

**GRADE 9**

# **Mathematics**

Teacher Toolkit: CAPS Planner and Tracker

**2019 TERM 3**



# CONTENTS

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<b>A. About the Tracker and Resources</b>	2
<b>B. Lesson Preparation Key Steps</b>	6
<b>C. Planning for Assessment</b>	8
<b>D. Trackers for Each Set of Approved LTSMs</b>	11
<i>Premier Mathematics</i>	11
<i>Spot On Mathematics</i>	23
<i>Platinum Mathematics</i>	35
<i>Oxford Headstart Mathematics</i>	47
<i>Oxford Successful Mathematics</i>	59
<i>Clever: Keeping Maths Simple</i>	71
<i>Solutions for All Mathematics</i>	83
<i>Mathematics Today</i>	95
<i>Sasol Inzalo Mathematics Book 2</i>	107
<b>E. Assessment Resources</b>	119
Formal Assessment Record Sheet – Term 3	119
Grade 9 Mathematics Term 3 – Test	120
Grade 9 Mathematics Term 3 – Test Memorandum and Cognitive Levels of Questions	123
Analysis of Cognitive Levels	126

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## A. ABOUT THE TRACKER AND RESOURCES

### 1. Your quick guide to using this planner and tracker



*What is the NECT and where do I fit in?*

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



*But who will help me?*

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



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

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



*How do I use the planner and tracker?*

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



### 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 9 Mathematics Curriculum and Assessment Planner and Tracker is a tool to support you in your role as a professional teacher. Its main purpose is to help you to keep pace with the time requirements and the content coverage of the CAPS. The tracker provides a programme of work that should be covered each day of the term and a space for reflection on the 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 (HOD) and peers to find the best possible way to make up time and ensure that all the work for the term is completed.

In addition, the tracker encourages you to reflect on the parts of your lessons that are effective, and the areas where content coverage could be supplemented or strengthened. These reflections can be shared with colleagues. In this way, the tracker encourages 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 9 is based on the requirements prescribed by the Department of Basic Education's Curriculum and Assessment Policy Statement (CAPS) for Mathematics in the Senior Phase. The work set out for each day is linked directly to the topics and subtopics given in the CAPS, and the time specified in the CAPS is allocated to each topic. The tracker gives the page number in the CAPS document of the topics and subtopics being addressed in each lesson to help you refer to the curriculum document directly, should you wish to do so.

Please note that the KwaZulu-Natal sequence of topics for Term 3 is not the same as that of the CAPS. However, the topics covered are the same.

## 4. Links to the approved sets of Learner's Books and Teacher's Guides

The tracker coordinates the CAPS requirements with the content set out in the eight approved sets of Learner's Books and Teacher's Guides. There is a tracker for each of these sets on the list of approved books on the national catalogue. In addition, there is a tracker for the *Sasol Inzalo Grade 9 Mathematics Book 2* for teachers who are using

this material as their main teaching resource. 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 different ways – but you must be sure to cover the content systematically. For each set of LTSMs in the tracker, 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 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. The activity is marked **\*Select** in these cases. In other instances the Learner's Books do not have adequate activities for learners to consolidate work done on a topic, in which case we recommend that you use the relevant activities in the DBE workbooks, the *Sasol Inzalo Mathematics* book or additional work from other sources. The activity is marked **#Supplement** in these cases.

Each tracker is based on the latest print editions of the eight approved sets of LTSMs. It is important to note that page numbers may differ slightly from other print runs of the same Learner's 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 differ by a page or two from those given in the tracker.

## 5. Links to the DBE workbooks and to the *Sasol Inzalo Mathematics* book

The tracker for each of the eight published books gives links to worksheets in the DBE workbooks relevant to the content prescribed for each day. The worksheets in the DBE workbooks are referred to by worksheet number and page. These workbooks should be used in conjunction with the Learner's Book activities as mentioned above. You should review them before each lesson, and decide how best to use them – for teaching, revision, extension or consolidation; in class or for homework. Please also note that the workbook referenced in the tracker is the 2017 edition. If you use a different edition, you should check that the worksheet to which you are referred in the tracker is still appropriate for the content it is linked to.

In addition, the tracker for each of the eight approved LTSMs also gives links to relevant pages in the *Sasol Inzalo Learner's Book 2* to help you find relevant resources there.

## 6. Managing time allocated in the tracker

The CAPS prescribes four and a half hours of Mathematics per week in Grade 9. The tracker provides a suggested plan for five lessons a week, with the first four lessons expected to be an hour long, and the fifth lesson thirty minutes long. Altogether this makes up four and a half hours. As each school organises its timetable differently, you may have to divide the lessons in the programme to accommodate the length of the lessons at your school in a way that ensures the full four and a half hours for Mathematics is used constructively.

The breakdown of work to be done each week corresponds to the 'annual teaching plan and programme of assessment' drawn up by the provincial Department of Education; however, the tracker gives a more detailed outline of what should be taught each day.

It is important to note that a total of 45 hours is given in the CAPS to the topics for the term. In Term 3, a total of five hours is given for assessment and revision.

The programme in the tracker completes the formal teaching and assessment programme in ten weeks. This leaves Week 11 for you to complete any work you have not managed to cover in the first ten weeks, go over assignments and tests and do remediation work with your learners. What needs to be done will vary from class to class. We have thus left the tracker blank for you to plan this week yourself.

Please note that if you use the tracker in a third term that is longer or shorter than 11 weeks, you will need to adjust the programme accordingly.

## 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 if you are working at a slower pace, 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 to the lesson schedule. One way of doing this is by covering the lesson 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 homework reflection, until you are back on track.

## 8. Links to assessment

In Term 3 of Grade 9, the formal assessment programme specified in the CAPS requires,

as a minimum, that learners complete one assignment and one project and write a test. The approved Learner's Books and Teacher's Guides provide exemplar assignments, projects and tests that you can use with your class. The Assessment Term Plan, provided in Section C of this document, shows when in the programme of work they are included in each set of materials, and on which pages in the Learner's Books or Teacher's Guides they can be found. The tracker indicates where in the series of lessons the formal assessments should be done and when feedback should be given. The actual tasks and the dates for the assessments vary slightly from Learner's Book to Learner's Book, but are always in line with the CAPS specifications. If the LTSM that you are using offers more than one option for an assignment or a project, then an option has been chosen for you and included in the tracker, but you can, of course, choose a different option if you prefer.

In a number of cases, the project is spread over a few weeks. This is clearly indicated in the tracker. We suggest that you discuss testing times with your colleagues who are teaching other subjects. In this way you can avoid having the learners write several tests on the same day.

If there is a term test in the Learner's Book, we suggest that you do not use it as part of the formal assessment programme, because learners will be able to prepare for it in advance. If this is the case, rather use a term test from a different Teacher's Guide from the set of approved LTSMs, or set your own term test using a range of sources and the DBE and *Sasol Inzalo* Learner's Books. We have also included a term test and marking memorandum, which you could use instead of the term test in the LTSMs used by your class. There is an analysis of the term test according to the weightings of cognitive levels specified in the CAPS. You will find these resources in Section E of this document.

A suggested mark 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 during the term. You may prefer to use your own mark sheet created using your class list.

In addition to the prescribed formal assessment, you should include some informal assessments to help you and the learners gain insight into how they are progressing. Although marks do not have to be recorded for such assessments, you might like to record some marks that are awarded or key comments for your own interest.

## 9. Resources and notes

The tracker suggests resources that you could use for certain lessons, but note that this is not a comprehensive set of the resources you might use to enrich your Mathematics teaching.

## B. LESSON PREPARATION KEY STEPS

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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, and 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 and your colleagues who are teaching Mathematics agree on a day to get together to plan your lessons as a group and submit your plans to your HOD for quality assurance. To deliver the lessons successfully **you must do the necessary preparation yourself**. Remember that your lessons will not be successful if you have not prepared properly for them. Preparing for your lessons involves a number of key steps. We have noted some of these steps below.

- 1. Review the term focus:** It is important that you are clear about the CAPS content focus, because this will frame everything you do in your Mathematics lessons during the term. Start by looking at the CAPS and **orientating** yourself to the CAPS content focus for the term. **The time allocation per term** is given in the CAPS document on page 118. This indicates how many hours should be spent on each topic.
- 2. Prepare resources:** The resources needed for each lesson are listed at the start of each CAPS topic or for each lesson, depending on the Learner's Book. 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. Here are a few tips to help you:
  - Use newspapers and magazines to cut out pictures that could be used in your teaching. If you have access to the internet, use Google to search for and print out pictures that you may need to use as illustrations in your lessons.
  - Make sure you have chalk or marking pens so that you can use your chalk board or whiteboard as needed. If you have digital resources, check that they are in working order.
  - Check the assessment programme so that you can prepare any resources, such as test papers, needed for formal assessment to ensure that learners settle down and begin working promptly.
- 3. Prepare the content:** Think carefully about the content that you will teach your learners in each lesson. Think about the prior knowledge of the content that learners should have from earlier grades. This prior knowledge will be built on in the lesson. You also need to think about how you will deal with learners who

do not have adequate prior knowledge of the content being taught, and have resources ready for them to use, thus ensuring they are not disadvantaged in any way. Consider any common misconceptions, and how you will address these.

Refer to the CAPS content and skills clarification column for further guidance while you prepare.

- **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. Also think about how learners will develop an understanding of the main concepts of the topic. You need to think about how to explain new Mathematics content, new vocabulary and Mathematical 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 you will do in class and what learners will do at home. Be sure to have some enrichment and remediation activities ready to use as needed. The Teacher's Guides offer suggestions for enrichment and remediation activities that you might want to use.
- **Consider the needs of any learners with barriers to learning in your class** and how best you can support them. The DBE has published some excellent materials to support you in working with learners with learning barriers. Two such publications are:
  - Directorate Inclusive Education, Department of Basic Education (2011) *Guidelines for Responding to Learner Diversity in the Classroom Through Curriculum and Assessment Policy Statements*. Pretoria. [www.education.gov.za](http://www.education.gov.za), [www.thutong.doe.gov.za/InclusiveEducation](http://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](http://www.education.gov.za), [www.thutong.doe.gov.za/InclusiveEducation](http://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. We have made suggestions about how much time to spend on each step (for a one-hour lesson) – but you might find that you need to



work differently in some lessons, such as when a test is being written, or when the allocated lesson time is only half an hour.

- **Homework review/reflection (15 minutes):** This is the first activity of the lesson. We recommend that you take about 15 minutes to remediate and correct the previous day's homework. Read out answers to all 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 learners struggled with, and work through these activities in class. Allow learners the opportunity to write corrections as needed.

During this part of the lesson you may also reflect on the previous day's work.

- **Lesson content – concept development (15 minutes):** This is the second activity of the lesson. We recommend that you actively teach your class for 15 minutes – working through examples interactively with your learners. Worked examples and suggested explanations are given in the Learner's Book or Teacher's Guide. Work through these examples with your class as a whole.

If you need additional examples or ideas to enrich your explanations, the CAPS content clarification column elaborates on these explanations and provides additional examples if necessary.

- **Classwork activity (25 minutes):** This is the third 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 the DBE workbook. These activities allow them to practice their Mathematical and problem solving skills. It is important that you **work through the classwork activity beforehand** – you need to assist learners as they do the classwork.

You might also need to select particular questions from each activity that can be used as a classwork activity to ensure that learners can manage the workload. 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 learners about which numbers of each exercise they should do. (Remember not to give your learners more work than you are able to control and mark.)

Depending on your learners and the activities, you could work through one or two of the classwork activities with the whole class before allowing the

learners to work independently. Give 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. 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 the group.

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 work through the classwork activity together and they can do corrections during the lesson.

This is also the part of the lesson where you can assist learners who need extra support and extend those who need enrichment. Throughout the lesson, try to identify learners who need additional support or extension by paying attention to how well they 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 that need extra support and help them to work through the remediation activities. If learners successfully complete the daily classwork activities ahead of the rest of the class, be prepared and have enrichment activities for them to complete.

- **Allocate homework (5 minutes):** This is the fourth 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. Homework enables the learners to consolidate the Mathematics you have taught them in the class. It also promotes learner writing, development of Mathematical knowledge and the development of regular study habits.

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.

Encourage your learners to show their parent(s) or their guardian(s) the work they have done.

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

## C. PLANNING FOR ASSESSMENT

The term plan gives an overview of how the minimum requirements of the formal assessment programme fit into the weekly planned lessons in the tracker for each set of LTSMs.

**Note:** All assessments should be done under controlled conditions. Teachers should invigilate and there should be no talking among the learners.

### 1. Formal assessment

Table 1 shows the minimum requirements for formal assessment in Grade 9 given by the CAPS (p. 155).

School-based assessment	FORMS OF ASSESSMENT	Minimum requirements per term				Number of tasks per year	Weighting
		Term 1	Term 2	Term 3	Term 4		
		Test	1	1	1		
Examination		1			1		
Assignment	1		1	1	3		
Investigation		1		1	2		
Project			1		1		
<b>Total</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>10*</b>		
<b>End-of-year examination</b>						1	<b>60%</b>

\*To be completed before the end-of-year examination

LTSM	Assignment	Project	Test
<i>Premier Mathematics</i>	<b>Week 5</b> Day 21 TG pp. 166–171	<b>Week 10</b> Day 46 & 47 LB pp. 181–183 TG p. 128	<b>Exemplar test</b>
			<b>Week 9</b> Day 45 TG pp. 137–140

Table 2 gives an overview of how the minimum requirements of the formal assessment programme fit into the weekly planned lessons in the tracker and where examples can be found in the LTSMs. Remember, examples of tests/examinations in the Learner's Book should not be used for formal assessment as the learners can prepare for them in advance, but they can be used for revision.

**The tracker and this assessment plan indicate when the exemplar test (see Section E) should be written.** The last column also gives the page references of tests in the LTSMs. Should you wish to use one of these tests from a Teacher's Guide instead of the exemplar at a different time, you may of course do so. If you set a test at a different time, you will need to adjust the programme in the tracker accordingly.

Please note that DBE assessment requirements change from time to time. Should any changes have been made after this document was printed, please adjust the programme here and in the trackers accordingly.

**Table 2: FORMAL ASSESSMENT TERM PLAN FOR EACH SET OF LTSMs**

LTSM	Assignment	Project	Test
<i>Spot On Mathematics</i>	<b>Week 8</b> Day 38 LB pp. 201–204 TG pp. 148–152	<b>Week 10</b> Day 46 & 47 LB pp. 220–223 TG pp. 158–159	<b>Exemplar test</b> <b>Week 9</b> Day 45
			No test provided
<i>Platinum Mathematics</i>	<b>Week 8</b> Day 38 LB pp. 216–217 TG p. 112	<b>Week 6</b> Day 26 & 27 LB pp. 184–185 TG p. 100	<b>Exemplar test</b> <b>Week 10</b> Day 46
			LB pp. 232–233 TG p. 117
<i>Oxford Headstart Mathematics</i>	<b>Week 8</b> Day 38 LB pp. 421–422 TG pp. 316–317	<b>Week 10</b> Day 46 & 47 LB pp. 440–441 TG p. 327	<b>Exemplar test</b> <b>Week 9</b> Day 43
			TG pp. 328–329
<i>Oxford Successful Mathematics</i>	<b>Week 8</b> Day 38 LB pp. 439–440 TG pp. 336–338	<b>Week 10</b> Day 47 & 48 LB pp. 444–445 TG p. 340	<b>Exemplar test</b> <b>Week 9</b> Day 45
			TG pp. 341–344
<i>Clever: Keeping Maths Simple</i>	<b>Week 3</b> Day 11 LB p. 271 TG pp. 268–269	<b>Week 6</b> Day 27 & 28 LB pp. 272–275 TG pp. 270–273	<b>Exemplar test</b> <b>Week 10</b> Day 46
			LB pp. 276–277 TG pp. 274–276
<i>Solutions for All Mathematics</i>	<b>Week 3</b> Day 11 TG pp. 441–442	<b>Week 6</b> Day 27 & 28 TG pp. 443–446	<b>Exemplar test</b> <b>Week 10</b> Day 47
			TG pp. 437–440
<i>Mathematics Today</i>	<b>Week 8</b> Day 38 LB pp. 240–241 TG pp. 106–107	<b>Week 10</b> Day 46 & 47 LB p. 254 TG p. 111	<b>Exemplar test</b> <b>Week 9</b> Day 45
			No test provided
<i>Sasol Inzalo Mathematics Book 2</i>	<b>Week 5</b> Day 21 No assignment provided	<b>Week 10</b> Day 46 & 47 No project provided	<b>Exemplar test</b> <b>Week 9</b> Day 45
			No test provided
For all LTSMs			<b>Exemplar test content</b> Functions and relationships; Algebraic expressions; Algebraic equations; Graphs; Surface area and volume of 3-D objects (excluding combinations)

## 2. Informal assessment

In addition to the prescribed formal assessment, you should include some informal assessments to help you and the learners gain insight into how they are progressing. Much informal assessment is integrated into teaching and learning – in class discussions, responses to questions, and as classwork is done and homework reviewed. It is also a good idea, however, to set some informal written assessment tasks that simulate more formal assessment activities, such as examination or test questions. These written tasks will allow learners to develop important examination techniques such as keeping to time limits and first answering what they know best.

