp. 176–177	Remedial support TG p. 146 Enrichment TG p. 146						
12	Week 7: Thurs. LB p. 233 TG p. 177	Problem solving	286–287	3	244	145–146	131 pp. 178–179							

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Viva Mathematics Week 3

There is no MM for the days on which assessment is being done

Lesson	MM	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Resources and notes (No.) is the resource's number in *MM Activities and Printable Resources* book	Class				
									Date completed				
13		**Return investigations to the learners**						Give the learners time to correct their answers					
14	Week 7: Fri. LB p. 233 TG p. 177	**SPACE AND SHAPE** **Transformations** Enlarging and reducing triangles	288	2	247	148	136 pp. 192–193	Squared paper TG p. 191 (No. 20, 21)					
15	Week 8: Mon. LB p. 241 TG p. 177	Enlarging and reducing quadrilaterals	288	3	248	148	137a–b pp. 194–197	Remedial support TG p. 148 Enrichment TG p. 148					
16	Week 8: Tues. LB p. 241 TG p. 177	**SPACE AND SHAPE** **Position and movement** Locating positions on a grid	288	1–2	250–251	149–150	140a pp. 206–207	Maps, atlases; Squared paper TG p. 191 (No. 20, 21)					
17	Week 8: Wed. LB p. 241 TG p. 177	Describe a route	288	3	253	150	141 pp. 208–209						
18	Week 8: Thurs. LB p. 241 TG p. 177	**DATA HANDLING** **Probability** Tree diagrams	289	4	252	150	142a–b pp. 210–213	Dice, coins; Spinners TG p. 195 (No. 19)					

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Viva Mathematics Week 4														
Lesson	**MM**	**CAPS concepts and skills**	**CAPS pp.**	**LB act.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**					
														Date completed
19	Week 8: Fri. LB p. 241 TG p. 177	Rolling dice	289	5	253	150	143 pp. 214–215							
20	Week 9: Mon. LB p. 245 TG p. 178	Spinners	289	6	253	150	144 pp. 216–217	Remedial support TG p. 151 Enrichment TG p. 151						
21	Week 1: Fri. LB p. 197 TG p. 174	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Whole numbers** Number patterns	278	1 no. 3–5, 7–8	198–199	117–118	105a–b pp. 108–111	Counters, counting grids (No. 2), number lines, TG pp. 183–184 (No. 5); abacus Remedial support TG p. 199 Enrichment TG p. 119						
22		**ASSESSMENT** No assignment given in this LTSM; Use assessment exercise LB p. 255			255	152		Learners finish work in class and hand in at the end of the lesson						
23	Week 2: Mon. LB p. 201 TG p. 174	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Multiplication** Factors and prime factors	278–279	3	204	122–123	106a–b pp. 112–115							
24	Week 2: Tues. LB p. 201 TG p. 174	Multiply 4-digit by 3-digit numbers	278–279	4	205	124	107 pp. 116–117							

Reflection	
Think about and make a note of: 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 next time? Why? **HOD:** **Date:**

Viva Mathematics Week 5													
Lesson	**MM**	**CAPS concepts and skills**	**CAPS pp.**	**LB act.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**				
									Date completed				
25	Week 2: Wed. LB p. 201 TG p. 174	Word problems	278–279	5	206	124	108 pp. 118–119	Remedial support TG p. 125 Enrichment TG p. 125					
26	Week 2: Thurs. LB p. 201 TG p. 174	**NUMBERS, OPERATIONS AND RELATIONSHIPS** **Common fractions** Simplifying fractions	280	1	208	126–127							
27	Week 3: Mon. LB p. 207 TG p. 175	Comparing and ordering fractions	280	2	209	127	114 pp. 134–135	Fraction boards, fraction maps (TG p. 125) (No. 7), fraction circles (No. 6), Cuisenaire rods					
28	Week 3: Tues. LB p. 207 TG p. 175	Adding, subtracting and simplifying fractions	280	3–4	210	127–128	115 pp. 136–137						
29	Week 3: Wed. LB p. 207 TG p. 175	Compare, add and subtract fractions	280	5–6	211	128	116 pp. 138–139						
30		**Return assignments to the learners**						Give the learners time to correct their answers					

