**GRADE 8** 

# **Mathematics**

Teacher Toolkit: CAPS Planner and Tracker

2020 TERM 2

# CONTENTS

A. About the Tracker and Resources	2
B. Lesson Preparation Key Steps	6
C. Planning for Assessment	8
D. Trackers for Each Set of Approved LTSMs	11
Premier Mathematics	11
Spot On Mathematics	23
Platinum Mathematics	34
Oxford Headstart Mathematics	45
Oxford Successful Mathematics	56
Clever: Keeping Maths Simple	67
Solutions for All Mathematics	78
Mathematics Today	90
Sasol Inzalo Mathematics	101

E. Assessment Resources	112
Formal Assessment Record Sheet: Term 2	112
Grade 8 Mathematics Mid-Year Examination	113
Grade 8 Mathematics Mid-Year Examination: Memorandum	
and Cognitive Levels of Questions	_117

## 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.

- 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 8 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. You will still make the final professional choices about which examples and explanations to give, which activities to set for your class and how to manage your class on a daily basis. The tracker provides a programme of work which should be covered each day of the term and a space for reflection on work done. By following the programme in the tracker you should cover the curriculum in the allocated time, and complete the formal assessment programme. By noting the date when each lesson is completed, you can see whether or not you are on track and, if not, you can strategise with your head of department (HOD) and peers as to how best to make up time to ensure that all the work for the term is completed. In addition, the tracker encourages you to reflect on what in your lessons is effective, and where content coverage could be strengthened. These reflections can be shared with colleagues. In this way, the tracker 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 8 is based on the requirements prescribed by the Department of Basic Education's Curriculum and Assessment Policy Statement (CAPS) for Mathematics in the Senior Phase. The work set out for each day is linked directly to the topics and subtopics given in the CAPS, and the specified amount of time is allocated to each topic. The tracker gives the page number in the CAPS document of the topics and subtopics being addressed in each session to help you refer to the curriculum document directly should you wish to do so.

## 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 Grade 8 DBE *Sasol Inzalo Mathematics* book 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 or *Sasol Inzalo Mathematics* Book 1 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 the Sasol Inzalo Mathematics books

The tracker for each of the eight published books gives links to worksheets in the DBE workbooks (2017) relevant to the content prescribed for each day. The worksheets in the DBE workbooks are referred to by worksheet number and page. The pages might differ very slightly in later years. 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 for consolidation, in class or for homework. Also, as there might be slight changes from the 2017 edition of the workbook in later editions, you should check that the worksheets to which you are referred in the tracker are still relevant for the work linked to them.

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

## 6. Managing time allocated in the tracker and the Sasol Inzalo Mathematics books

The CAPS prescribes four and a half hours of Mathematics per week in Grade 8. 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 30 minutes, making up the four and a half hours. As each school organises its timetable differently, you may have to divide the sessions in the programme slightly differently to accommodate the length of the lessons at your school in a way that ensures that the full four and a half hours of time 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. Eight of these hours are given for assessments and revision. The programme in the tracker completes the formal teaching programme in eight weeks, leaving the ninth week for catching up any work not done and for revision; and the tenth week for the formal examination period. Should you use this tracker in a year in which the second term is not ten weeks, you should adjust your planning accordingly. Always check this at the start of the term.

#### 7. Sequence adherence

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

**Please note:** The sequence of topics in this tracker does not follows the order given in the CAPS, but rather the provincial teaching plan of the KwaZulu-Natal Department of Education. Euclidean geometry constructions and the learning of Euclidean geometry have been combined to allow for more effective understanding. Also, the Theorem of Pythagoras, which should be taught in Term 3, has been brought forward to be taught at the end of Term 2.

#### 8. Links to assessment

The tracker for each book indicates where in the series of lessons the CAPS formal assessment activities are to be done and when feedback should be given. The CAPS states that "tests, examinations, projects, assignments and investigations are recommended for Mathematics" (CAPS, p. 155). An overview of the term indicating where the assessments will be done is provided in Table 2: Formal Assessment Term Plan for easy reference. A suggested date is given for the formal term test. The actual tasks and the dates for the investigations vary slightly from Learner Book to Learner Book, but are always in line with the CAPS specifications. It is suggested that you discuss testing times with your colleagues teaching other subjects in order to avoid the learners having to write several tests on the same day.

In Term 2, learners must complete an investigation. Some of the Learner's Books offer more than one such activity that could be used for formal assessment. Where this is the case, the tracker suggests which one should be used.