Each set of LTSMs provides revision exercises as well as remediation and extension exercises, all of which may be used for informal assessment. Some examples are given below:

- *Premier Mathematics* provides revision exercises of the units at the end of the term with full solutions provided in the Teacher's Guide.
- *Spot On Mathematics* provides a revision activity at the end of each module with full solutions in the Teacher's Guide.
- *Platinum Mathematics* provides comprehensive revision exercises at the end of each topic in the Learner's Book (with full solutions in the Teacher's Guide) as well as Basic Target and Advanced Target worksheets at the back of the Teacher's Guide. An Extension and Remediation Worksheet Book is also provided.

- *Oxford Headstart Mathematics* gives revision exercises at the end of each chapter with solutions in the Teacher's Guide. Extension and remedial activities are also suggested throughout the Teacher's Guide.
- *Oxford Successful Mathematics* has a consolidation exercise at the end of each chapter in the Learner's Book (with full solutions in the Teacher's Guide).
- *Clever: Keeping Maths Simple* does not have revision exercises but there is more than enough material in many of the exercises available for revision purposes.
- *Solutions for All Mathematics* has a revision exercise (Check what you know) at the end of each unit. The final unit of each term comprises revision of all the units done during the term. Comprehensive solutions are provided in the Teacher's Guide. Enrichment is provided occasionally and is indicated by an enrichment icon.
- *Mathematics Today* provides a revision test at the end of each topic with full solutions in the Teacher's Guide. For each topic, remedial support and extension exercises are provided in the Teacher's Guide. There is also a separate photocopiable Worksheet Book covering all the topics.

The trackers do not specify when such informal assessments should be done as you will use your professional judgement in this regard. Although marks do not have to be recorded for informal assessment, you might like to keep a record of these in order to monitor your learners' progress.

## D. TRACKERS FOR EACH SET OF APPROVED LTSMs

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### **Premier Mathematics**

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

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

1. Day/lesson number.
2. CAPS content linked to Learner's Book content.
3. CAPS page numbers at the start of each CAPS topic.
4. Learner's Book exercises that cover the CAPS content for the day. Where an exercise has been recommended for more than one day, it has been divided into two parts.
5. Page reference in the Learner's Book (LB page reference).
6. Page reference in your Teacher's Guide for the day's activities (TG page reference).
7. DBE workbook link to related content (worksheet and page numbers are referenced).
8. Sasol Inzalo Foundation Mathematics Book 2 link to related content (exercise and page numbers are referenced).
9. Date completed.

Where necessary, notes referring to specific days have been inserted below the week's tracker.

#### **Weekly reflection**

The tracker provides a space that you can use to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and peers, and together 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 and skills for the day? Could they use the language expected of them? Could they write what was expected of 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 and also forms the basis for collegial conversations with your HOD and peers.

**Premier Mathematics Week 1**

\*Select

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
1	<b>Algebraic expressions:</b> Revise algebraic language; Revise simplification of algebraic expressions (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	142–143				No. 70–75b* (pp. 12–33)	No. 1–5 (pp. 13–16)					
2	Find the highest common factor of monomials	142–143	1	138	96–98							
3	Factorise algebraic expressions that involve common factors	142–143	2 (no. 1)	139	98	No. 76 (pp. 34–35)	No. 1–4 (pp. 16–17)					
4	Factorise algebraic expressions that involve common factors cont.	142–143	2 (no. 2)	140	98–99	No. 77 (pp. 36–37)						
5	Factorise algebraic expressions that involve the difference of two squares	142–143	3	140	99–100	No. 78 (pp. 38–39)	No. 1–5 (pp. 22–23) No. 1–2 (pp. 23–24)					

**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**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class						
								Date completed						
6	Factorise algebraic expressions that involve perfect square trinomials	142–143	4	141–142	100									
7	Factorise algebraic expressions that involve trinomials	142–143	5 (no. 1)	142–144	101	No. 80 (pp. 42–43)	No. 1–7 (pp. 17–19) No. 1–3 (pp. 19–20)							
8	Factorise algebraic expressions that involve trinomials cont.	142–143	5 (no. 2)	144	101		No. 1–3 (pp. 21–22)							
9	Simplify algebraic expressions that involve factorisation	142–143	6 (no. 1–11)	145–146	102	No. 79 (pp. 40–41)	No. 1–3 (pp. 25–26) No. 1–4 (p. 26)							
10	Simplify algebraic expressions that involve factorisation cont.	142–143	6 (no. 12–18)	146	102–103		No. 1–2 (p. 27) No. 1–3 (pp. 27–28) No. 1–2 (pp. 29–30)							
Reflection														
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>								
<p><b>HOD:</b></p>						<p><b>Date:</b></p>								

**Premier Mathematics Week 3**

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
11	<b>Algebraic equations:</b> Revise solving equations using inspection and additive and multiplicative inverses	144	1 (no. 1–2)	147–148	103–104		No. 1–2 (pp. 31–33)					
12	Revise solving equations using additive and multiplicative inverses cont.	144	1 (no. 3–4)	148	104–105	No. 81 (pp. 44–45)	No. 1–5 (pp. 34–35)					
13	Solve equations of the form: A product of factors = 0	144	2 (no. 1)	148–149	106–107		No. 1–2 (p. 36) No. 1–4 (p. 37)					
14	Solve equations using factorisation	144	2 (no. 2)#	149	107	No. 82 (pp. 46–47)	No. 1–6 (p. 38) No. 1–3 (p. 40)					
15	Solve equations involving the difference of two squares; Mixed exercises for more practice (use <i>Sasol Inzalo</i> book)	144	3	150	107–108	No. 83 (pp. 48–49)	No. 1–8 (p. 39) No. 1–10 (p. 41)					

**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**

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
16	Use substitution in equations to generate tables of ordered pairs	144	4 (no. 1)#	150–152	108–109	No. 85 (pp. 52–53)	No. 1–3 (p. 45)					
17	Use substitution in equations to generate tables of ordered pairs cont.	144	4 (no. 2)#	152	109–110	No. 87 (pp. 58–59)	No. 1–4 (pp. 45–46)					
18	Set up equations involving volume	144	5	153	110	No. 84 (pp. 50–51)						
19	Set up equations to describe problem situations and solve the equations (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	144				No. 86a (pp. 54–55)	No. 1–4 (pp. 42–44)					
20	Set up equations to describe problem situations and solve the equations (use <i>DBE workbook</i> )	144				No. 86b (pp. 56–57)						

**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**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class					
								Date completed					
21	<b>Formal assessment: Assignment</b> (use Questions 2–4 from end-of-year examination)				166–167								
22	<b>Functions and relationships:</b> Determine output values for given equations	141	1 (no. 1–5)	133	91		No. 1–8 (pp. 1–6)						
23	Determine output values for given equations cont.	141	1 (no. 6–10)	133	91–92	No. 69 (pp. 10–11)	No. 1–14 (pp. 6–10)						
24	Determine rules for number patterns (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	141				No. 65 (pp. 2–3)	No. 1–6 (pp. 11–12)						
25	Equivalent forms: Determine rules for patterns and relationships and draw the flow diagrams/graphs	141	2 (no. 1–2)	134–135	92–94	No. 66–67 (pp. 4–7)							

**Note:** Refer to Day 21: The memorandum for the assignment: TG (pp. 170–171).

**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**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
26	Equivalent forms: Determine the output values or formulae and draw the table of values and/or graphs; Go over assignment done in previous week	141	2 (no. 3–6)	136–137	95–96	No. 68 (pp. 8–9)						
27	<b>Graphs:</b> Analyse and interpret global graphs of problem situations	145	1	155–158	113	No. 88a (pp. 60–61)	No. 1–6 (pp. 47–52) No. 1–9 (pp. 53–58)					
28	Plot points and draw graphs on the Cartesian plane using tables of ordered pairs	145	2	158–160	114	No. 88b (pp. 62–63)	No. 1–4 (pp. 61–62)					
29	Interpret and determine the $x$ -intercept and the $y$ -intercept of linear graphs; Draw linear graphs	145	3	160–161	115–116	No. 89 (pp. 64–65)	No. 1–4 (pp. 71–72) No. 1–4 (p. 72)					
30	Interpret and determine the gradient and $y$ -intercept of linear graphs	145	4	162–163	117	No. 90a–90b (pp. 66–69)	No. 1–5 (pp. 58–60) No. 1–3 (pp. 63–65)					
Reflection												
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						
HOD:						Date:						

**Premier Mathematics Week 7**

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
31	Draw linear graphs from given equations	145	5 (no. 1, 2a–b)	163–164	118–119	No. 91 (pp. 70–71)						
32	Draw linear graphs from given equations	145	5 (no. 2c–j)	164	119–120	No. 96a (pp. 80–81)						
33	Draw linear graphs from given equations (use <i>DBE workbook</i> )	145				No. 96b–97 (pp. 82–85)						
34	Determine equations from given linear graphs	145	6	165–167	121	No. 98 (pp. 86–87)	No. 1–2 (p. 66)					
35	Determine equations from given linear graphs cont. (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	145				No. 99a–99b (pp. 88–91)	No. 1–3 (pp. 66–69) No. 1–3 (pp. 69–71)					

**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 8**

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
36	Sketch and compare linear graphs cont.	145	7 (no. 1)#	168	121	No. 92 (pp. 72–73)						
37	Sketch and compare linear graphs cont.	145	7 (no. 2–3)#	168	122	No. 93–94 (pp. 74–77)						
38	Sketch and compare linear graphs cont.; Sketch graphs of non-linear functions (use <i>Sasol Inzalo</i> book)	145	7 (no. 4–5)#	168	122	No. 95 (pp. 78–79)	No. 1 (pp. 73–74)					
39	<b>Surface area and volume of 3-D objects:</b> Revise conversions; Calculate the surface area and the volume of cubes	146	1#	169–170	123	No. 100a–100b (pp. 92–95)						
40	Calculate the surface area, volume and capacity of rectangular prisms	146	2	170–173	123–124	No. 101–102 (pp. 96–99)	No. 1–8 (pp. 75–78)					

**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**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
41	Calculate the surface area, volume and capacity of triangular prisms	146	3	173–175	124–125	No. 103a–103b (pp. 100–103)	No. 1–3 (pp. 81–82) No. 1–3 (p. 85)					
42	Calculate the surface area, volume and capacity of cylinders	146	4 (no. 1a–b)	176–177	125	No. 104a–104b (pp. 104–107)	No. 1–4 (pp. 79–80)					
43	Calculate the surface area, volume and capacity of cylinders cont.	146	4 (no. 1c–3b)	177–178	125–126		No. 1–3 (pp. 83–84)					
44	Revise for test											
45	<b>Formal assessment: Test</b>											

**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 10**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
46	<b>Formal assessment: Project</b>		Project	181–183	128							
47	<b>Formal assessment: Project</b> cont.		Project	181–183	128							
48	Investigate how doubling dimensions affects the volume	146	5	178–180	126–127		No. 1–3 (pp. 86–87)					
49	Doubling the dimensions of a cylinder (use <i>Sasol Inzalo</i> book); Go over test done in previous week	146					No. 1–4 (pp. 87–88)					
50	Revision											
Reflection												
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						
HOD:						Date:						

**Premier Mathematics Week 11**  
**Catch up any work not done; review assessments and do remediation – plan your week**

**End-of-term reflection**

**Think about and make a note of:**

1. Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?

2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?

3. What ONE change should you make to your teaching practice to help you teach more effectively next term?

4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in future? What plan will you make to get back **on track**?

**HOD:**

**Date:**



## Spot On Mathematics

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

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

1. Day/lesson number.
2. CAPS content linked to Learner's Book content.
3. CAPS page numbers at the start of each CAPS topic.
4. Learner's Book exercises that cover the CAPS content for the day. Where an exercise has been recommended for more than one day, it has been divided into two parts.
5. Page reference in the Learner's Book (LB page reference).
6. Page reference in your Teacher's Guide for the day's activities (TG page reference).
7. DBE workbook link to related content (worksheet and page numbers are referenced).
8. *Sasol Inzalo Foundation Mathematics Book 2* link to related content (exercise and page numbers are referenced)
9. Date completed.

Where necessary, notes referring to specific days have been inserted below the week's tracker.

### Weekly reflection

The tracker provides a space that you can use to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and peers, and together 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 and skills for the day? Could they use the language expected of them? Could they write what was expected of 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 and also forms the basis for collegial conversations with your HOD and peers.

## Spot On Mathematics Week 1

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class					
								Date completed					
1	<b>Algebraic expressions:</b> Revise algebraic language; Revise expanding and simplifying algebraic expressions	142–143	5.2 (no. 1–3)#	167–169	125–126	No. 70–72b (pp. 12–19)	No. 1–5 (pp. 13–16)						
2	Revise algebraic language and simplifying of expressions	142–143	5.2 (no. 4–7)#	169	126	No. 73a–75b (pp. 20–33)							
3	Find the highest common factor of monomials	142–143	5.3a (no. 1–2)	170–171	127								
4	Factorise algebraic expressions that involve common factors	142–143	5.3a (no. 3)#	171	127	No. 76 (pp. 34–35)							
5	Factorise algebraic expressions that involve common factors (use <i>DBE workbook</i> )	142–143				No. 77 (pp. 36–37)	No. 1–4 (pp. 16–17)						
Reflection													
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						<p><b>HOD:</b></p>	<p><b>Date:</b></p>

**Spot On Mathematics Week 2**

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
6	Factorise algebraic expressions that involve the difference of two squares	142–143	5.3b	172–173	127–128	No. 78 (pp. 38–39)	No. 1–5 (pp. 22–23) No. 1–2 (pp. 23–24)					
7	Factorise algebraic expressions that involve trinomials	142–143	5.3c (no. 1–2)	174–175	129–130	No. 80 (pp. 42–43)	No. 1–7 (pp. 17–19) No. 1–3 (pp. 19–20)					
8	Factorise algebraic expressions that involve trinomials cont.	142–143	5.3c (no. 3–5)	175	130		No. 1–3 (pp. 21–22)					
9	Simplify algebraic expressions that involve factorisation	142–143	5.4 (no. 1–4)	176–178	131–132	No. 79 (pp. 40–41)	No. 1–3 (pp. 25–26) No. 1–4 (p. 26)					
10	Simplify algebraic expressions that involve factorisation cont.	142–143	5.4 (no. 5–7)	178	132–133		No. 1–2 (p. 27) No. 1–3 (pp. 27–28) No. 1–2 (pp. 29–30)					
Reflection												
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						
<p><b>HOD:</b></p>						<p><b>Date:</b></p>						

## Spot On Mathematics Week 3

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
11	<b>Algebraic equations:</b> Revise solving equations using inspection and additive and multiplicative inverses	144	5.5 (no. 1)#	179–183	134	No. 81 (pp. 44–45)	No. 1–2 (pp. 31–33) No. 1–5 (pp. 34–35)					
12	Solve equations of the form: A product of factors = 0 and using factorisation	144	5.5 (no. 2)#	180–181 183	134–135	No. 82 (pp. 46–47)	No. 1–2 (p. 36) No. 1–4 (p. 37)					
13	Set up equations involving volume	144	5.5 (no. 3)#	183	135	No. 84 (pp. 50–51)	No. 1–6 (p. 38) No. 1–3 (p. 40)					
14	Solve equations using factorisation and the difference of two squares; Mixed exercises for more practice (use <i>Sasol Inzalo</i> book)	144	5.5 (no. 4)#	183	135	No. 83 (pp. 48–49)	No. 1–8 (p. 39) No. 1–10 (p. 41)					
15	Use substitution in equations to generate tables of ordered pairs	144	5.5 (no. 5)#	182–183	135	No. 85 (pp. 52–53)	No. 1–3 (p. 45)					
Reflection												
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						
						HOD:			Date:			

## Spot On Mathematics Week 4

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
16	Use substitution in equations to generate tables of ordered pairs cont. (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	144				No. 87 (pp. 58–59)	No. 1–4 (pp. 45–46)					
17	Analyse and interpret equations that describe a given situation; Set up equations to solve problems	144	5.5 (no. 6–7)#	182–183	135–136	No. 86a (pp. 54–55)						
18	Set up equations to describe problem situations and solve the equations (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	144				No. 86b (pp. 56–57)	No. 1–4 (pp. 42–44)					
19	Revise factorising and simplifying algebraic expressions	144	Rev. Act. 5 (no. 1–2)	201	148							
20	Revise solving equations and generating tables of ordered pairs	144	Rev. Act. 5 (no. 3–5)	201	148–149							

**Note:** 1. Refer to Day 19: For more revision: TG No. 3 (p. 207).  
2. Refer to Day 20: For more revision: LB No. 6 (p. 321).