Reflection	
Think about and make a note of: 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 next time? Why? **HOD:** **Date:**

Viva Mathematics Week 6														
Lesson	**MM**	**CAPS concepts and skills**	**CAPS pp.**	**LB act.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Resources and notes** (No.) is the resource's number in *MM Activities and Printable Resources* book	**Class**					
									Date completed					
31	Week 3: Thurs. LB p. 207 TG p. 175	Fractions, decimals and percentages	280	7	212	128	117 pp. 140–141	Remedial support TG p. 129 Enrichment TG p. 129						
32	Week 3: Fri. LB p. 207 TG p. 175	**SPACE AND SHAPE** **Properties of 3-D objects** Identifying 3-D objects	281	1–2	216–217	131–132	118 pp. 142–143	Straws, string, toothpicks, jelly sweets, plasticine, right-angle measures, different boxes and containers, inside of toilet rolls/roller towel						
33	Week 4: Mon. LB p. 215 TG p. 175	Faces, vertices and edges	281	3	219	132	119 pp. 144–145							
34	Week 4: Tues. LB p. 215 TG p. 175	3-D objects and nets	281	4	220	132	120a–b pp. 146–149	Remedial support TG p. 133 Enrichment TG p. 133						
35	Week 4: Wed. LB p. 215 TG p. 175	Catch-up – finish off work not yet completed; Add in your own planning here; Select from activities listed at the beginning of this tracker					121 pp. 150–151							
36	Week 4: Thurs. LB p. 215 TG p. 175	Catch-up – finish off work not yet completed; Add in your own planning here; Select from activities listed at the beginning of this tracker					122 pp. 152–153							

Reflection	
Think about and make a note of: 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 next time? Why? **HOD:** **Date:**

Viva Mathematics Weeks 7 and 8 Revision and end-of-year examination – plan your work

Where time is available, complete any DBE pages not done and work on exercises, revision, challenges as well as extension and additional exercises listed at the beginning of the *Viva Mathematics* tracker.

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
						Date completed				

Reflection

Think about and make a note of: 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 next time? Why?
	HOD: **Date:**

Viva Mathematics Week 9 Review of examination, remediation and learner corrections	
Reflect on the year	
Think about and make a note of: 1. Did you complete the curriculum according to the CAPS requirements? If not, why not and what could you do to cover all of the work next year?	4. What did learners struggle with? How can you help your group next year understand these concepts and develop these skills better?
2. Did the tracker help with curriculum planning and coverage? How could you use it even more effectively next year?	5. What needs to be communicated to the teacher who will teach this group of learners next year?
3. What concepts and skills did learners grasp well this year? What good practice could you use again next year?	6. What aspects of your teaching and assessment practices would you like to develop further next year? How will you go about this?
HOD:	**Date:**

D. ASSESSMENT RESOURCES

According to the CAPS (p. 294), in Term 4 the leaners need to do one assignment, one investigation and one end-of-year examination. You could also carry out other informal assessment activities during the term using your TG or other resources.

INFORMAL ASSESSMENT

In the CAPS document, at the end of Common Fractions (p. 281) it states: **At this stage the learners should have been assessed on: 9-digit numbers; Multiplication of up to 4 digits by 3-digit numbers; Fractions.**

At the end of History of Mathematics (p. 283) it states: **At this stage the learners should have been assessed on: 3-D objects; Area and perimeter; Volume.**

At the end of Probability (p. 289) it states: **At this stage the learners should have been assessed on: Division with up to 4-digit numbers by 3-digit numbers; Number sentences; Transformations; Probability.**

Table 1 in the *Assessment Term Plan* gives an overview of the relevant pages of the informal assessment exercises in the various LTSMs which could be used. If your LTSM does not provide informal assessment exercises, use classwork and homework activities or use formal tasks from another source.

FORMAL ASSESSMENT

The CAPS document does not indicate the topics that should be covered in the assignment and investigation.