In addition, learners are required to write a test and an examination. Most of the Learner's Books or Teacher's Guides provide an exemplar test and a mid-year examination paper. Note that you should not use exemplar tests and examinations in the Learner's Book for formal assessment as learners could have prepared their answers in advance. These resources are, however, useful revision and informal assessment activities. If there is not a feasible term test (such as when it is given in the Learner's Book), then you should set your own test, using resources such as other Learner's Books and Teacher's Guides on the catalogue, the *Sasol Inzalo Mathematics* books or ANA past papers and exemplars. For the mid-year examination, if a common paper is not provided, then in addition to these options, you can use the exemplar paper which, together with a memorandum and an analysis of cognitive levels, has been included in Section E of this book.

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 in 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. Some information on material which can be used for informal assessment in each set of LTSMs is provided in Section C of this document.

#### 9. Resources

The trackers suggest resources that you could use for certain lessons. You are free to use any resources to enrich your Mathematics teaching.

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

The tracker provides a detailed programme to guide you through the daily content you need to teach to your class, and when to do formal assessments. You are still required to draw up your own lesson plans. It is a good idea that you and your Mathematics colleagues agree on a day that you can 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**. Bear in mind that your lessons will not succeed if you have not prepared properly for them. This entails a number of key steps, such as those noted below.

- Review the term focus: Start by looking at the CAPS and orientating yourself to the CAPS content focus for the term. It is important that you are clear about the content focus as this will frame everything you do in your Mathematics lessons during the term. The time allocation per term is given in the CAPS document on page 74. This indicates how many hours are required to be spent on each topic. If the second term is much shorter than 11 weeks, you might need to work at a different pace in order to complete the work and have time for assessment.
- 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.
  - 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 so that learners can settle down and begin working promptly.

- **3. Prepare the content:** Think carefully about what it is that you will teach your learners in this lesson. Think about the prior knowledge of the content that learners should have learned in earlier grades that will be built on in this lesson. You should refer to the CAPS content and skills clarification column for further guidance while you prepare. Consider any common misconceptions, and how you will address these.
  - **Prepare a short introduction** to the topic so that you can explain it in simple terms to your learners. The Learner's Book and Teacher's Guide will assist you. Think also about how learners will develop an understanding of the main concepts of the lesson topic. You need to think about how to explain new Mathematics content and skills to your learners.
  - Make sure you have prepared for the teaching of the concepts before you teach. Prepare yourself to assist learners with any questions they might have during the lesson. Look at the activities in the Learner's Book and in the DBE workbook and think about how best to help your learners engage with them. Consider what will be done in class and what at home. Be sure to have some enrichment and remediation activities ready to use as needed. The Teacher's Guides offer suggestions for 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, www.thutong.doe.gov.za/InclusiveEducation.
    - Directorate Inclusive Education, Department of Basic Education (2010) Guidelines for Inclusive Teaching and Learning. Education White Paper 6. Special needs education: Building an inclusive education and training system. Pretoria. www.education.gov.za, www.thutong.doe.gov.za/ InclusiveEducation.
- 4. Plan the steps in your lesson, and think carefully about how much time to allocate to different learner activities. Also think about how to organise the learners when they work. Most lessons should include the steps below and we have suggested the time to be spent on each (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 of the homework questions. Make sure that you mark the homework activities use peer and individual marking and check homework yourself as often as you can. If peer or individual marking has been done, you should regularly sample some Learners' Books to moderate this marking. Choose one or two activities that you realise were problematic, to go over more thoroughly. During this part of the lesson you may reflect on the previous day's work. Allow learners the opportunity to write corrections as needed.
- 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 going through examples interactively with your learners. Worked examples and suggested explanations are given in the Learner's Book or Teacher's Guide that you should go through with your class as a whole. The CAPS content clarification column would also be a useful reference should you need further examples or ideas to enrich your explanations. You should elaborate on these explanations and provide additional examples if necessary.
- 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 DBE workbook. These
  activities allow them to practise their maths and problem solving skills. It is
  important that you prepare yourself for the classwork activity you need to
  assist learners as they do the classwork. You might also need to select particular
  questions from each activity for the classwork so that learners can manage the
  selection the exercises given in the various Learner's Books vary greatly in
  length and you need to make this selection in advance (ensuring that all types of
  activities or concepts are covered each day) so that you can give quick and clear
  instructions to your learners about which numbers of each exercise they should do.

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

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

This is also the part of the lesson where you can assist learners who need extra support and extend those who need enrichment. Throughout the lesson, try to identify learners who need additional support or extension by paying attention to how well they 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 who 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 to give them enrichment activities to do.

• 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.

For homework, you can select a few questions from the daily classwork in their Learner's Book and ask the learners to complete them at home, or ask them to do part or all of a DBE worksheet. Homework enables the learners to consolidate the maths that you have taught them in class. It also promotes learner writing, development of mathematical knowledge and the development of regular study habits. Encourage your learners to show their parent(s) or their guardian(s) the work they have done.

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

## C. PLANNING FOR ASSESSMENT

**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 below shows the minimum requirement for formal assessment in Grade 8 given by the CAPS (p. 155).