### 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:**

**Spot On Mathematics Week 5**

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
21	<b>Functions and relationships:</b> Determine rules for number patterns (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	141				No. 65 (pp. 2–3)	No. 1–8 (pp. 1–6)					
22	Determine rules for number patterns using tables and equations (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	141				No. 66 (pp. 4–5)	No. 1–14 (pp. 6–10)					
23	Determine rules for number patterns using tables and equations cont. (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	141				No. 67 (pp. 6–7)	No. 1–6 (pp. 11–12)					
24	Determine input and output values; Equivalent forms: Determine the output values or formulae	141	5.1 (no. 1–5)	163–166	121–124	No. 68 (pp. 8–9)						
25	Determine input and output values; Equivalent forms: Determine the output values or formulae	141	5.1 (no. 6–9)	166	124	No. 69 (pp. 10–11)						

**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:**

**Spot On Mathematics Week 6**

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
26	<b>Graphs:</b> Analyse and interpret global graphs of problem situations (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	145				No. 88a–88b (pp. 60–63)	No. 1–6 (pp. 47–52) No. 1–9 (pp. 53–58)					
27	Interpret and determine the $x$ -intercept and the $y$ -intercept of linear graphs; Draw linear graphs	145	5.6	184–189	137–139	No. 89 (pp. 64–65)	No. 1–4 (pp. 71–72) No. 1–4 (p. 72)					
28	Interpret and determine the gradient of linear graphs	145	5.7 (no. 1–4)	190–193	140–141	No. 90a–90b (pp. 66–69)						
29	Determine and interpret the gradient and $y$ -intercept of linear graphs; Draw linear graphs	145	5.7 (no. 5–10)	193	141–142		No. 1–5 (pp. 58–60) No. 1–3 (pp. 63–65)					
30	Draw linear graphs from given equations	145	5.8 (no. 1–5)	194–199	143–144	No. 91 (pp. 70–71)	No. 1–4 (pp. 61–62)					
Reflection												
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						
HOD:						Date:						

## Spot On Mathematics Week 7

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
31	Draw global graphs from given descriptions of a problem situation	145	5.8 (no. 6–9)	199	145–146							
32	Draw linear graphs from given equations	145	Rev. Act. 5 (no. 5–6)	201	149	No. 96a (pp. 80–81)						
33	Draw linear graphs from given equations cont. (use <i>DBE workbook</i> )	145				No. 96b–97 (pp. 82–85)						
34	Determine equations from given linear graphs	145	Rev. Act. 5 (no. 9)#	202	150	No. 98–99b (pp. 86–91)	No. 1–2 (p. 66)					
35	Determine equations from given linear graphs cont. (use <i>Sasol Inzalo</i> book)	145					No. 1–3 (pp. 66–69) No. 1–3 (pp. 69–71)					

### 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:



## Spot On Mathematics Week 8

\*Select

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
36	Sketch and compare linear graphs (use <i>DBE workbook</i> )	145				No. 92–93 (pp. 72–75)						
37	Sketch and compare linear graphs cont. (use <i>DBE workbook</i> ); Sketch graphs of non-linear functions (use <i>Sasol Inzalo</i> book)	145				No. 94–95 (pp. 76–79)	No. 1 (pp. 73–74)					
38	<b>Formal assessment: Assignment</b>		Rev. Act. 5	201–204	148–152							
39	<b>Surface area and volume of 3-D objects:</b> Revise conversions; Calculate the surface area of 3-D objects	146	6.1 (no. 1a–d)	207–211	153–154	No. 100a– 101* (pp. 92–97)	No. 1–8 (pp. 75–78)					
40	Calculate the surface area of 3-D objects	146	6.1 (no. 2–5)	211–212	155	No. 102– 103b* (pp. 98–103)						

**Note:** Refer to Day 39 & 40: For the exercises in the *DBE workbook*: Surface area only.

### 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:

## Spot On Mathematics Week 9

\*Select

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
41	Revise conversions; Calculate the volume and capacity of 3-D objects	146	6.2 (no. 1–5)	213–218	156	No. 100a–102* (pp. 92–99)	No. 1–3 (pp. 81–82) No. 1–3 (p. 85)					
42	Calculate the surface area, volume and capacity of 3-D objects, including cylinders; Go over assignment done in previous week	146	6.2 (no. 6–10)	218–219	157	No. 102–103b* (pp. 100–105)						
43	Revise for test											
44	<b>Formal assessment: Test</b>											
45	Revise the surface area, volume and capacity of cylinders (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	146				No. 104b (pp. 106–107)	No. 1–4 (pp. 79–80) No. 1–3 (pp. 83–84)					

**Note:** Refer to Day 41 & 45: For the exercises in the *DBE workbook*: Volume and capacity only.

### 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:

**Spot On Mathematics Week 10**

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class					
								Date completed					
46	<b>Formal assessment: Project</b> (use <i>Investigation</i> for project)		Investigation 6.3	220–223	158–159								
47	<b>Formal assessment: Project</b> cont. (use <i>Investigation</i> for project)		Investigation 6.3	220–223	158–159								
48	Discuss project findings; Review doubling dimensions of 3-D objects (use <i>Sasol Inzalo</i> book)	146					No. 1–3 (pp. 86–87) No. 1–4 (pp. 87–88)						
49	Revise the surface area and volume of 3-D objects	146	Rev. no. 6	225–226	161–162								
50	Revision												
Reflection													
<p><b>Think about and make a note of:</b> 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?</p>						Revision							
						HOD:					Date:		

**Spot On Mathematics Week 11**  
**Catch up any work not done; review assessments and do remediation – plan your week**

**End-of-term reflection**

**Think about and make a note of:**

1. Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?

2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?

3. What ONE change should you make to your teaching practice to help you teach more effectively next term?

4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in future? What plan will you make to get back **on track**?

**HOD:**

**Date:**

## Platinum Mathematics

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

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

1. Day/lesson number.
2. CAPS content linked to Learner's Book content.
3. CAPS page numbers at the start of each CAPS topic.
4. Learner's Book exercises that cover the CAPS content for the day. Where an exercise has been recommended for more than one day, it has been divided into two parts.
5. Page reference in the Learner's Book (LB page reference).
6. Page reference in your Teacher's Guide for the day's activities (TG page reference).
7. DBE workbook link to related content (worksheet and page numbers are referenced).
8. Sasol Inzalo Foundation Mathematics Book 2 link to related content (exercise and page numbers are referenced)
9. Date completed.

Where necessary, notes referring to specific days have been inserted below the week's tracker.

### Weekly reflection

The tracker provides a space that you can use to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and peers, and together 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 and skills for the day? Could they use the language expected of them? Could they write what was expected of 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 and also forms the basis for collegial conversations with your HOD and peers.

**Platinum Mathematics Week 1**

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
1	<b>Algebraic expressions:</b> Revise expanding and simplifying algebraic expressions	142–143	16.1	174–176	96–97	No. 70–73c (pp. 12–25)	No. 1–5 (pp. 13–16)					
2	Revise simplifying of algebraic expressions (use <i>DBE workbook</i> )	142–143				No. 73d–75b (pp. 26–33)						
3	Determine squares, square roots, cubes and cube roots	142–143	16.2	176–177	97							
4	Factorise algebraic expressions that involve common factors	142–143	16.3#	178–179	97–98	No. 76 (pp. 34–35)						
5	Factorise algebraic expressions that involve common factors (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	142–143				No. 77 (pp. 36–37)	No. 1–4 (pp. 16–17)					

**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**

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
6	Factorise algebraic expressions that involve a difference of two squares	142–143	16.4#	179–180	98	No. 78 (pp. 38–39)	No. 1–5 (pp. 22–23) No. 1–2 (pp. 23–24)					
7	Factorise algebraic expressions that involve trinomials	142–143	16.5 (no. 1–2)	180–181	98		No. 1–7 (pp. 17–19) No. 1–3 (pp. 19–20)					
8	Factorise algebraic expressions that involve trinomials cont.	142–143	16.5 (no. 3–4)#	181	98–99	No. 80 (pp. 42–43)	No. 1–3 (pp. 21–22)					
9	Simplify algebraic expressions that involve factorisation	142–143	16.6	182	99	No. 79 (pp. 40–41)	No. 1–3 (pp. 25–26) No. 1–4 (p. 26)					
10	Revise simplification and factorisation	142–143	Rev.	183	99		No. 1–2 (p. 27) No. 1–3 (pp. 27–28) No. 1–2 (pp. 29–30)					

**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**

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
11	<b>Algebraic equations:</b> Revise solving equations using inspection and additive and multiplicative inverses	144	17.1	186–187	101–102		No. 1–2 (pp. 31–33)					
12	Revise solving equations using additive and multiplicative inverses cont.	144	17.2	188	102	No. 81 (pp. 44–45)	No. 1–5 (pp. 34–35)					
13	Set up equations to describe and solve problem situations	144	17.3	189–191	102							
14	Solve equations of the form: A product of factors = 0; Solve equations using factorisation	144	17.4	192–193	103–104	No. 82 (pp. 46–47)	No. 1–2 (p. 36) No. 1–4 (p. 37) No. 1–6 (p. 38) No. 1–3 (p. 40)					
15	Solve equations involving the difference of two squares; Mixed exercises for more practice (use <i>Sasol Inzalo</i> book)	144	17.4 (no. 2)#	193	103	No. 83 (pp. 48–49)	No. 1–8 (p. 39) No. 1–10 (p. 41)					

**Note:** Refer to Day 14: Leave out No. 2 of Ex. 17.4.

**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**

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
16	Use substitution in equations to generate tables of ordered pairs	144	17.5#	194–195	104	No. 85 (pp. 52–53)	No. 1–3 (p. 45)					
17	Use substitution in equations to generate tables of ordered pairs (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	144				No. 87 (pp. 58–59)	No. 1–4 (pp. 45–46)					
18	Set up equations involving volume (use <i>DBE workbook</i> )	144				No. 84 (pp. 50–51)						
19	Solve equations simultaneously; Set up equations to describe problem situations and solve the equations	144	17.6 (no. 1–4)	196–197	104	No. 86a (pp. 54–55)	No. 1–4 (pp. 42–44)					
20	Set up equations to describe problem situations and solve the equations cont.	144	17.6 (no. 5–10)	197–198	104	No. 86b (pp. 56–57)						

**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**

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
21	<b>Functions and relationships:</b> Determine output values for relationships using flow diagrams	141	15.1	166–167	92–93							
22	Determine output values for given equations using tables	141	15.2#	168	93	No. 69 (pp. 10–11)	No. 1–8 (pp. 1–6)					
23	Determine rules for relationships using tables	141	15.3#	169	93	No. 65 (pp. 2–3)	No. 1–14 (pp. 6–10)					
24	Determine output or input values using the rules for patterns/relationships	141	15.4#	169–170	93	No. 66 (pp. 4–5)	No. 1–6 (pp. 11–12)					
25	Equivalent forms: Determine the output values and draw the graphs	141	15.5–15.6	171–172	93–95	No. 67–68 (pp. 6–9)						

**Note:** Refer to Day 24: Supplement Ex. 15.4 with *Challenge* LB p. 170, TG p. 93.

**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**

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class					
								Date completed					
26	<b>Formal assessment: Project</b>		Project	184–185	100								
27	<b>Formal assessment: Project</b> cont.		Project	184–185	100								
28	<b>Graphs:</b> Analyse and interpret global graphs of problem situations	145	18.1	200–201	106–107	No. 88a–b (pp. 60–63)	No. 1–6 (pp. 47–52) No. 1–9 (pp. 53–58)						
29	Interpret and determine the $x$ -intercept and the $y$ -intercept of linear graphs	145	18.2#	202–204	107	No. 89 (pp. 64–65)	No. 1–4 (pp. 71–72) No. 1–4 (p. 72)						
30	Interpret and determine the gradient of linear graphs	145	18.3#	204–208	107	No. 90a (pp. 66–67)	No. 1–5 (pp. 58–60) No. 1–3 (pp. 63–65)						

**Note:** Refer to Day 28: For this topic, graph paper may be supplied.

**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 7**

\*Select #Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
31	Determine the gradients and intercepts for the linear equations	145	18.4#	208–210	107	No. 90b (pp. 68–69)						
32	Draw linear graphs from given equations (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	145				No. 91 (pp. 70–71)	No. 1–4 (pp. 61–62)					
33	Draw linear graphs from given equations (use <i>DBE workbook</i> )	145				No. 96a–97* (pp. 80–85)						
34	Determine equations from given linear graphs (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	145				No. 98–99a (pp. 86–89)	No. 1–2 (p. 66)					
35	Determine equations from given linear graphs (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	145				No. 99b (pp. 90–91)	No. 1–3 (pp. 66–69) No. 1–3 (pp. 69–71)					

**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 8**

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
36	Draw graphs and determine equations of linear graphs	145	18.5 (no. 1–3)	211–213	108–109							
37	Draw graphs and determine equations of linear graphs cont.	145	18.5 (no. 4–5)#	213	110	No. 92 (pp. 72–73)						
38	<b>Formal assessment: Assignment</b>		Assignment	216–217	112							
39	Sketch and compare linear graphs (use <i>DBE workbook</i> ); Sketch graphs of non-linear functions (use <i>Sasol Inzalo</i> book)	145				No. 93–94 (pp. 74–77)	No. 1 (pp. 73–74)					
40	Revise graphs	145	Rev.	215	110–111	No. 95 (pp. 78–79)						

**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**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
41	<b>Surface area and volume of 3-D objects:</b> Revise conversions; Calculate the surface area of 3-D objects	146	19.1 (no. 1)	218–224	113	No. 100a–102 (pp. 92–99)	No. 1–8 (pp. 75–78)					
42	Calculate the surface area of 3-D objects cont.	146	19.1 (no. 2–6)	224	114	No. 103a–104b (pp. 100–107)	No. 1–4 (pp. 79–80)					
43	Calculate the volume of 3-D objects; Go over assignment done in previous week	146	19.2 (no. 1)	225–227	114	No. 100a–102 (pp. 92–99)	No. 1–3 (pp. 81–82)					
44	Calculate the volume of 3-D objects cont.; Calculate capacity of 3-D objects	146	19.2 (no. 2–5) 19.3	227–228	114–115	No. 103a–104b (pp. 100–107)	No. 1–3 (pp. 83–84) No. 1–3 (p. 85)					
45	Revise for test											

**Note:** 1. Refer to Day 41 & 42: For the *DBE workbook* exercises: Do surface area only.  
2. Refer to Day 43 & 43: For the *DBE workbook* exercises: Do volume (and capacity) only.