What is an assignment?

An assignment is an extended piece of work that can be completed at home. It focuses on more demanding work and could include resource material.

What is an investigation?

An investigation promotes critical and creative thinking. It can be used to discover rules or concepts and can include inductive thinking, identifying and testing patterns, drawing conclusions and establishing general trends. An investigation is generally assessed using a rubric.

If your LTSM does not provide a suitable assignment or investigation, use one provided in another LTSM. Table 1 below gives an overview of these assessment tasks.

You need to go over any assessments with the learners when you hand it back to them. Time is allocated in the tracker for this purpose.

Examination

The end-of-year examination should cover the work done during Term 4 and some revision of the work done during Terms 1, 2 and 3. Table 1 below shows where an end-of-year examination has been provided. If your LTSM does not provide an examination in the Teacher's Guide, either use one provided in another LTSM, set your own, or use the examination provided in this section which you could use as is or adapt. A memorandum and analysis of the cognitive levels in the examination are also provided in this section.

Note that where an end-of-year examination is provided in the Learner's Book it should not be used as a formal assessment task as learners are able to prepare for it in advance. It can be used for revision either in class or for homework.

Assessment record

A suggested mark recording sheet is provided for you to record the marks for the formal assessment tasks and examination.

Note: The information that follows is in line with the assessment requirements published in the CAPS (2011). Should the DBE make changes to these, you should amend the assessment programme accordingly.

1. Assessment Term Plan

This table gives an overview of the formal and informal assessment tasks for Term 4.

Table 1: TERM 4 FORMAL AND INFORMAL ASSESSMENT TASKS INCLUDED IN EACH SET OF LTSMs						
LTSM	**Informal Assessment Task 1** • *9-digit numbers* • *Multiplication of up to 4-digit numbers by 3-digit numbers* • *Fractions* **Can be used for revision**	**Informal Assessment Task 2** • *3-D objects* • *Area and perimeter* • *Volume* **Can be used for revision**	**Informal Assessment Task 3** • *Division of up to 4-digit numbers by 3-digit numbers* • *Number sentences* • *Transformations* • *Probability* **Can be used for revision**	**Formal Assessment Task: Assignment**	**Formal Assessment Task: Investigation**	**Formal Assessment Task: End-of-year examination** • *All the topics covered in Term 4* • *Revision of work covered in Term 1–3* **Weeks 7 and 8**
Fabulous Mathematics	Use classwork and homework activities or use formal tasks from another source	Use classwork and homework activities or use formal tasks from another source	Test 4: TG pp. 237–241	Week 4 Number patterns: TG pp. 250–255	Week 2 Tangram: TG pp. 256–260	TG pp. 242–249
Oxford Headstart Mathematics	Use classwork and homework activities or use formal tasks from another source	Use classwork and homework activities or use formal tasks from another source	Use classwork and homework activities or use formal tasks from another source	Week 4 No assignment provided; You could use Investigation 1, 2 or 3 shown below: 1: LB pp. 307–308, TG p. 304 2: LB pp. 318–319, TG p. 312 3: LB p. 319, TG p. 312	Week 2 Investigation: 4: LB p. 324, TG p. 316 or 5: LB p. 325, TG p. 316	No suitable examination provided; set your own or use the one in Section D of this book
Oxford Successful Mathematics	Use classwork and homework activities or use formal tasks from another source	Use classwork and homework activities or use formal tasks from another source	Use classwork and homework activities or use formal tasks from another source	Week 5 No assignment provided; You could use Investigation 3 3: LB p. 303, TG p. 303	Week 2 2: LB p. 302, TG p. 226	No suitable examination provided; set your own or use the one in Section D of this book
Platinum Mathematics	Use classwork and homework activities or use formal tasks from another source	Use classwork and homework activities or use formal tasks from another source	Use classwork and homework activities or use formal tasks from another source	Week 5 LB p. 180, TG p. 140	Week 2 LB p. 200, TG pp. 154–155	Exam: TG pp. 178–179 Memo: TG p. 169
Premier Mathematics	TG pp. 233–234 Memo: TG p. 278	TG pp. 237–240 Memo: TG pp. 281–282	TG pp. 241–243 Memo: TG pp. 283–284	Week 5 LB p.178 ex. 6 TG pp. 133, 235, 280	Week 1 LB p. 186 ex. 4 TG pp. 137, 236, 280	Exam: TG pp. 244–253 Memo: TG pp. 285–291
Solutions for All Mathematics	Use classwork and homework activities or use formal tasks from another source	Use classwork and homework activities or use formal tasks from another source	Use classwork and homework activities or use formal tasks from another source	Week 5 TG pp. 304-308	Week 2 TG pp. 302-303	No suitable examination provided; set your own or use the one in Section D of this book