**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 10**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
46	<b>Formal assessment: Test</b>											
47	Solve problems involving surface area and volume	146	19.4	229–230	115–116							
48	Investigate doubling dimensions and the effect on volume (use <i>Sasol Inzalo</i> book)	146					No. 1–3 (pp. 86–87)					
49	Doubling the dimensions of a cylinder (use <i>Sasol Inzalo</i> book)	146					No. 1–4 (pp. 87–88)					
50	Revise term's work (use <i>Exemplar</i> test in LB)	146	Test	232–233	117							
Reflection												
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						
HOD:						Date:						

**Platinum Mathematics Week 11**  
**Catch up any work not done; review assessments and do remediation – plan your week**

**End-of-term reflection**

**Think about and make a note of:**

1. Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?

2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?

3. What ONE change should you make to your teaching practice to help you teach more effectively next term?

4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in future? What plan will you make to get back **on track**?

**HOD:**

**Date:**



## Oxford Headstart Mathematics

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

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

1. Day/lesson number.
2. CAPS content linked to Learner's Book content.
3. CAPS page numbers at the start of each CAPS topic.
4. Learner's Book exercises that cover the CAPS content for the day. Where an exercise has been recommended for more than one day, it has been divided into two parts.
5. Page reference in the Learner's Book (LB page reference).
6. Page reference in your Teacher's Guide for the day's activities (TG page reference).
7. DBE workbook link to related content (worksheet and page numbers are referenced).
8. Sasol Inzalo Foundation Mathematics Book 2 link to related content (exercise and page numbers are referenced)
9. Date completed.

Where necessary, notes referring to specific days have been inserted below the week's tracker.

### Weekly reflection

The tracker provides a space that you can use to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and peers, and together 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 and skills for the day? Could they use the language expected of them? Could they write what was expected of 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 and also forms the basis for collegial conversations with your HOD and peers.

## Oxford Headstart Mathematics Week 1

\*Select #Supplement

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
1	<b>Algebraic expressions:</b> Revise algebraic language; Revise simplifying algebraic expressions (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	142–143				No. 70–75b* (pp. 12–33)	No. 1–5 (pp. 13–16)					
2	Find the highest common factor of monomials; Revise simplifying algebraic expressions	142–143	1	365–367	268–271							
3	Factorise algebraic expressions that involve common factors	142–143	1–2	368–370	271–274	No. 76 (pp. 34–35)	No. 1–4 (pp. 16–17)					
4	Factorise algebraic expressions that involve common factors	142–143	3–4#	370–371	274–275	No. 77 (pp. 36–37)						
5	Factorise algebraic expressions that involve the difference of two squares	142–143	1–2	372–374	275–278		No. 1–5 (pp. 22–23) No. 1–2 (pp. 23–24)					

### 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

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
6	Factorise more complex algebraic expressions that involve common factors	142–143	3–4	374–376	278–279	No. 78 (pp. 38–39)						
7	Factorise algebraic expressions that involve trinomials	142–143	1	377–380	279–281	No. 80 (pp. 42–43)	No. 1–7 (pp. 17–19) No. 1–3 (pp. 19–20)					
8	Factorise algebraic expressions that involve trinomials cont.	142–143	2	380–381	281–282		No. 1–3 (pp. 21–22)					
9	Simplify algebraic expressions that involve factorisation	142–143	1#	382–383	282–283	No. 79 (pp. 40–41)	No. 1–3 (pp. 25–26) No. 1–4 (p. 26)					
10	Revise factorising and simplifying of algebraic expressions	142–143	Rev.	384	284		No. 1–2 (p. 27) No. 1–3 (pp. 27–28) No. 1–2 (pp. 29–30)					
<b>Reflection</b>												
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						
HOD:						Date:						

## Oxford Headstart Mathematics Week 3

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
11	<b>Algebraic equations:</b> Revise solving equations using the laws of exponents	144	1–3	386–388	285–288		No. 1–3 (p. 40)					
12	Revise solving equations using additive and multiplicative inverses (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	144			215	No. 81 (pp. 44–45)	No. 1–2 (pp. 31–33) No. 1–5 (pp. 34–35)					
13	Solve equations of the form: A product of factors = 0; Solve equations using factorisation	144	1–2	389–391	288–291	No. 83 (pp. 48–49)	No. 1–2 (p. 36) No. 1–4 (p. 37)					
14	Solve equations using factorisation	144	3	392	291–292	No. 82 (pp. 46–47)	No. 1–6 (p. 38) No. 1–3 (p. 40)					
15	Set up equations involving perimeter, area and volume; Solve equations by factorising the difference between two squares (use <i>Sasol Inzalo</i> book)	144	4	392–393	292–293	No. 84 (pp. 50–51)	No. 1–8 (p. 39)					
Reflection												
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						
						<p><b>HOD:</b> _____ <b>Date:</b> _____</p>						

**Oxford Headstart Mathematics Week 4**

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
16	Use substitution in equations; Use substitution to generate tables of ordered pairs	144	1–2	394–396	293–295	No. 85 (pp. 52–53)	No. 1–3 (p. 45)					
17	Use substitution in equations to generate tables of ordered pairs (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	144			219–220	No. 87 (pp. 58–59)	No. 1–4 (pp. 45–46)					
18	Set up equations to describe problem situations and solve the equations (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	144				No. 86a (pp. 54–55)	No. 1–4 (pp. 42–44)					
19	Set up equations to describe problem situations and solve the equations (use <i>DBE workbook</i> )	144				No. 86b (pp. 56–57)						
20	Revise algebraic equations	144	Rev.	397	295		No. 1–10 (p. 41)					

**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**

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class					
								Date completed					
21	<b>Functions and relationships:</b> Determine output values for relationships using verbal descriptions, flow diagrams and formulae	141	1–3	355–357	256–258								
22	Determine output values for relationships using equations	141	4#	357	259	No. 69 (pp. 10–11)	No. 1–8 (pp. 1–6)						
23	Determine rules for number patterns (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	141			195–197	No. 65 (pp. 2–3)	No. 1–14 (pp. 6–10)						
24	Equivalent forms: Determine rules for patterns and relationships and draw the graphs	141	1–2	358–359	259–262	No. 66 (pp. 4–5)	No. 1–6 (pp. 11–12)						
25	Equivalent forms: Determine the equations of the rules and write flow diagrams, equations and/or draw graphs	141	3	360–362	262–265	No. 67–68 (pp. 6–9)							

**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**

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
26	<b>Graphs:</b> Analyse and interpret global graphs of problem situations	145	1–2	399–401	296–298	No. 88a (pp. 60–61)	No. 1–6 (pp. 47–52) No. 1–9 (pp. 53–58)					
27	Plot points and draw graphs on the Cartesian plane using tables of ordered pairs	145	1	402–403	300–301	No. 88b (pp. 62–63)	No. 1–4 (pp. 61–62)					
28	Draw linear graphs using tables	145	2	403–405	302–304	No. 91 (pp. 70–71)	No. 1–4 (pp. 71–72)					
29	Interpret and determine the gradient and $y$ -intercept of linear graphs	145	3–4	405–407	304–307	No. 90a (pp. 66–67)	No. 1–5 (pp. 58–60) No. 1–3 (pp. 63–65)					
30	Investigate the meaning of gradient	145	5	407–409	307–308	No. 90b (pp. 68–69)						
<b>Reflection</b>												
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						
						<p><b>HOD:</b> _____ <b>Date:</b> _____</p>						

**Oxford Headstart Mathematics Week 7**

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
31	Draw linear graphs using intercepts and/or gradient	145	6	409–410	308–310	No. 89 (pp. 64–65)						
32	Linear equations of special lines, parallel lines and perpendicular lines	145	7–8	411–412	310–311		No. 1–4 (p. 72)					
33	Sketch and compare linear graphs (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	145				No. 92–93 (pp. 72–75)						
34	Sketch and compare linear graphs (use <i>DBE workbook</i> )	145			236	No. 94–95 (pp. 76–79)						
35	Sketch and compare linear graphs (use <i>DBE workbook</i> )	145			237	No. 96a–97 (pp. 80–85)						

**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 8**

\*Select #Supplement

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
36	Determine equations from given linear graphs	145	9#	412–415	311–312	No. 98–99b (pp. 86–91)	No. 1–2 (p. 66) No. 1–3 (pp. 66–69)					
37	Determine equations from given linear graphs cont. (use <i>Sasol Inzalo</i> book); Sketch graphs of non-linear functions (use <i>Sasol Inzalo</i> book); Graphs showing direct and indirect proportion	145	1–2*	416–420	312–315		No. 1–3 (pp. 69–71) No. 1 (pp. 73–74)					
38	<b>Formal assessment: Assignment</b> (use Revision exercise)		Rev.	421–422	316–317							
39	<b>Surface area and volume of 3-D objects:</b> Revise area of 2-D shapes; Define 3-D objects	146	1–2	424–426	318–321	No. 100a–101 (pp. 92–97)	No. 1–8 (pp. 75–78)					
40	Calculate the surface area of 3-D objects	146	3	426–431	321–322	No. 102–103b (pp. 98–103)	No. 1–4 (pp. 79–80)					

**Note:** Refer to Day 39 & 40: For the *DBE workbook* exercises: Do surface area only.

**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?

Calculate the surface area of 3-D objects

**HOD:**

**Date:**

**Oxford Headstart Mathematics Week 9**

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
41	Revise conversions; Calculate the volume and capacity of 3-D objects	146	1 2 (no. 1–2)	432–436	323–325	No. 100a–102 (pp. 92–99)	No. 1–3 (pp. 81–82) No. 1–3 (p. 85)					
42	Revise for test; Go over assignment done in previous week	146										
43	<b>Formal assessment: Test</b>											
44	Calculate the volume and capacity of 3-D objects	146	2 (no. 3–5)	436	325	No. 103a–104b (pp. 100–107)	No. 1–3 (pp. 83–84)					
45	Investigate how doubling dimensions affects the volume	146	1	437	325–326		No. 1–3 (pp. 86–87)					

**Note:** Refer to Day 41 & 44: For the *DBE workbook* exercises: Volume and capacity only.

**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 10**

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class					
								Date completed					
46	<b>Formal assessment: Project</b>		Project	440–441	327								
47	<b>Formal assessment: Project</b> cont.		Project	440–441	327								
48	Investigate how doubling dimensions affects the volume cont.	146	2	438–440	326		No. 1–4 (pp. 87–88)						
49	Revise surface area and volume of 3-D objects	146	Rev.	442	327								
50	Revision; Go over test done in previous week	146											

**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 11**  
**Catch up any work not done; review assessments and do remediation – plan your week**

**End-of-term reflection**

**Think about and make a note of:**

1. Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?

2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?

3. What ONE change should you make to your teaching practice to help you teach more effectively next term?

4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in future? What plan will you make to get back **on track**?

**HOD:**

**Date:**

## Oxford Successful Mathematics

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

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

1. Day/lesson number.
2. CAPS content linked to Learner's Book content.
3. CAPS page numbers at the start of each CAPS topic.
4. Learner's Book exercises that cover the CAPS content for the day. Where an exercise has been recommended for more than one day, it has been divided into two parts.
5. Page reference in the Learner's Book (LB page reference).
6. Page reference in your Teacher's Guide for the day's activities (TG page reference).
7. DBE workbook link to related content (worksheet and page numbers are referenced).
8. Sasol Inzalo Foundation Mathematics Book 2 link to related content (exercise and page numbers are referenced)
9. Date completed.

Where necessary, notes referring to specific days have been inserted below the week's tracker.

### Weekly reflection

The tracker provides a space that you can use to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and peers, and together 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 and skills for the day? Could they use the language expected of them? Could they write what was expected of 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 and also forms the basis for collegial conversations with your HOD and peers.

**Oxford Successful Mathematics Week 1**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
1	<b>Algebraic expressions:</b> Revise expanding and simplifying algebraic expressions	142–143	1	266	201–202	No. 70–72b (pp. 12–19)	No. 1–5 (pp. 13–16)					
2	Revise simplifying of algebraic expressions	142–143	2	266–267	203–204	No. 73a–75b (pp. 20–33)						
3	Factorise algebraic expressions that involve common factors	142–143	1	269–271	204–206	No. 76 (pp. 34–35)	No. 1–4 (pp. 16–17)					
4	Factorise algebraic expressions that involve the difference of two squares	142–143	2	271–273	206–207		No. 1–5 (pp. 22–23) No. 1–2 (pp. 23–24)					
5	Factorise algebraic expressions that involve the difference of two squares cont.	142–143	3	273–275	207–208	No. 78 (pp. 38–39)						

**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**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
6	Factorise more complex algebraic expressions that involve common factors	142–143	4	275–277	209–210	No. 77 (pp. 36–37)						
7	Factorise algebraic expressions that involve trinomials	142–143	5	277–280	210–211	No. 80 (pp. 42–43)	No. 1–7 (pp. 17–19) No. 1–3 (pp. 19–20)					
8	Factorise algebraic expressions that involve trinomials cont.	142–143	6	280–281	211–212		No. 1–3 (pp. 21–22)					
9	Simplify algebraic expressions that involve factorisation	142–143	7	281–282	212–213	No. 79 (pp. 40–41)	No. 1–3 (pp. 25–26) No. 1–4 (p. 26)					
10	Revise factorising and simplifying of algebraic expressions	142–143	Cons. (no. 1–3)	293	220–221		No. 1–2 (p. 27) No. 1–3 (pp. 27–28) No. 1–2 (pp. 29–30)					
Reflection												
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						
HOD:						Date:						

## Oxford Successful Mathematics Week 3

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
11	<b>Algebraic equations:</b> Revise solving equations using inspection, additive and multiplicative inverses	144	1 (no. 1–3)	283–286	214–215	No. 81 (pp. 44–45)	No. 1–2 (pp. 31–33) No. 1–5 (pp. 34–35)					
12	Revise solving equations using the laws of exponents	144	1 (no. 4)	285–286	215		No. 1–3 (p. 40)					
13	Solve equations using factorisation	144	1 (no. 1–2, 4)	287–289	215–217	No. 82 (pp. 46–47)	No. 1–2 (p. 36) No. 1–4 (p. 37) No. 1–6 (p. 38)					
14	Solve equations involving the difference of two squares; Mixed exercises for more practice (use <i>Sasol Inzalo</i> book)	144	1 (no. 6)#	289	218	No. 83 (pp. 48–49)	No. 1–8 (p. 39) No. 1–10 (p. 41)					
15	Set up equations involving volume	144	1 (no. 5)#	289	217	No. 84 (pp. 50–51)						
Reflection												
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						
						<p><b>HOD:</b> _____ <b>Date:</b> _____</p>						



**Oxford Successful Mathematics Week 4**

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
16	Determine the numerical value of an expression by substitution (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	144				No. 85 (pp. 52–53)	No. 1–3 (p. 45)					
17	Use substitution in equations to generate tables of ordered pairs	144	1#	290–291	219–220	No. 87 (pp. 58–59)	No. 1–4 (pp. 45–46)					
18	Set up equations to describe problem situations and solve the equations (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	144				No. 86a (pp. 54–55)	No. 1–4 (pp. 42–44)					
19	Set up equations to describe problem situations and solve the equations (use <i>DBE workbook</i> )	144				No. 86b (pp. 56–57)						
20	Revise algebraic equations	144	Cons. (No. 4–9)	293–294	221–222							

**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**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
21	<b>Functions and relationships:</b> Determine input and output values using flow diagrams, tables and equations	141	1	253–255	192–194		No. 1–8 (pp. 1–6)					
22	Determine input and output values and domains using flow diagrams, tables and equations	141	2	255–256	195	No. 69 (pp. 10–11)	No. 1–14 (pp. 6–10)					
23	Equivalent forms: Determine rules for patterns and relationships and draw the flow diagrams, tables and graphs	141	1	257–260	195–197	No. 65 (pp. 2–3)	No. 1–6 (pp. 11–12)					
24	Equivalent forms: Identify and justify equivalence	141	2 (no. 1–3)	260–262	198	No. 66 (pp. 4–5)						
25	Equivalent forms: Determine the rule and the equation	141	2 (no. 4–7)	262	198–199	No. 67–68 (pp. 6–9)						

**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**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
26	<b>Graphs:</b> Analyse and interpret global graphs of problem situations	145	1	296–301	223–225	No. 88a (pp. 60–61)	No. 1–6 (pp. 47–52)					
27	Analyse, interpret and draw global graphs of problem situations	145	1	302–305	225–227	No. 88b (pp. 62–63)	No. 1–9 (pp. 53–58)					
28	Plot points on the Cartesian plane using tables of ordered pairs	145	1	306–307	227–229		No. 1–4 (pp. 61–62)					
29	Draw linear graphs	145	2	308–309	229–230	No. 89 (pp. 64–65)						
30	Interpret and determine the gradient of linear graphs	145	3	309–310	230	No. 90a–90b (pp. 66–69)	No. 1–5 (pp. 58–60) No. 1–3 (pp. 63–65)					

**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 7**

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
31	Draw linear graphs from given equations	145	4	310–312	230–234	No. 91 (pp. 70–71)						
32	Determine intercepts of linear equations and draw graphs	145	5	312–313	234–235	No. 89 (pp. 64–65) No. 96a (pp. 80–81)	No. 1–4 (pp. 71–72) No. 1–4 (p. 72)					
33	Draw linear graphs from given equations cont. (use <i>DBE workbook</i> )	145				No. 96b–97 (pp. 82–85)						
34	Determine equations from given linear graphs	145	1#	314–316	236	No. 98 (pp. 86–87)	No. 1–2 (p. 66)					
35	Determine equations from given linear graphs cont.	145	2#	317–318	237	No. 99a–99b (pp. 88–91)	No. 1–3 (pp. 66–69) No. 1–3 (pp. 69–71)					

**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 8**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
36	Sketch and compare linear graphs (use <i>DBE workbook</i> )	145				No. 92–93 (pp. 72–75)						
37	Sketch and compare linear graphs (use <i>DBE workbook</i> ); Revise graphs; Sketch graphs of non-linear functions (use <i>Sasol Inzalo book</i> )	145	Cons.	321	237–238	No. 94–95 (pp. 76–79)	No. 1 (pp. 73–74)					
38	<b>Formal assessment: Assignment</b>		Assignment	439–440	336–338							
39	<b>Surface area and volume of 3-D objects:</b> Revise conversions	146	1	322–324	239–241	No. 100a–100b (pp. 92–95)						
40	Calculate the surface area and the volume of cubes, rectangular and triangular prisms	146	2	324–327	241–243	No. 101–102 (pp. 96–99)	No. 1–8 (pp. 75–78)					
Reflection												
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						
HOD:						Date:						

**Oxford Successful Mathematics Week 9**

Oxford Successful Mathematics Week 9												
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
41	Calculate the surface area, volume and capacity of combinations of prisms	146	3	327–328	243–244	No. 103a–103b (pp. 100–103)	No. 1–3 (pp. 81–82) No. 1–3 (p. 85)					
42	Go over assignment done in previous week (30 mins); Calculate the surface area of cylinders (30 mins)	146	1	329–331	245–246	No. 104a (pp. 104–105)	No. 1–4 (pp. 79–80)					
43	Calculate the volume and capacity of cylinders	146	2 (no. 1–3)	331–332	246–247	No. 104b (pp. 106–107)	No. 1–3 (pp. 83–84)					
44	Revise for test											
45	<b>Formal assessment: Test</b>											
Reflection												
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						
						<p><b>HOD:</b> _____ <b>Date:</b> _____</p>						

**Oxford Successful Mathematics Week 10**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class					
								Date completed					
46	Calculate the volume and capacity of cylinders; Calculate the surface area and volume of combinations	146	2 (no. 4–6) 3	333–335	247–248								
47	<b>Formal assessment: Project</b>		Project	444–445	340								
48	<b>Formal assessment: Project</b> cont.		Project	444–445	340								
49	Investigate how doubling dimensions affects the volume; Go over test done in previous week	146	1	336–338	249–250		No. 1–3 (pp. 86–87)						
50	Investigate how doubling dimensions affects the volume cont.	146	2	338–340	250–252		No. 1–4 (pp. 87–88)						

**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 11**  
**Catch up any work not done; review assessments and do remediation – plan your week**

**End-of-term reflection**

**Think about and make a note of:**

1. Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?

2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?

3. What ONE change should you make to your teaching practice to help you teach more effectively next term?

4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in future? What plan will you make to get back **on track**?

**HOD:**

**Date:**



## Clever: Keeping Maths Simple

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

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

1. Day/lesson number.
2. CAPS content linked to Learner's Book content.
3. CAPS page numbers at the start of each CAPS topic.
4. Learner's Book exercises that cover the CAPS content for the day. Where an exercise has been recommended for more than one day, it has been divided into two parts.
5. Page reference in the Learner's Book (LB page reference).
6. Page reference in your Teacher's Guide for the day's activities (TG page reference).
7. DBE workbook link to related content (worksheet and page numbers are referenced).
8. *Sasol Inzalo Foundation Mathematics Book 2* link to related content (exercise and page numbers are referenced)
9. Date completed.

Where necessary, notes referring to specific days have been inserted below the week's tracker.

### Weekly reflection

The tracker provides a space that you can use to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and peers, and together 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 and skills for the day? Could they use the language expected of them? Could they write what was expected of 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 and also forms the basis for collegial conversations with your HOD and peers.

## Clever: Keeping Maths Simple Week 1

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class					
								Date completed					
1	<b>Algebraic expressions:</b> Revise algebraic language; Revise expanding and simplifying algebraic expressions	142–143	What you... 1 (no. 1–3)#	200–203	201–210	No. 70–72b (pp. 12–19)	No. 1–5 (pp. 13–16)						
2	Revise simplifying algebraic expressions cont.	142–143	1 (no. 4–5)#	203	210	No. 73a–75b (pp. 20–33)							
3	Factorise algebraic expressions that involve common factors	142–143	2 (no. 1–3)	203–206	210–211	No. 76 (pp. 34–35)	No. 1–4 (pp. 16–17)						
4	Factorise algebraic expressions that involve common factors (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	142–143				No. 77 (pp. 36–37)							
5	Simplify algebraic expressions that involve factorisation; Solve problems involving factorisation	142–143	2 (no. 4–6)	206–207	211								
Reflection													
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						<p>HOD:</p>	<p>Date:</p>

**Clever: Keeping Maths Simple Week 2**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
6	Factorise algebraic expressions that involve the difference of two squares	142–143	3 (no. 1–2)	207–210	212	No. 78 (pp. 38–39)	No. 1–5 (pp. 22–23) No. 1–2 (pp. 23–24)					
7	Factorise algebraic expressions that involve the difference of two squares cont.	142–143	3 (no. 3–7)	210	212–213							
8	Factorise algebraic expressions that involve trinomials	142–143	4	211–213	213	No. 80 (pp. 42–43)	No. 1–7 (pp. 17–19) No. 1–3 (pp. 19–20)					
9	Factorise algebraic expressions that involve trinomials; Simplify algebraic expressions that involve factorisation	142–143	5	213–215	213–214	No. 79 (pp. 40–41)	No. 1–3 (pp. 21–22) No. 1–3 (pp. 25–26) No. 1–4 (p. 26)					
10	Revise simplifying and factorising algebraic expressions	142–143	6	215–216	214		No. 1–2 (p. 27) No. 1–3 (pp. 27–28) No. 1–2 (pp. 29–30)					
Reflection												
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						
<p><b>HOD:</b></p>						<p><b>Date:</b></p>						

**Clever: Keeping Maths Simple Week 3**

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class					
								Date completed					
11	<b>Formal assessment: Assignment</b>		Assignment	271	268–269								
12	<b>Algebraic equations:</b> Revise solving equations using inspection and additive and multiplicative inverses; Solve equations of the form: $A \text{ product of factors} = 0$	144	What you... 1	217–220	215–223	No. 81 (pp. 44–45)	No. 1–2 (pp. 31–33) No. 1–5 (pp. 34–35)						
13	Solve equations using factorisation; Set up and solve equations to describe problem situations	144	2	220–222	224	No. 82 (pp. 46–47)	No. 1–2 (p. 36) No. 1–4 (p. 37)						
14	Solve equations involving the difference of two squares; Mixed exercises for more practice (use <i>Sasol Inzalo</i> book)	144	3 (no. 1–3)#	222–223	225	No. 83 (pp. 48–49)	No. 1–8 (p. 39) No. 1–10 (p. 41)						
15	Set up and solve equations involving perimeter, area and other problem situations	144	3 (no. 4–7)	223–224	225–226	No. 86a (pp. 54–55)							
<b>Reflection</b>													
<p><b>Think about and make a note of:</b> 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?</p>				<p>What will you change next time? Why?</p>									
				HOD:				Date:					

## Clever: Keeping Maths Simple Week 4

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class					
								Date completed					
16	Solve equations using factorisation	144	4 (no. 1–3)	224–227	226–227		No. 1–6 (p. 38) No. 1–3 (p. 40)						
17	Set up and solve equations involving perimeter, area, volume and other problem situations	144	4 (no. 4–6)#	227–228	226–227	No. 84 (pp. 50–51)							
18	Go over assignment done in previous week (30 mins); Solve equations with fractions, using factorisation (30 mins)	144	5 (no. 1)	227–228	228–229								
19	Set up equations to describe problem situations and solve the equations	144	5 (no. 2–5)#	228–229	229–230	No. 86b (pp. 56–57)	No. 1–4 (pp. 42–44)						
20	Use substitution in equations to generate tables of ordered pairs	144	6	229–231	230–231	No. 85 (pp. 52–53)	No. 1–3 (p. 45)						
Reflection													
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						<p>HOD:</p>	<p>Date:</p>

**Clever: Keeping Maths Simple Week 5**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
21	Use substitution in equations to generate tables of ordered pairs	144	7	232–233	231–232	No. 87 (pp. 58–59)	No. 1–4 (pp. 45–46)					
22	<b>Functions and relationships:</b> Determine rules and output values for number patterns (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	141				No. 65 (pp. 2–3)	No. 1–8 (pp. 1–6)					
23	Determine rules and output values for number patterns (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	141				No. 66 (pp. 4–5)	No. 1–14 (pp. 6–10)					
24	Equivalent forms: Determine rules and equations for patterns and relationships and draw the tables and flow diagrams	141	<i>What you... 1 (no. 1–2)</i>	193–197	193–198	No. 69 (pp. 10–11)	No. 1–6 (pp. 11–12)					
25	Equivalent forms: Determine rules and equations for patterns and relationships and draw the tables and flow diagrams	141	1 (no. 3–5)	197–198	198–199	No. 67 (pp. 6–7)						
Reflection												
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						
						<p>HOD: _____ Date: _____</p>						

**Clever: Keeping Maths Simple Week 6**

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
26	Equivalent forms: Determine rules and equations for patterns and relationships and complete the tables	141	1 (no. 6–7)	198–199	199–200	No. 68 (pp. 8–9)						
27	<b>Formal assessment: Project</b>		Project	272–275	270–273							
28	<b>Formal assessment: Project</b> cont.		Project	272–275	270–273							
29	<b>Graphs:</b> Analyse and interpret global graphs of problem situations	145	What you... #	234–235	233–241	No. 88a (pp. 60–61)	No. 1–6 (pp. 47–52) No. 1–9 (pp. 53–58)					
30	Plot points and draw graphs on the Cartesian plane using tables of ordered pairs	145	1#	235–238	241	No. 88b (pp. 62–63)	No. 1–4 (pp. 61–62)					
Reflection												
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						
<p>HOD:</p>						<p>Date:</p>						

**Clever: Keeping Maths Simple Week 7**

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
31	Interpret and determine the $x$ -intercept and the $y$ -intercept of linear graphs	145	2	239–242	241–243	No. 89 (pp. 64–65)	No. 1–4 (pp. 71–72)					
32	Interpret and determine the gradient of linear graphs (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	145				No. 90a–90b (pp. 66–69)	No. 1–5 (pp. 58–60) No. 1–3 (pp. 63–65)					
33	Interpret and determine the gradient and intercepts of linear graphs	145	3	243–246	243–244							
34	Compare special kinds of graphs	145	4#	246–248	244	No. 92–93 (pp. 72–75)	No. 1–4 (p. 72)					
35	Draw graphs of problem situations; Draw linear and non-linear graphs	145	5–6	248–251	244–250		No. 1 (pp. 73–74)					

**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:**



**Clever: Keeping Maths Simple Week 8**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
36	Draw linear graphs from given equations	145	7	251–253	251–253	No. 91 (pp. 7071)						
37	Sketch linear graphs from given equations cont.	145	8	254	253–255	No. 96a (pp. 80–81)						
38	Sketch and compare linear graphs cont. (use <i>DBE workbook</i> )	145				No. 94–95 (pp. 76–79)						
39	Draw linear graphs from given equations (use <i>DBE workbook</i> )	145				No. 96b–97 (pp. 82–85)						
40	Determine equations from given linear graphs	145	9	255–256	255	No. 98 (pp. 86–87)	No. 1–2 (p. 66)					

**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:**

**Clever: Keeping Maths Simple Week 9**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
41	Determine equations from given linear graphs cont. (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	145				No. 99a–99b (pp. 88–91)	No. 1–3 (pp. 66–69) No. 1–3 (pp. 69–71)					
42	<b>Surface area and volume of 3-D objects:</b> Calculate the surface area and volume of cubes, rectangular and triangular prisms	146	What you... 1	257–260	256–264	No. 100a–100b (pp. 92–95)	No. 1–8 (pp. 75–78)					
43	Calculate the surface area and volume of cylinders	146	2	260–264	264–266	No. 104a–104b (pp. 104–107)	No. 1–4 (pp. 79–80) No. 1–3 (pp. 83–84)					
44	Calculate units conversions; Calculate the volume and capacity of 3-D objects; Investigate doubling the dimensions	146	3 (no. 1–3)	264–267	266	No. 101–102 (pp. 96–99)	No. 1–3 (pp. 81–82) No. 1–3 (p. 85)					
45	Revise for test											
<b>Reflection</b>												
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						
HOD:						Date:						

**Clever: Keeping Maths Simple Week 10**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class					
								Date completed					
46	<b>Formal assessment: Test</b>												
47	Calculate the volume and capacity of 3-D objects; Investigate doubling the dimensions	146	3 (no. 4–8)	267–268	266–267	No. 103a–103b (pp. 100–103)							
48	Doubling dimensions and the effect on volume cont. (use <i>Sasol Inzalo</i> book)	146					No. 1–3 (pp. 86–87) No. 1–4 (pp. 87–88)						
49	Calculate unknown values if given the surface area, volume or capacity of 3-D objects	146	4	268–270	267								
50	Revision												
Reflection													
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>							
						<p>HOD: _____ Date: _____</p>							

**Clever: Keeping Maths Simple Week 11**  
**Catch up any work not done; review assessments and do remediation – plan your week**

**End-of-term reflection**

**Think about and make a note of:**

1. Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?

2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?

3. What ONE change should you make to your teaching practice to help you teach more effectively next term?

4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in future? What plan will you make to get back **on track**?