LTSM	**Informal Assessment Task 1** • *9-digit numbers* • *Multiplication of up to 4-digit numbers by 3-digit numbers* • *Fractions* **Can be used for revision**	**Informal Assessment Task 2** • *3-D objects* • *Area and perimeter* • *Volume* **Can be used for revision**	**Informal Assessment Task 3** • *Division of up to 4-digit numbers by 3-digit numbers* • *Number sentences* • *Transformations* • *Probability* **Can be used for revision**	**Formal Assessment Task: Assignment**	**Formal Assessment Task: Investigation**	**Formal Assessment Task: End-of-year examination** • *All the topics covered in Term 4* • *Revision of work covered in Term 1–3* **Weeks 7 and 8**
Study and Master Mathematics	4.1: TG pp. 375–378 4.2: TG pp. 389–392	4.3: TG pp. 406–410	4.4: TG pp. 437–438 4.5: TG pp. 437–438 4.6: TG pp. 453–457 4.7: TG pp. 461–462	Week 4 LB p. 399, TG p. 452 Teacher to develop own memo	Week 2 TG p. 405 Teacher to develop own memo and rubric	No suitable examination provided; set your own or use the one in Section D of this book
Viva Mathematics	LB pp. 213–214 TG pp. 129–130	LB p. 232 TG p. 138	LB p. 255 TG p. 152	Week 4 No assignment provided; You could use ex. 4 LB p. 255, TG p. 152	Week 1 LB p. 200 TG p. 118	No suitable examination provided; set your own or use the one in Section D of this book.

2. Suggested Assessment Record

MARK RECORDING SHEET SUBJECT: Mathematics GRADE: 6 YEAR:			SCHOOL:													CLASS:		
			GRADE 6 MATHEMATICS FORMAL ASSESSMENT TASKS															
			TERM 1			TERM 2			TERM 3			TERM 4						
			ASSIGNMENT	TEST 1	TOTAL TERM 1	TEST 2	EXAMINATION	TOTAL TERM 2	PROJECT	TEST 3	TOTAL TERM 3	ASSIGNMENT	INVESTIGATION	TOTAL TERM 4	SBA TOTAL 75%	EXAMINATION 25%	TOTAL	COMMENT
DATE OF ASSESSMENT TASK																		
TOTAL POSSIBLE MARKS																		
No.	SURNAME	NAME													75%	25%	100%	
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
HOD signature																		
Date																		
TEACHER signature																		
Date																		

3. Grade 6 Mathematics Exemplar End-of-Year Examination

Surname:		
Name:	**Date:** _____	_____ **50**
Date of birth:		

INSTRUCTIONS TO LEARNERS:

1. Answer all the questions in the spaces provided. Where asked for, full solutions must be given.
2. No calculators may be used.

Time: 1 hour *Total: 50 marks*

SECTION 1: NUMBERS, OPERATIONS AND RELATIONSHIPS **26 marks**

1. a) Write in digits:

   Two hundred and thirty-five million, six hundred and eight thousand and seven

   _____

   _____ (1)

   b) Write in expanded notation: 214 007 340

   _____

   _____ (1)

2. Study these numbers:

   393; 6 543; 2 709; 6 474; 58 058

   a) Which numbers are divisible by 3?

   _____

   _____ (2)

   b) Which number(s) are divisible by 6?