**HOD:**

**Date:**

## Solutions for All Mathematics

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

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

1. Day/lesson number.
2. CAPS content linked to Learner's Book content.
3. CAPS page numbers at the start of each CAPS topic.
4. Learner's Book exercises that cover the CAPS content for the day. Where an exercise has been recommended for more than one day, it has been divided into two parts.
5. Page reference in the Learner's Book (LB page reference).
6. Page reference in your Teacher's Guide for the day's activities (TG page reference).
7. DBE workbook link to related content (worksheet and page numbers are referenced).
8. *Sasol Inzalo Foundation Mathematics Book 2* link to related content (exercise and page numbers are referenced)
9. Date completed.

Where necessary, notes referring to specific days have been inserted below the week's tracker.

### Weekly reflection

The tracker provides a space that you can use to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and peers, and 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 and skills for the day? Could they use the language expected of them? Could they write what was expected of 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 and also forms the basis for collegial conversations with your HOD and peers.

## Solutions for All Mathematics Week 1

#Supplement

Solutions for All Mathematics Week 1										
#Supplement										
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class		
								Date completed		
1	<b>Algebraic expressions:</b> Revise expanding and simplifying algebraic expressions	142–143	<i>Getting started</i> #	277–278	238–240	No. 70–72b (pp. 12–19)	No. 1–5 (pp. 13–16)			
2	Revise simplifying of algebraic expressions	142–143	Act. 20.1 Ex. 20.1	278–279	240	No. 73a–75b (pp. 20–33)				
3	Factorise algebraic expressions that involve common factors	142–143	Act. 20.2–20.3 Ex. 20.2	279–282	240–242	No. 76 (pp. 34–35)				
4	Factorise algebraic expressions that involve common factors (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	142–143				No. 77 (pp. 36–37)	No. 1–4 (pp. 16–17)			
5	Factorise algebraic expressions that involve trinomials	142–143	Act. 20.4 Ex. 20.3	282–284	242–243		No. 1–7 (pp. 17–19) No. 1–3 (pp. 19–20)			
Reflection										
<p><b>Think about and make a note of:</b> 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?</p>					<p>What will you change next time? Why?</p>					
					HOD:			Date:		

**Solutions for All Mathematics Week 2**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
6	Factorise algebraic expressions that involve trinomials (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	142–143				No. 80 (pp. 42–43)	No. 1–3 (pp. 21–22)					
7	Factorise algebraic expressions that involve the difference of two squares or cubes ( <i>enrichment</i> )	142–143	Act. 20.5 Ex. 20.4	285–287	243–245	No. 78 (pp. 38–39)	No. 1–5 (pp. 22–23) No. 1–2 (pp. 23–24)					
8	Simplify algebraic expressions that involve factorisation	142–143	Act. 20.6 Ex. 20.5	287–289	245–247	No. 79 (pp. 40–41)	No. 1–3 (pp. 25–26) No. 1–4 (p. 26)					
9	Revise simplifying and factorising algebraic expressions	142–143	<i>Check what...</i> (no. 1–8)	289–291	247–249		No. 1–2 (p. 27) No. 1–3 (pp. 27–28)					
10	Revise simplifying and factorising algebraic expressions cont.	142–143	<i>Check what...</i> (no. 9–16)	291	249–250		No. 1–2 (pp. 29–30)					
Reflection												
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						
<p><b>HOD:</b></p>						<p><b>Date:</b></p>						

### Solutions for All Mathematics Week 3

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
11	Algebraic equations: Revise solving equations using additive and multiplicative inverses	144			441	No. 81 (pp. 44–45)						
12	Solve equations of the form: A product of factors = 0	144	Getting started#	293	251–252		No. 1–2 (pp. 31–33) No. 1–5 (pp. 34–35)					
13	Solve equations using factorisation	144	Act. 21.1 Ex. 21.1	294–295	253		No. 1–2 (p. 36) No. 1–4 (p. 37)					
14	Solve equations involving the difference of two squares (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book);		Act. 21.2 Ex. 21.2	295–296	253	No. 82 (pp. 46–47)	No. 1–6 (p. 38) No. 1–3 (p. 40)					
15	Mixed exercises for more practice (use <i>Sasol Inzalo</i> book)	14(4)				No. 83 (pp. 48–49)	No. 1–8 (p. 39) No. 1–10 (p. 41)					

**Note:** Refer to Day 11: The assignment memorandum TG (p. 442).

#### 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

\*Select

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class					
								Date completed					
16	Use substitution in equations to generate tables of ordered pairs	144	Act. 21.3 Ex. 21.3	296–298	253–254	No. 85 (pp. 52–53)	No. 1–3 (p. 45)						
17	Use substitution in equations to generate tables of ordered pairs cont. (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	144				No. 87 (pp. 58–59)	No. 1–4 (pp. 45–46)						
18	Go over assignment done in previous week (30 mins); Set up equations involving volume (use <i>DBE workbook</i> ) (30 mins)	144				No. 84 (pp. 50–51)							
19	Set up equations to describe problem situations and solve the equations	144	Act. 21.4 Ex. 21.4	298–300	254–255	No. 86a (pp. 54–55)	No. 1–4 (pp. 42–44)						
20	Set up equations to describe problem situations and solve the equations cont.	144	Ex. 21.5	300–302	256–258	No. 86b (pp. 56–57)							
Reflection													
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						<p><b>HOD:</b></p>	<p><b>Date:</b></p>

**Solutions for All Mathematics Week 5**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class						
								Date completed						
21	Revise algebraic equations	144	Check what...	303–304	259–260									
22	<b>Functions and relationships:</b> Determine output values for given relationships using tables and graphs	141	Getting started Act. 19.1	267–268	221	No. 69 (pp. 10–11)	No. 1–8 (pp. 1–6)							
23	Determine input and output values for given equations using flow diagrams and tables; Determine rules and equations for patterns	141	Act. 19.2 Ex. 19.1	269–271	221–227	No. 65 (pp. 2–3)	No. 1–14 (pp. 6–10)							
24	Equivalent forms: Determine rules for patterns and relationships given tables and draw graphs	141	Act. 19.3 Act. 19.4	272–273	227–230	No. 66 (pp. 4–5)	No. 1–6 (pp. 11–12)							
25	Equivalent forms: Determine rules for patterns and relationships using flow diagrams and tables and drawing graphs	141	Ex. 19.2 Check what... (no. 1–3)	273–275	230–233	No. 67 (pp. 6–7)								

**Note:** Refer to Day 22: Graph paper may be supplied for this topic.

**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**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class						
								Date completed						
26	Equivalent forms: Determine the output values or formulae and draw the table of values and/or graphs	141	Check what... (no. 4–6)	275–276	233–237	No. 68 (pp. 8–9)								
27	<b>Formal assessment: Project</b>				443–444									
28	<b>Formal assessment: Project</b> cont.				443–444									
29	<b>Graphs:</b> Analyse and interpret global graphs of problem situations	145	Getting started	305–307	261–265	No. 88a (pp. 60–61)	No. 1–6 (pp. 47–52) No. 1–9 (pp. 53–58)							
30	Identify linear and non-linear graphs	145	Act. 22.1	307–308	265–266	No. 88b (pp. 62–63)								

**Note:** Refer to Day 26 & 27: For the project: Discussion and marking rubric TG (pp. 445–446).

**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 7

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
31	Write linear graphs in standard form	145	Act. 22.2 Ex. 22.1	308–309	266–267		No. 1–4 (pp. 61–62)					
32	Interpret and determine the gradient and $y$ -intercept of linear graphs; Draw linear graphs from given equations	145	Act. 22.3–22.4	309–313	267–271	No. 90a–90b (pp. 66–69) No. 94 (pp. 76–77)						
33	Draw linear graphs from given equations	145	Ex. 22.2#	313–314	271–273	No. 91 (pp. 70–71)						
34	Draw linear graphs from given equations cont.	145	Check what... (no. 1)	316	273–274	No. 96a (pp. 80–81)						
35	Draw linear graphs from given equations (use <i>DBE workbook</i> )	145				No. 96b–97 (pp. 82–85)						

### 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 8**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
36	Determine equations of linear graphs	145	Check what... (no. 2–4)	316–317	274	No. 98 (pp. 86–87)	No. 1–2 (p. 66)					
37	Determine $x$ -intercepts and $y$ -intercepts	145	Getting started	319–320	276–281	No. 89 (pp. 64–65) No. 92 (pp. 72–73)	No. 1–4 (pp. 71–72) No. 1–4 (p. 72)					
38	Determine the gradient using two points	145	Act. 23.1–23.2	321–323	282–285	No. 95 (pp. 78–79)	No. 1–5 (pp. 58–60) No. 1–3 (pp. 63–65)					
39	Draw linear graphs from given equations using gradients and intercepts; Determine gradients	145	Ex. 23.1	323–324	285–291	No. 93 (pp. 74–75)						
40	Determine equations from given linear graphs cont.	145	Act. 23.3	324–325	291–293		No. 1–3 (pp. 66–69)					
Reflection												
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						
						<p><b>HOD:</b> _____ <b>Date:</b> _____</p>						

## Solutions for All Mathematics Week 9

\*Select #Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
41	Determine equations from given linear graphs; Sketch graphs of non-linear functions (use <i>Sasol Inzalo</i> book)	145	Ex. 23.2#	326–328	293–294	No. 99a–99b (pp. 88–91)	No. 1–3 (pp. 69–71) No. 1 (pp. 73–74)					
42	<b>Surface area and volume of 3-D objects:</b> Revise conversions; Calculate the surface area and volume of cubes and rectangular prisms	146	<i>Getting started</i>	331–332	299–303	No. 100a–101 (pp. 92–97)						
43	Calculate the surface area of cubes, rectangular and triangular prisms	146	Act. 24.1–24.2 Ex. 24.1–24.2*	332–338	303–306	No. 102–103b (pp. 98–103)	No. 1–8 (pp. 75–78)					
44	Calculate the surface area of cylinders	146	Ex 24.3	338–341	306–307	No. 104a–104b (pp. 104–107)	No. 1–4 (pp. 79–80)					
45	Investigate doubling the dimensions; Calculate the volume and capacity of cubes, rectangular and triangular prisms	146	Act. 24.3–24.5 Ex. 24.4–24.5*	341–345	307–310	No. 102–103b (pp. 98–103)	No. 1–3 (pp. 81–82) No. 1–3 (p. 85)					
<b>Note:</b> 1. Refer to Day 43 & 44: For the <i>DBE workbook</i> exercises: Surface area only. 2. Refer to Day 45: For the <i>DBE workbook</i> exercises: Volume and capacity only.												
Reflection												
<b>Think about and make a note of:</b> 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:

## Solutions for All Mathematics Week 10

\*Select

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class					
								Date completed					
46	Revise for test												
47	<b>Formal assessment: Test</b>												
48	Revise the surface area and volume of cylinders; Investigate doubling the dimensions of cylinders and other 3-D objects	146	Act. 24.6 Ex. 24.6*	346–348	310–312	No. 104a–104b (pp. 104–107)	No. 1–3 (pp. 83–84) No. 1–3 (pp. 86–87)						
49	Investigate doubling the dimensions of cylinders and other 3-D objects cont.	146	24.7	349–351	312–313		No. 1–4 (pp. 87–88)						
50	Revise surface area and volume of 3-D objects	146	Check what...	356–358	314–316								
Reflection													
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>							
						<p>HOD: <span style="float: right;">Date:</span></p>							

**Solutions for All Mathematics Week 11**  
**Catch up any work not done; review assignment and project and do remediation – plan your week**

**End-of-term reflection**

**Think about and make a note of:**

1. Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?

2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?

3. What ONE change should you make to your teaching practice to help you teach more effectively next term?

4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in future? What plan will you make to get back **on track**?

**HOD:**

**Date:**



## Mathematics Today

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

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

1. Day/lesson number.
2. CAPS content linked to Learner's Book content.
3. CAPS page numbers at the start of each CAPS topic.
4. Learner's Book exercises that cover the CAPS content for the day. Where an exercise has been recommended for more than one day, it has been divided into two parts.
5. Page reference in the Learner's Book (LB page reference).
6. Page reference in your Teacher's Guide for the day's activities (TG page reference).
7. DBE workbook link to related content (worksheet and page numbers are referenced).
8. *Sasol Inzalo Foundation Mathematics Book 2* link to related content (exercise and page numbers are referenced)
9. Date completed.

Where necessary, notes referring to specific days have been inserted below the week's tracker.

### Weekly reflection

The tracker provides a space that you can use to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and peers, and together 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 and skills for the day? Could they use the language expected of them? Could they write what was expected of 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, and also forms the basis for collegial conversations with your HOD and peers.

## Mathematics Today Week 1

\*Select

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
1	<b>Algebraic expressions:</b> Revise algebraic language; Revise addition, subtraction and multiplication of algebraic expressions	142–143	16.1–16.3*	187–189	82–83	No. 70–72b (pp. 12–19)	No. 1–5 (pp. 13–16)					
2	Revise division, squares, cubes, square roots and cube roots of algebraic expressions	142–143	16.4–16.6*	189–192	83	No. 74 (pp. 28–29)						
3	Determine values by substitution; Revise simplifying algebraic expressions	142–143	16.7–16.9*	193–196	83–84	No. 73a–73d, 75a–75b (pp. 20–27, 30–33)						
4	Factorise algebraic expressions that involve common factors	142–143	16.10	197–198	84	No. 76 (pp. 34–35)	No. 1–4 (pp. 16–17)					
5	Factorise complex algebraic expressions that involve common factors	142–143	16.11	198	84	No. 77 (pp. 36–37)						
Reflection												
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						
						HOD:			Date:			

**Mathematics Today Week 2**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
6	Factorise complex algebraic expressions that involve common factors; Factorise the difference of two squares	142–143	16.12–16.13	199–200	84–85		No. 1–5 (pp. 22–23)					
7	Factorise algebraic expressions that involve the difference of two squares	142–143	16.14	201	85	No. 78 (pp. 38–39)	No. 1–2 (pp. 23–24)					
8	Factorise algebraic expressions that involve trinomials	142–143	16.15	201–202	85	No. 80 (pp. 42–43)	No. 1–7 (pp. 17–19) No. 1–3 (pp. 19–20) No. 1–3 (pp. 21–22)					
9	Simplify algebraic expressions that involve factorisation	142–143	16.16–16.17	203–204	85–86	No. 79 (pp. 40–41)	No. 1–3 (pp. 25–26) No. 1–4 (p. 26)					
10	Revise factorising and simplifying algebraic expressions	142–143	Rev. (no. 8–9)	205	86		No. 1–2 (p. 27) No. 1–3 (pp. 27–28) No. 1–2 (pp. 29–30)					
Reflection												
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						
<p><b>HOD:</b></p>						<p><b>Date:</b></p>						

## Mathematics Today Week 3

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
11	<b>Algebraic equations:</b> Revise analysing, interpreting and solving equations that describe problem situations	144	17.1	207–208	88							
12	Revise analysing, interpreting and solving equations that describe problem situations	144	17.2	208–209	88							
13	Revise solving equations with fractions	144	17.3	210–211	89	No. 81 (pp. 44–45)	No. 1–2 (pp. 31–33) No. 1–5 (pp. 34–35) No. 1–5 (pp. 34–35)					
14	Solve equations of the form: A product of factors = 0; Solve equations using factorisation	144	17.4 (no. 1, 3, 4)	211–213	89–90	No. 82 (pp. 46–47)	No. 1–2 (p. 36) No. 1–4 (p. 37) No. 1–6 (p. 38)					
15	Solve equations involving the difference of two squares	144	17.4 (no. 2)#	212	89	No. 83 (pp. 48–49)	No. 1–8 (p. 39)					
Reflection												
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						
						<p><b>HOD:</b> _____ <b>Date:</b> _____</p>						