   _____

   _____ (1)

3. Write down the prime factors of 45.

   _____

   _____ (2)

4. Do the following calculations. Do **not** use a calculator and show all steps of the calculation.

a) 7 019 x 231

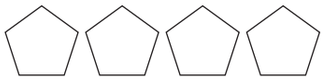
(2)

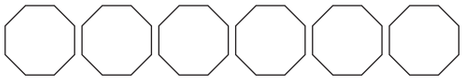
b) 6 001 ÷ 124

(3)

5. a) Find the ratio of the number of pentagons to the number of octagons.

Write your answer in simplest form.

Pentagon 

Octagon 

(2)

b) A car travels at 60 km per hour. How far will the car travel in $\frac{1}{4}$ hour?

(1)

6. a) How much bigger is the value of the first 5 than the value of the second 5 in the number 456 058?

_____

_____

_____ (2)

b) I have only 8 digits and each one is the same.

The number that follows me has 9 digits.

What number am I?

_____

_____

_____ (2)

7. Every Saturday Dan spends $3\frac{1}{6}$ hours working in his vegetable garden.

During the week he spends a total of $5\frac{2}{3}$ hours working in the garden.

How much longer does Dan work in his garden during the week than on Saturday?

_____

_____

_____

_____

_____

_____

_____

_____ (3)

8. Thembi and Thandi are twin sisters.

John and James are twin brothers.

The two girls are two years older than the two boys.

The sum of all their ages is 40.

How old is each of the children? Show all your working out.

_____

_____

_____

_____

_____

_____

_____

_____ (4)

SECTION 2: PATTERNS, FUNCTIONS AND ALGEBRA

6 marks

9. Give the next two numbers in this sequence:

   61; 54; 47; _____; _____ (2)

10. Is the following number sentence true or false?

    If it is false, use brackets to make the number sentence true.

    8 + 4 x 5 = 60

    _____

    _____ (2)

11. A number is multiplied by 5 and is then increased by 27 to equal 62.

    What is the number? Show your working out.

    _____

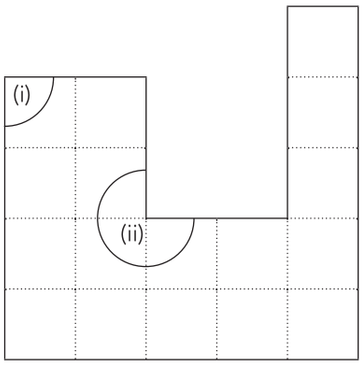
    _____

    _____

    _____ (2)

SECTION 3: SPACE, SHAPE AND MEASUREMENT **13 marks**

12. This shape has been drawn on centimetre grid paper.



a) Shade in the name of the angle that best describes the angle at (i)

Acute angle	Right angle
Obtuse angle	Reflex angle

b) Shade in the name of the angle that best describes the angle at (ii)

Acute angle	Right angle
Obtuse angle	Reflex angle

(2)

c) Find the total number of centimetre squares in the shape.

_____ (1)

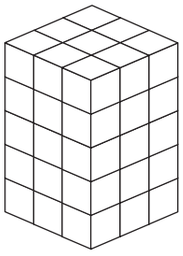
d) Find the perimeter of the shape.

_____ (1)

e) Draw an enlargement of this shape by doubling the sides.

(2)

13. This 3-D object is made up of centimetre cubes.



a) How many faces, edges and vertices does this 3-D object have?

Faces: _____

Edges: _____

Vertices: _____ (3)

b) What is the geometric name of this 3-D object?

_____ (1)

c) Calculate the volume of this 3-D object.

_____

_____

_____

_____

_____

_____

_____ (1)

d) Calculate the surface area of this 3-D object.

_____

_____

_____

_____

_____

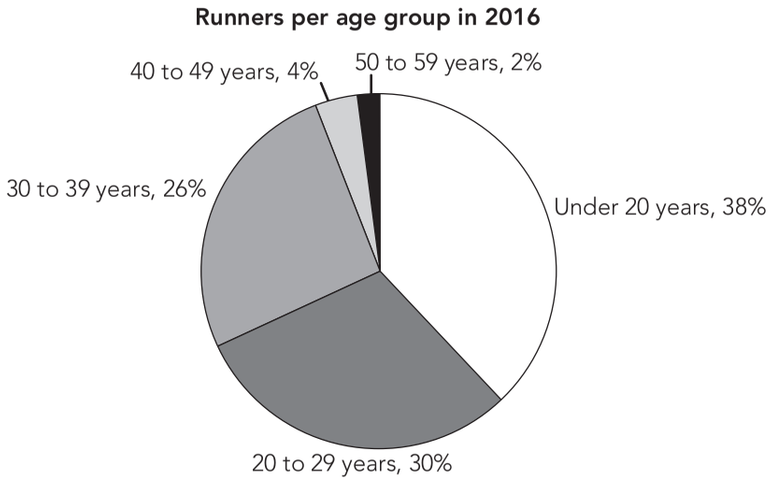
_____

_____ (3)

SECTION 4: DATA HANDLING **5 marks**

14. The Sunrise Running Club organises a 20 km running race every year.

The club chairman drew a pie chart to show the ages of the people who ran the race in 2014.



a) Which age group had the most runners?

_____ (1)

b) Write the percentage of runners in the 40 to 49 year age-group as a fraction in simplest form.

_____

_____ (2)

c) The race is run on a Saturday morning in November.

Shade in the block you think gives the probability that the next day is a Sunday.

Certain	Impossible	Uncertain

(1)

d) The women and the men run the race at different times. The club chairman tosses a coin to decide whether the women will run first or the men will run first.

List all the possible outcomes of tossing a coin.

_____

_____ (1)

4. Grade 6 Mathematics Exemplar End-of-Year Examination: Memorandum

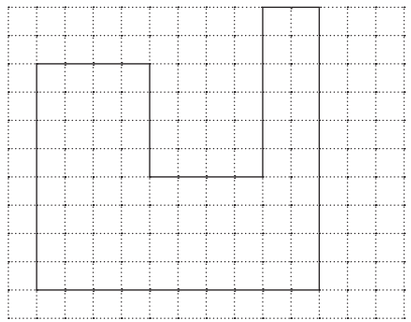
Note: The last column in the memorandum shows the cognitive level for each question in the test. The levels are:

K	Knowledge: straight recall; use of mathematical facts and vocabulary; rounding off.
RP	Routine procedure: perform well known procedures; simple applications.
CP	Complex procedure: problems involving complex calculations and/or higher order reasoning.
PS	Problem solving: non-routine problems; higher order understanding and processes.
More information about these levels can be found in the CAPS (p. 296).	

Questions	Marks	Cognitive level
SECTION 1: NUMBERS, OPERATIONS AND RELATIONSHIPS		**26**
1. a) Two hundred and thirty-five million, six hundred and eight thousand and seven = 235 608 007 ✓	(1)	**K**
b) 214 007 340 = 200 000 000 + 10 000 000 + 4 000 000 + 7 000 + 300 + 40 ✓ OR 2 x 100 000 000 + 1 x 10 000 000 + 4 x 1 000 000 + 7 x 1 000 + 3 x 100 + 4 x 10 OR 2 hundred million + 10 million + 4 million + 7 thousand + 3 hundred + 4 ten	(1)	**K**
2. a) 393, 6 543, 2 709 and 6 474 are divisible by 3 All four numbers correct – 2 marks Three numbers correct – 1 mark Two numbers correct – 1 mark One number correct – 0 marks	(2)	**K**
b) 6 474 is divisible by 6 ✓	(1)	**K**