**Mathematics Today Week 4**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
16	Set up equations to describe problem situations and solve the equations	144	17.4 (no. 5–9)	213	90	No. 84 (pp. 50–51) No. 86a (pp. 54–55)						
17	Set up equations to describe problem situations and solve the equations (use <i>DBE workbook</i> )	144				No. 86b (pp. 56–57)	No. 1–4 (pp. 42–44)					
18	Use substitution in equations to generate tables of ordered pairs	144	17.5 (no. 1–2)	214–216	90	No. 85 (pp. 52–53)	No. 1–3 (p. 45)					
19	Use substitution in equations to generate tables of ordered pairs	144	17.5 (no. 3)	216	90	No. 87 (pp. 58–59)	No. 1–4 (pp. 45–46)					
20	Revise algebraic equations	144	17.6	216	91		No. 1–3 (p. 40) No. 1–10 (p. 41)					
<b>Reflection</b>												
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>						
HOD:						Date:						

**Mathematics Today Week 5**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
21	<b>Functions and relationships:</b> Determine output values for given equations, formulae and flow diagrams	141	15.1 (no. 1–6)	172–173	78		No. 1–8 (pp. 1–6)					
22	Determine output values for given equations, formulae and flow diagrams	141	15.2 (no. 7–12)	173–174	78	No. 69 (pp. 10–11)	No. 1–14 (pp. 6–10)					
23	Determine rules and equations for relationships and patterns using flow diagrams and tables	141	15.2	175–177	79	No. 65 (pp. 2–3)	No. 1–6 (pp. 11–12)					
24	Equivalent forms: Determine rules for patterns and relationships and draw the tables and graphs	141	15.3 (no. 1–2)	178–181	79	No. 66 (pp. 4–5)						
25	Equivalent forms: Determine rules for patterns and relationships and draw the tables and graphs	141	15.3 (no. 3–4)	182	79	No. 67–68 (pp. 6–9)						

**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:**

**Mathematics Today Week 6**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
26	<b>Graphs:</b> Analyse and interpret global graphs of problem situations	145	18.1	219–222	95–96	No. 88a (pp. 60–61)	No. 1–6 (pp. 47–52)					
27	Analyse and interpret non-linear graphs	145	18.2	222–223	96	No. 88b (pp. 62–63)	No. 1–9 (pp. 53–58)					
28	Interpret and determine the $x$ -intercept and the $y$ -intercept of linear graphs	145	18.3	224–225	96	No. 89 (pp. 64–65)	No. 1–4 (pp. 71–72) No. 1–4 (p. 72)					
29	Interpret and determine the gradient of linear graphs	145	18.4	226–228	96	No. 90a–90b (pp. 66–69)	No. 1–5 (pp. 58–60) No. 1–3 (pp. 63–65)					
30	Draw and interpret graphs of problem situations	145	18.5	230–231	96–97							

**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:**

**Mathematics Today Week 7**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
31	Draw non-linear and linear graphs from given equations using tables	145	18.6 (no. 1.1–2.4)	231–232	97–98	No. 91 (pp. 70–71) No. 96a (pp. 80–81)	No. 1 (pp. 73–74)					
32	Draw linear graphs from given equations using tables	145	18.6 (no. 2.5–4.5)	232–233	98–99	No. 92–94 (pp. 72–77)	No. 1–4 (pp. 61–62)					
33	Draw linear graphs from equations using the gradient and $y$ -intercept	145	18.7	233–234	99	No. 95 (pp. 78–79)						
34	Draw linear graphs from equations using the $x$ - and $y$ -intercepts	145	18.8	234–235	99–100		No. 1–2 (p. 66)					
35	Draw sketch graphs of linear functions	145	18.9	235–236	100–101	No. 96b–97 (pp. 82–85)						

**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:**



## Mathematics Today Week 8

\*Select

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
36	Determine equations from given linear graphs	145	18.10 (no. 1)	236–238	101	No. 98 (pp. 86–87)	No. 1–3 (pp. 66–69)					
37	Determine equations from given linear graphs	145	18.10 (no. 2–3)	238	101	No. 99a–99b (pp. 88–91)	No. 1–3 (pp. 69–71)					
38	<b>Formal assessment: Assignment</b>		Assignment	240–241	106–107							
39	<b>Surface area and volume of 3-D objects:</b> Revise conversions; Calculate the surface area of cubes, rectangular and triangular prisms	146	19.1 (no. 1–3)	243–245	108	No. 100a–101* (pp. 92–97)	No. 1–8 (pp. 75–78)					
40	Calculate the surface area of cubes, rectangular and triangular prisms	146	19.1 (no. 4–9)	245–246	108	No. 102–103b* (pp. 98–103)	No. 1–3 (pp. 81–82) No. 1–3 (p. 85)					

**Note:** Refer to Day 39 & 40: For the *DBE workbook*: The surface area questions are applicable here.

### 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:**

## Mathematics Today Week 9

\*Select

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
41	Calculate the surface area of cylinders; Go over assignment done in previous week	146	19.2	246–248	108							
42	Revise for test											
43	<b>Formal assessment: Test</b>											
44	Calculate conversions of units; Calculate the volume and capacity of 3-D objects	146	19.3	249–250	109	No. 100a–103b* (pp. 92–103)						
45	Investigate doubling the dimensions of 3-D objects	146	19.4	251–252	109		No. 1–3 (pp. 86–87)					

**Note:** Refer to Day 44: For the *DBE workbook*: Volume and capacity questions are applicable here.

### 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:

**Mathematics Today Week 10**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class					
								Date completed					
46	<b>Formal assessment: Project</b>		Project	254	111								
47	<b>Formal assessment: Project cont.</b>		Project	254	111								
48	Revise the surface area, volume and capacity of cylinders (use <i>DBE workbook</i> )	146				No. 104a–104b (pp. 104–107)	No. 1–4 (pp. 79–80) No. 1–3 (pp. 83–84)						
49	Revise surface area and volume of 3-D objects	146	Rev.	253	110		No. 1–4 (pp. 87–88)						
50	Go over test done in previous week; Revision												

**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:**

**Mathematics Today Week 11**  
**Catch up any work not done; review assessments and do remediation – plan your week**

**End-of-term reflection**

**Think about and make a note of:**

1. Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?

2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?

3. What ONE change should you make to your teaching practice to help you teach more effectively next term?

4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in future? What plan will you make to get back **on track**?

**HOD:**

**Date:**

## Sasol Inzalo Mathematics Book 2

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

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

1. Day/lesson number.
2. CAPS content linked to Learner's Book content.
3. CAPS page numbers at the start of each CAPS topic.
4. Learner's Book exercises that cover the CAPS content for the day. Where an exercise has been recommended for more than one day, it has been divided into two parts.
5. Page reference in the Learner's Book (LB page reference).
6. Page reference in your Teacher's Guide for the day's activities (TG page reference).
7. DBE workbook link to related content (worksheet and page numbers are referenced).
8. Date completed.

Where necessary, notes referring to specific days have been inserted below the week's tracker.

### Weekly reflection

The tracker provides a space that you can use to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and peers, and together 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 and skills for the day? Could they use the language expected of them? Could they write what was expected of 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, and also forms the basis for collegial conversations with your HOD and peers.

**Sasol Inzalo Mathematics Book 2 Week 1**

\*Select

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
							Date completed				
1	<b>Algebraic expressions:</b> Revise algebraic language; Manipulating expressions	142–143	1–5	15–16	13–16	No. 70–75b* (pp. 12–33)					
2	Factors of expressions of the form $ab + ac$ ; The greatest common factor; Something in-between	142–143	1–4 1–7	16–17 17–19	16–17 17–19	No. 76–77 (pp. 34–37)					
3	Factors of expressions of the form $x^2 + (b + c)x + bc$ ; Try to find the factors	142–143	1–3	19–20	19–20						
4	Revise factorising trinomials: Practice makes perfect	142–143	1–3	21–22	21–22	No. 80 (pp. 42–43)					
5	Factorise algebraic expressions that involve the difference of two squares: Preliminary work	142–143	1–5	22–23	22–23	No. 78 (pp. 38–39)					
Reflection											
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>					
HOD:						Date:					

**Sasol Inzalo Mathematics Book 2 Week 2**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
							Date completed				
6	Factorising difference between two squares expressions	142–143	1–2	23–24	23–24						
7	Simplification of algebraic fractions	142–143	1–3	25–26	25–26						
8	Dividing by zero cannot be done; Defining the undefined	142–143	1–4 1–2	26 27	26 27	No. 79 (pp. 40–41)					
9	Simplifying algebraic fractions	142–143	1–3	27–29	27–29						
10	Simplify algebraic expressions: More practice	142–143	1–2	29–30	29–30						

**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:**

**Sasol Inzalo Mathematics Book 2 Week 3**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
							Date completed				
11	<b>Algebraic equations:</b> Solving equations using inspection	144	1–2	33	31–33						
12	Solving equations through inverse operations	144	1–5	34–35	34–35	No. 81 (pp. 44–45)					
13	Developing a strategy: Multiplying by zero; Taking out the highest common factor	144	1–2 1–4	36 37	36 37						
14	Solving by factorising trinomials	144	1–6	38	38	No. 82 (pp. 46–47)					
15	Solving by factorising the difference between two squares	144	1–8	39	39	No. 83 (pp. 48–49)					

**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:**



**Sasol Inzalo Mathematics Book 2 Week 4**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
							Date completed				
16	Solving by using properties of exponents; Mixed exercises for more practice	144	1–3 1–10	40 41	40 41						
17	Set up equations to solve problems: The mathematical modelling process; Practice your modelling skills	144	– 1–4	42–43 43–44	42–43 43–44	No. 84 (pp. 50–51)					
18	Equations and ordered pairs: When unknowns become variables	144	1–3	45	45	No. 85 (pp. 52–53)					
19	Functions as sets of ordered pairs	144	1–4	45–46	45–46	No. 87 (pp. 58–59)					
20	Set up equations to describe problem situations and solve the equations (use <i>DBE workbook</i> )	144				No. 86a–86b (pp. 54–57)					
Reflection											
<p><b>Think about and make a note of:</b> 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?</p>					<p>What will you change next time? Why?</p>						
					<p><b>HOD:</b> _____ <b>Date:</b> _____</p>						

**Sasol Inzalo Mathematics Book 2 Week 5**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
							Date completed				
21	<b>Formal assessment: Assignment</b>										
22	<b>Functions and relationships:</b> From formulas to words, tables and graphs: The same instructions in words and in symbols	141	1–8	3–6	1–6						
23	Tables and graphs	141	1–14	6–10	6–10	No. 69 (pp. 10–11)					
24	An investigation: Patterns in differences	141	1–6	11–12	11–12	No. 65 (pp. 2–3)					
25	Equivalent forms: Determine rules for patterns and relationships and draw the flow diagrams/graphs (use <i>DBE workbook</i> )	141				No. 66–67 (pp. 4–7)					

**Note:** Refer to Day 21: The assignment can be sourced from another set of LTSMs.

**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:**

**Sasol Inzalo Mathematics Book 2 Week 6**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
							Date completed				
26	Equivalent forms: Determine the output values or formulae and draw the table of values and/or graphs (use <i>DBE workbook</i> ); Go over assignment done in previous week.	141				No. 68 (pp. 8–9)					
27	<b>Graphs:</b> Global graphs: Discrete and continuous variables	145	1–6	49–52	47–52	No. 88a (pp. 60–61)					
28	Showing increase and decrease on graphs; Change at different rates	145	1–9 1–5	53–58 58–60	53–58 58–60	No. 88b (pp. 62–63)					
29	Draw graphs from tables of ordered pairs: Graphs of functions with constant differences	145	1–4	61–62	61–62	No. 91 (pp. 70–71)					
30	Gradient; Determine the gradient	145	1–3 1–2	63–65 66	63–65 66	No. 90a–90b (pp. 66–69)					
Reflection											
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>					
HOD:						Date:					

**Sasol Inzalo Mathematics Book 2 Week 7**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
							Date completed				
31	Finding the formula for a graph: Tables and formulas	145	1–3	66–69	66–69						
32	Determine the equation of a straight line	145	1–3	69–71	69–71						
33	Determine equations from given linear graphs cont. (use <i>DBE workbook</i> )	145				No. 99a–99b (pp. 88–91)					
34	<i>x</i> - and <i>y</i> - intercepts; Vertical and horizontal lines	145	1–4 1–4	71–72 72	71–72 72	No. 89 (pp. 64–65) No. 92 (pp. 72–73)					
35	Draw linear graphs from given equations (use <i>DBE workbook</i> )	145				No. 98 (pp. 86–87)					

**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:**

**Sasol Inzalo Mathematics Book 2 Week 8**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
							Date completed				
36	Sketch and compare linear graphs cont. (use DBE workbook)	145				No. 93 (pp. 74–75)					
37	Sketch and compare linear graphs cont. (use DBE workbook)	145				No. 94–95 (pp. 76–79)					
38	Sketch and compare linear graphs cont. (use DBE workbook); Sketch graphs of non-linear functions	145	1	73–74	73–74	No. 96a–97 (pp. 80–85)					
39	<b>Surface area and volume of 3-D objects:</b> Surface area of prisms	146	1–8	77–78	75–78	No. 100a–102 (pp. 92–99)					
40	Investigating and calculating the surface area of cylinders	146	1–4	79–80	79–80	No. 104a–104b (pp. 104–107)					

**Note:** Refer to Day 39–42: For the DBE workbook: Select surface area or volume where applicable.

**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:**

**Sasol Inzalo Mathematics Book 2 Week 9**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
							Date completed				
41	Formulae for volume of prisms; Calculating the volume of prisms	146	– 1–3	81 81–82	81 81–82	No. 100a–102 (pp. 92–99)					
42	Volume of cylinders	146	1–3	83–84	83–84	No. 104a–104b (pp. 104–107)					
43	Capacity	146	1–3	85	85	No. 103a–103b (pp. 100–103)					
44	Revise for test										
45	<b>Formal assessment: Test</b>										
Reflection											
<p><b>Think about and make a note of:</b> 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?</p>						<p>What will you change next time? Why?</p>					
						<p><b>HOD:</b> _____ <b>Date:</b> _____</p>					

**Sasol Inzalo Mathematics Book 2 Week 10**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
							Date completed				
46	<b>Formal assessment: Project</b>										
47	<b>Formal assessment: Project</b> cont.										
48	Doubling the dimensions of a prism	146	1–3	86–87	86–87						
49	Doubling the dimensions of a cylinder; Go over test done in previous week	146	1–4	87–88	87–88						
50	Revision										

**Note:** Refer to Day 46 & 47: The project can be sourced from another set of LTSMs.

**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:**

*Sasol Inzalo Mathematics Book 2 Week 11*  
Catch up any work not done; review assessments and do remediation – plan your week

**End-of-term reflection**

**Think about and make a note of:**

1. Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?

2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?

3. What ONE change should you make to your teaching practice to help you teach more effectively next term?

4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in future? What plan will you make to get back **on track**?

**HOD:**

**Date:**



**E. ASSESSMENT RESOURCES**

<b>GRADE 9 MATHEMATICS</b>						
<b>Formal Assessment Record Sheet – Term 3</b>						
	<b>Assignment</b>	<b>Test 3</b>	<b>Project</b>	<b>Total</b>	<b>%</b>	<b>Rating (1–7)</b>
Date of assessment						
Total marks for assessment						
Learner name						

## Grade 9 Mathematics Term 3 – Test

Time: 1 hour

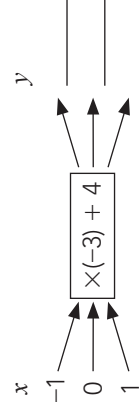
Total: 50 marks

### INSTRUCTIONS TO LEARNERS:

1. There are six questions. Answer all questions.
2. Show all your calculations where necessary. Full marks will not be awarded where working out should be shown but is not.
3. Scientific non-programmable calculators may be used.
4. Diagrams are not drawn to scale.
5. Graph paper is provided for Question 5.1.

### QUESTION 1:

- 1.1 Calculate the output numbers ( $y$ ) of the flow diagram below:



(3)

(1)

[4]

- 1.2 Give the equation that defines this relationship.