Questions	Marks	Cognitive level
3. 3 ✓ and 5 ✓ are prime factors of 45	(2)	**K**
4. a) $\begin{array}{r} 7\ 0\ 1\ 9 \\ \times\quad 2\ 3\ 1 \\ \hline 7\ 0\ 1\ 9 \\ 2\ 1\ 0\ 5\ 7\ 0 \\ 1\ 4\ 0\ 3\ 8\ 0\ 0 \\ \hline 1\ 6\ 2\ 1\ 3\ 8\ 9 \end{array}$ ✓ correct method So 7 019 x 231 = 1 621 389 ✓ OR 7 019 x 231 = (7 019 x 200) + (7 019 x 30) + (7 019 x 1) = 1 403 800 + 210 570 + 7 019 = 1 621 389 ✓ ✓ correct method OR 7 019 x 231 = (7 000 x 231) + (10 x 231) + (9 x 231) = 1 617 000 + 2 310 + 2 079 = 1 621 389 ✓ ✓ correct method	(2)	**RP**
b) $\begin{array}{r} \quad\quad 4\ 8 \\ 1\ 2\ 4 \overline{)\ 6\ 0\ 0\ 1} \\ \quad 4\ 9\ 6 \\ \hline \quad 1\ 0\ 4\ 1 \\ \quad\quad 9\ 9\ 2 \\ \hline \quad\quad\quad 4\ 9 \end{array}$ ✓ correct method So 6 000 ÷ 124 = 48 ✓ rem 49 ✓ $\begin{array}{r} \quad\quad 4\ 0 + 8 \\ 1\ 2\ 4 \overline{)\ 6\ 0\ 0\ 1} \\ \quad 4\ 9\ 6\ 0 \\ \hline \quad 1\ 0\ 4\ 1 \\ \quad\quad 9\ 9\ 2 \\ \hline \quad\quad\quad 4\ 9 \end{array}$ ✓ correct method So 6 000 ÷ 124 = 48 ✓ rem 49 ✓ $\begin{array}{r\|l} 6\ 0\ 0\ 1 & \div\ 124 \\ \hline 6\ 0\ 0\ 1 & \\ -\ 1\ 2\ 4\ 0 & 1\ 0 \\ \hline 5\ 7\ 6\ 1 & \\ -\ 1\ 2\ 4\ 0 & 1\ 0 \\ \hline 5\ 7\ 6\ 1 & \\ -\ 1\ 2\ 4\ 0 & 1\ 0 \\ \hline 4\ 5\ 2\ 1 & \\ -\ 1\ 2\ 4\ 0 & 1\ 0 \\ \hline 3\ 2\ 8\ 1 & \\ -\ 1\ 2\ 4\ 0 & 1\ 0 \\ \hline 1\ 0\ 4\ 1 & \\ -\ \ 6\ 2\ 0 & \quad 5 \\ \hline \quad 4\ 2\ 1 & \\ -\ \ 2\ 4\ 8 & \quad 2 \\ \hline \quad 1\ 7\ 3 & \\ -\ \ 1\ 2\ 4 & \quad 1 \\ \hline \quad\quad 4\ 9 & 4\ 9 \end{array}$ ✓ correct method So 6 000 ÷ 124 = 48 ✓ remainder 49 ✓	(3)	**RP** CLUE BOARD 124 x 1 = 124 124 x 2 = 248 124 x 3 = 372 124 x 4 = 496 124 x 5 = 620 124 x 6 = 744 124 x 7 = 868 124 x 8 = 992

Questions	Marks	Cognitive level
5. a) The ratio of the number of pentagons to the number of octagons = 4 to 6 ✓ = 2 to 3 ✓	(2)	RP
b) The car will travel 15 km ✓	(1)	RP
6. a) $\begin{array}{r} 5\ 0\ \ 0\ 0\ 0 \\ -\qquad 5\ 0 \\ \hline 4\ 9\ \ 9\ 5\ 0 \end{array}$ ✓ method and ✓ for correct answer The difference between the two 5s is 49 950	(2)	CP
b) The number is 99 999 999 ✓✓	(2)	PD
7. Number of hours longer $= 5\frac{2}{3} - 3\frac{1}{6}$ ✓ for knowing to subtract $= 2\frac{2}{3} - \frac{1}{6}$ $= 2\frac{4}{6} - \frac{1}{6}$ $= 2\frac{3}{6}$ $= 2\frac{1}{2}$ ✓ for the correct answer OR Number of hours longer $= 5\frac{2}{3} - 3\frac{1}{6}$ ✓ for knowing to subtract $= \frac{17}{3} - \frac{19}{6}$ $= \frac{34}{6} - \frac{19}{6}$ $= \frac{15}{6}$ $= \frac{5}{2}$ $= 2\frac{1}{2}$ ✓ for the correct answer Dan works for $2\frac{1}{2}$ hours longer during the week than on Saturday. ✓	(3)	RP
8. *Many different solutions are possible. Accept the ones that are correct. Here is one solution:* Boy + boy + (boy + 2) + (boy + 2) = 40 ✓✓ for a correct method 4 x boy's age = 36 ∴ boy's age = 9 years So the two boys are each 9 years ✓ old and the two girls are each 11 years ✓ old.	(4)	PS

Questions	Marks	Cognitive level
SECTION 2: PATTERNS, FUNCTIONS AND ALGEBRA		**6**
9. 61 ; 54 ; 47 ; **40** ; **33** ✓	(2)	K
10. **FALSE** ✓ The correct sentence should be (8 + 4) x 5 = 60 ✓	(2)	RP
11. (☐ x 5) + 27 = 62 ☐ x 5 = 35 ✓ for the correct working out So ☐ = 7 The number is 7 ✓	(2)	CP
SECTION 3: SPACE, SHAPE AND MEASUREMENT		**13**
12. a) Acute angle | **Right angle ✓** Obtuse angle | Reflex angle So the angle at (i) is a right angle	(1)	K
b) Acute angle | Right angle Obtuse angle | **Reflex angle ✓** The angle at (ii) is an reflex angle	(1)	K
c) The total number of centimetre squares in the shape = 17 ✓	(1)	RP
d) The perimeter of the shape = 24 cm ✓	(1)	RP
e)  2 marks if enlargement is completely correct 1 mark if the enlargement is the correct shape but the wrong size 0 marks if the enlargement is the wrong shape and the wrong size	(2)	RP

Questions	Marks	Cognitive level
13. a) This 3-D object has **6** faces ✓, **12** edges ✓ and **8** vertices ✓	(3)	**CP**
b) Square prism or rectangular prism ✓	(1)	**K**
c) The volume of this 3-D object = 45 centimetre cubes ✓	(1)	**RP**
d) The surface area of this 3-D object = (4 x 15 cm squares) + (2 x 9 cm squares) = 60 cm squares + 18 cm squares = 78 cm squares ✓ for the correct method ✓ for the correct answer	(2)	**CP**
SECTION 4: DATA HANDLING		**5**
14. a) The under 20 years age group had the most runners ✓	(1)	**RP**
b) The percentage of runners in the 40 to 49 year age group = 4% ✓ = $\frac{4}{100} = \frac{1}{25}$ ✓	(2)	**RP**
c) **Certain** | Impossible | Uncertain ✓ The probability that the next day is a Sunday is **certain**	(1)	**RP**
d) The possible outcomes of tossing a coin are **Heads** and **Tails** ✓	(1)	**RP**

5. Analysis of Cognitive Levels

Table 1 below shows the percentage of marks that should be allocated to the different content areas and the actual marks for each area in the Term 4 examination.

Table 1: WEIGHTING OF CONTENT AREAS IN TERM 4

Content area	CAPS	Percentage per content area in the end-of-year examination
Numbers, operations and relationships	50%	52%
Patterns, functions and algebra	10%	10%
Measurement	15%	18%
Space and shape	15%	10%
Data handling	10%	10%
	100%	**100%**

Table 2 below shows the percentage of marks that should be allocated to cognitive levels and the number of marks in each level in the end-of-year examination.

Table 2: COGNITIVE LEVELS IN THE END-OF-YEAR EXAMINATION

Cognitive level	CAPS	Marks per level in an examination out of 50	Actual marks per level in the end-of-year examination
Knowledge	25%	12,5	12
Routine procedures	45%	22,5	23
Complex procedures	20%	10	9
Problem solving	10%	5	6
	100%	**50**	**50**

Both tables show that the test complies with the CAPS specified weightings.