### QUESTION 2:

Give the rule of the following number pattern (that is, the relationship between  $x$  and  $y$ ):

$x$	1	2	3	4	5	6
$y$	-5	-7	-9	-11	-13	-15

[2]

### QUESTION 3:

- 3.1 Simplify  $-(y - 4)^2 + 2(3y + 2)(3y - 2)$

(3)

3.2 Factorise:

3.2.1  $-3xy^4 - 48x^2y$

(2)

3.2.2  $x^2 - 2(5x - 8)$

(3)

3.2.3  $x^2(5a - b) + (b - 5a)$

(3)

- 3.3 Simplify:  $\frac{x^2 - 4x - 21}{x^2 - 49}$

(3)

[14]

**QUESTION 4:**

- 4.1 Solve for the unknown in each case:
- 4.1.1  $y^2 - 2y - 15 = 0$  (2)
  - 4.1.2  $2x^3 + 6x^2 - 20x = 0$  (3)
  - 4.1.3  $2^k = 64$  (2)
- 4.2 Thabo is five years older than Amy.  
In seven years' time Amy will be three-quarters of Thabo's age.  
How old is Amy now? (3)
- [10]

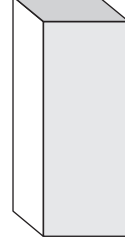
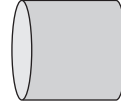
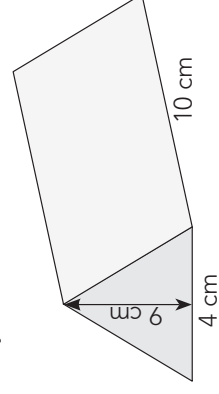
**QUESTION 5:**

- 5.1 Given:  $x + 2y = -2$  and  $x - y = 4$ :
- 5.1.1 Use the grid paper provided to draw the graphs of these two straight lines on the same system of axes using the intercept-intercept method (dual-intercept method). (4)
  - 5.1.2 Read off the point of intersection of these two linear graphs. (1)
- 5.2 Find the equation of the line parallel to  $4y - 5x - 20 = 0$  and which cuts the  $y$ -axis at  $-2$ . (2)
- 5.3 Given two points  $(0; 3)$  and  $(-1; 3)$ :
- 5.3.1 Draw the straight line joining these two points. (1)
  - 5.3.2 What is the equation of this straight line? (1)
  - 5.3.3 What is the gradient of this straight line? (1)
  - 5.3.4 What does the gradient indicate about this line in relation to the  $x$ -axis? (1)
- [11]

**QUESTION 6:**

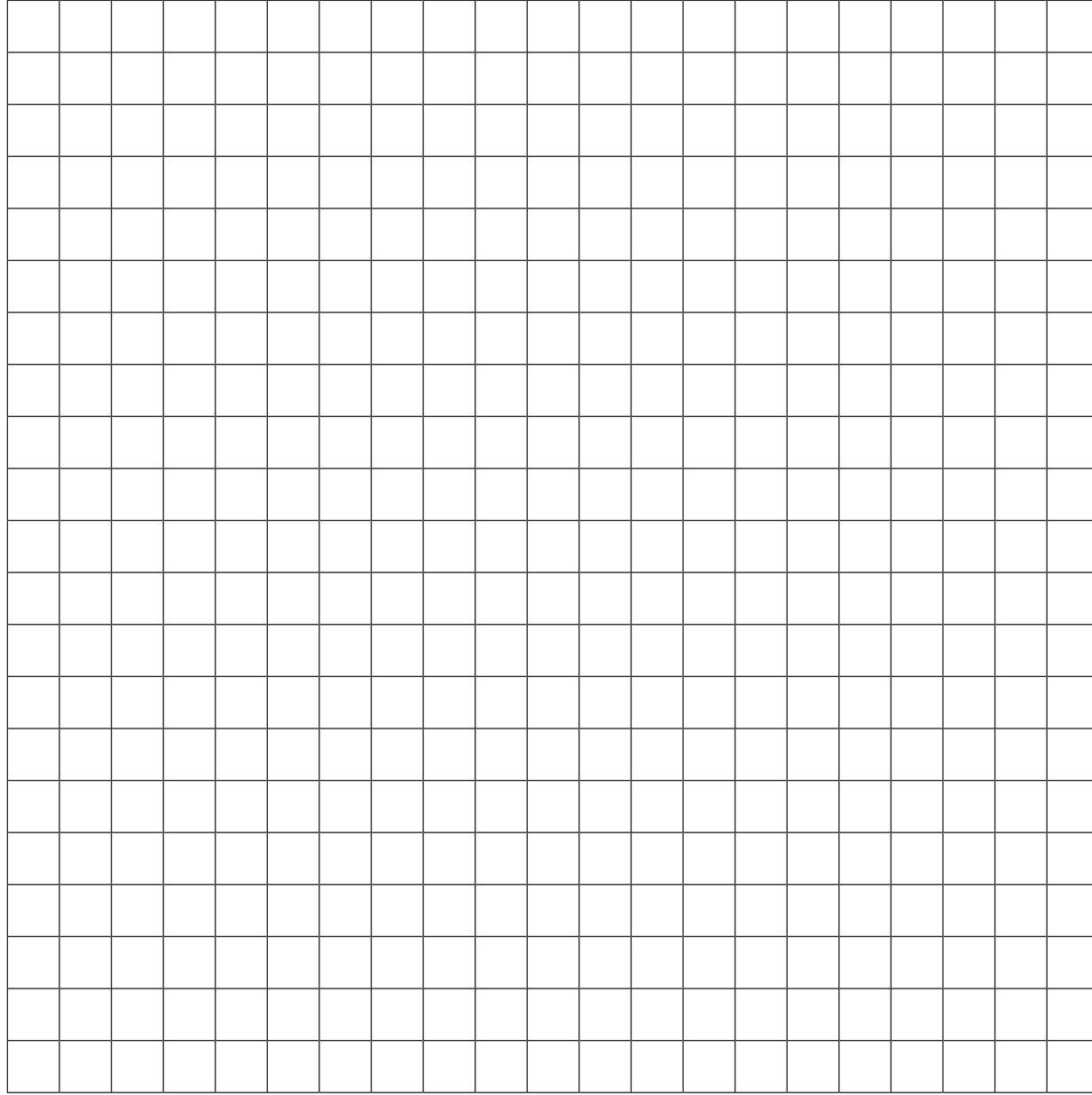
[Round your answers off to two decimal places, where necessary.]

- 6.1 A bar of steel is cut in such a way that the length is 10 cm and its triangular face has one side equal to 4 cm, with a height of 9 cm, as shown:
- Calculate:
- 6.1.1 the other two sides of the triangular sides if they are equal in length. (2)
  - 6.1.2 the surface area in  $m^2$ . (3)
- 6.2 The volume of a cylinder is  $720 \text{ cm}^3$ .  
The height is 19,4 cm.  
Calculate the radius of the cylinder. (2)
- 6.3 Calculate the capacity (in  $\ell$ ) of a rectangular prism that has a volume of  $6\,859 \text{ cm}^3$ . (2)
- [9]



**QUESTION 5** – Do 5.1 on this grid paper

Name: \_\_\_\_\_



## Grade 9 Mathematics Term 3 – Test Memorandum and Cognitive Levels of Questions

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

The levels are:

K: Knowledge – straight recall of facts

RP: Routine Procedures – well-known, simple applications and calculations

CP: Complex Procedures – procedures involving complex calculations and/or higher reasoning

PS: Problem Solving – solving problems for which higher order reasoning and processes are involved

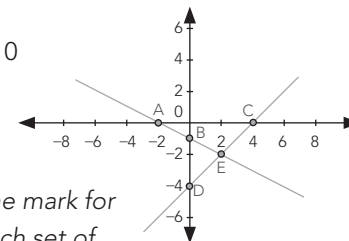
More information about these levels can be found in the CAPS (p. 157).

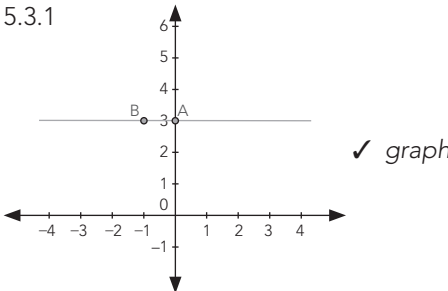
SOLUTIONS	MARKS	COGNITIVE LEVELS
<b>QUESTION 1:</b>		
1.1 $y = -1 \times -3 + 4 = 3 + 4$ $= 7$ ✓ <i>substitution</i> $y = 0 \times -3 + 4 = 0 + 4$ $= 4$ ✓ <i>substitution</i> $y = 1 \times -3 + 4 = -3 + 4$ $= 1$ ✓ <i>substitution</i>	(3)	RP
1.2 $y = -3x + 4$ ✓ <i>equation</i>	(1)	K
<b>QUESTION 2:</b>		
$y = -2x - 3$ ✓✓ <i>rule/equation</i>	(2)	RP

SOLUTIONS	MARKS	COGNITIVE LEVELS
<b>QUESTION 3:</b>		
3.1 $-(y - 4)^2 + 2(3y + 2)(3y - 2)$ $= -(y^2 - 8y + 16) + 2(9y^2 - 4)$ ✓✓ <i>simplification</i> $= -y^2 + 8y - 16 + 18y^2 - 8$ $= 17y^2 + 8y - 24$ ✓ <i>answer</i>	(3)	RP
3.2 3.2.1 $-3xy^4 - 48x^2y$ $= -3x^2y(y^3 + 16)$ ✓✓ <i>factors</i>	(2)	RP
3.2.2 $x^2 - 2(5x - 8)$ $= x^2 - 10x + 16$ ✓✓ <i>multiplication</i> $= (x - 8)(x - 2)$ ✓ <i>factors</i>	(3)	RP
3.2.3 $x^2(5a - b) + (b - 5a)$ $= x^2(5a - b) - (5a - b)$ ✓ <i>change order of terms</i> $= (5a - b)(x^2 - 1)$ ✓ <i>factorise</i> $= (5a - b)(x - 1)(x + 1)$ ✓ <i>factorise further</i>	(3)	RP
3.3 $\frac{x^2 - 4x - 21}{x^2 - 49}$ $= \frac{(x - 7)(x + 3)}{(x - 7)(x + 7)}$ $= \frac{x + 3}{x + 7}$ ✓✓✓ <i>factorise &amp; simplify</i>	(3)	CP

SOLUTIONS	MARKS	COGNITIVE LEVELS									
<b>QUESTION 4:</b>											
4.1 4.1.1 $y^2 - 2y - 15 = 0$ $(y - 5)(y + 3) = 0$ $y = 5$ ✓ or $y = -3$ ✓ answers	(2)	RP									
4.1.2 $2x^3 + 6x^2 - 20x = 0$ $2x(x^2 + 3x - 10) = 0$ ✓ factorisation $2x(x + 5)(x - 2) = 0$ ✓ further factorisation $x = 0$ or $x = -5$ or $x = 2$ ✓ answers	(3)	CP									
4.1.3 $2^k = 64$ $2^k = 2^6$ ✓ power of 2 $k = 6$ ✓ answer	(2)	RP									
4.2											
<table border="1"> <thead> <tr> <th></th> <th>Present</th> <th>Future</th> </tr> </thead> <tbody> <tr> <td>Amy</td> <td><math>x</math></td> <td><math>x + 7</math></td> </tr> <tr> <td>Thabo</td> <td><math>x + 5</math></td> <td><math>(x + 5) + 7</math></td> </tr> </tbody> </table>		Present	Future	Amy	$x$	$x + 7$	Thabo	$x + 5$	$(x + 5) + 7$		
	Present	Future									
Amy	$x$	$x + 7$									
Thabo	$x + 5$	$(x + 5) + 7$									
$x + 7 = \frac{3}{4}(x + 12)$ ✓✓ equation											
$x + 7 = \frac{3x}{4} + 9$											
LCD: 4											
$4x + 28 = 3x + 36$											
$x = 12$ ✓ answer											
Amy is 12 years old	(3)	PS									

SOLUTIONS	MARKS	COGNITIVE LEVELS
<b>QUESTION 5:</b>		
5.1 5.1.1 $x + 2y = -2$ x-int: let $y = 0$ $x + 2(0) = -2$ $x + 0 = -2$ $x = -2$ $(-2; 0)$ ✓		
y-int: let $x = 0$ $0 + 2y = -2$ $2y = -2$ $y = \frac{-2}{2}$ $y = -1$ $(0; -1)$ ✓ one mark for each set of intercepts		
$x - y = 4$ x-int: let $y = 0$ $x - 0 = 4$ $x = 4$ $(4; 0)$ ✓		
y-int: let $x = 0$ $0 - y = 4$ $-y = 4$ $y = -4$ $(0; -4)$ ✓ one mark for each set of intercepts		
✓✓ for graphs		
5.1.2 Point of intersection $(2; -2)$ ✓ ordered pair	(1)	RP



SOLUTIONS	MARKS	COGNITIVE LEVELS
5.2 $4y - 5x - 20 = 0$ $4y = 5x + 20$ $y = \frac{5}{4}x + 5$ ✓ <i>standard form</i> $m = \frac{5}{4}; c = -2$ $y = \frac{5}{4}x - 2$ ✓ <i>equation</i>	(2)	RP
5.3 5.3.1  ✓ <i>graph</i>	(1)	K
5.3.2 Equation: $y = 3$ ✓	(1)	K
5.3.3 Gradient: 0 ✓	(1)	K
5.3.4 Perpendicular to the y-axis ✓	(1)	K
OR		
Parallel to the x-axis ✓		

SOLUTIONS	MARKS	COGNITIVE LEVELS
<b>QUESTION 6:</b>		
6.1 6.1.1 $x^2 = 2^2 + 9^2$ (Theorem of Pythagoras) ✓ <i>equation</i> $= 4 + 81$ $= 85$ $x = \sqrt{85} = 9,22 \text{ cm}$ ✓ <i>answer</i>	(2)	PS
6.1.2 Surface area: $2\left(\frac{1}{2}(4 \times 9)\right) + 3(10 \times 9,22)$ ✓✓ <i>formula &amp; substitution</i> $= 36 + 276,6$ $= 312,6 \text{ cm}^2$ ✓ <i>answer</i> $= 0,03126 \text{ m}^2$	(3)	CP
6.2 $V = 720 \text{ cm}^3$ $\pi r^2 \times h = 720$ ✓ <i>equation</i> $\pi r^2 \times 19,4 = 720$ $r^2 = 11,813\dots \text{ cm}$ $\therefore r = \sqrt{11,813\dots}$ ✓ <i>answer</i> $r = 3,44 \text{ cm}$	(2)	CP
6.3 $V = 6\,859 \text{ cm}^3$ Capacity = 6 859 ml ✓ <i>conversion</i> $= 6,859 \ell$ ✓ <i>answer in litres</i>	(2)	K

## Analysis of Cognitive Levels

Table 1 below shows the weighting of the cognitive levels as specified by the CAPS for tests and examinations for the senior phase.

**Table 1: WEIGHTING OF THE COGNITIVE LEVELS SPECIFIED BY THE CAPS**

Cognitive levels	Percentage
Knowledge	≈ 25%
Routine procedures	≈ 45%
Complex procedures	≈ 20%
Problem solving	≈ 10%

Table 2 below shows the weighting of marks across the cognitive levels in the exemplar test paper provided above. As can be seen, this differs slightly from the suggested weightings in the CAPS. This is acceptable, provided that the two lower cognitive levels add up to approximately 70% and the two higher levels add up to approximately 30%.

In this exemplar test, the two lower levels add up to 68% and the two higher levels add up to 32%.

**Table 2: WEIGHTING OF MARKS ACROSS COGNITIVE LEVELS IN THE EXEMPLAR TEST**

Cognitive levels	Mark out of 50	Percentage
Knowledge	7	14%
Routine procedures	27	54%
Complex procedures	11	22%
Problem solving	5	10%