**Note:** The DBE makes changes to the requirements for formal assessment from time to time. If such changes are made after this tracker has been printed, you should adjust the programme of assessment given here accordingly.

Table 1: NUMBER OF ASSESSMENT TASKS AND WEIGHTING												
	FORMS OF ASSESSMENT	Mini	mum re per t	er of r year	ting							
sessment		Term 1	Term 2	Term 3	Term 4	Numbo tasks pe	Weigh					
e as	Test	1	1	1		3						
bas	Examination		1			1						
-100	Assignment	1		1	1	3	10%					
Sch	Investigation		1		1	2	40 /0					
	Project			1		1						
	Total	2	3	3	2	10*						
End-o	of-year examina	ation				1	60%					

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

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 and examinations in the Learner's Books should not be used for formal assessment as the learners can prepare for them in advance, but they can be used for revision.

	Table 2: FORMAL ASS	ESSMENT TERM PLAN FOR EACH SET OF LTSMs	
LTSMs	Investigation	Test	Mid-year examination
Premier Mathematics	Week 6 – Day 27 Formal assessment: Investigation LB pp. 114–115 Memo TG pp. 76–77	Week 5 – Day 24 Formal assessment: Test Use questions selected from <i>Term 2 Mid-year</i> <i>Examination</i> to set own test TG pp. 80–82 Memo TG pp. 82–83	Week 10 Common examination/ Exemplar examination
Spot On Mathematics	Week 7 – Day 35 Formal assessment: Investigation LB pp. 136–137 Memo TG pp. 162–163	Week 5 – Day 23 Formal assessment: Test Use questions selected from End of Term 2 Assessment to set own test TG pp. 188–189 Memo TG pp. 190–191	Week 10 Common examination/ Exemplar examination
Platinum Mathematics	Weeks 7 – Day 31 Formal assessment: Investigation <i>Revision</i> can be used as the investigation LB p. 107 Memo TG pp. 53–54	Week 5 – Day 24 Formal assessment: Test Use questions selected from Formal Assessment Exemplar: Mid-year Examination to set own test TG pp. 152–153 Memo TG pp. 154–155	Week 10 Common examination/ Exemplar examination
Oxford Headstart Mathematics	Week 7 – Day 33 Formal assessment: Investigation Investigating the sum of interior angles of polygons LB pp. 199–201 Memo TG pp. 180–182	Week 5 – Day 24 Formal assessment: Test Use questions selected from Examination Exemplar 2 (November: Additional Paper 3) to set own test TG pp. 381–386 Memo TG pp. 386–390	Week 10 Common examination/ Exemplar examination
Oxford Successful Mathematics	Week 7 – Day 31 Formal assessment: Investigation Properties of quadrilaterals and ex. 2 LB pp. 156–157 Memo TG pp. 144–146	Week 5 – Day 25 Formal assessment: Test Select questions from <i>Control Test 2</i> and supplement with other questions TG pp. 340–341 Memo TG pp. 342–343	Week 10 Common examination/ Exemplar examination
Clever: Keeping Maths Simple	Week 6 – Day 30 Formal assessment: Investigation Space and shape (Geometry) LB p. 200 Memo TG p. 160	Week 5 – Day 22 Formal assessment: Test Use questions selected from <i>Mid-year Examination</i> to create your own test TG pp. 164–167 Memo TG pp. 168–171	Week 10 Common examination/ Exemplar examination
Solutions for All Mathematics	Week 6 – Day 30 Formal assessment: Investigation Unit 13: Investigating properties of geometry LB pp. 271–272 Memo TG pp. 165–167	Week 5 – Day 25 Formal assessment: Test Select questions from <i>Term 2 Control Test</i> TG pp. 342–345 Memo TG pp. 346–348	Week 10 Common examination/ Exemplar examination

LTSMs	Investigation	Test	Mid-year examination
Mathematics Today	Week 7 – Day 31 Formal assessment: Investigation Investigate the properties of 2-D shapes LB p. 144 Memo TG p. 61	Week 5 – Day 25 Formal assessment: Test Select questions from Formal Assessment: Term 2 Test to set your own test; modify to include geometry TG p. 49 Memo TG p. 50	Week 10 Common examination/ Exemplar examination
Sasol Inzalo Mathematics Book 1	Week 7 – Day 31 Formal assessment: Investigation An investigation must be sourced from another set of LTSMs	Week 5 – Day 24 Formal assessment: Test Set own test by sourcing material from other sets of LTSMs	Week 10 Common examination/ Exemplar examination

#### 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, as they 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 given.
- Oxford Headstart Mathematics gives revision exercises at the end of each chapter with solutions in the Teacher's Guide.
- Oxford Successful Mathematics has a summary and a consolidation exercise at the end of each chapter in the Learner's Book (with full solutions in the Teacher's Guide).

- Solutions for All Mathematics has a summary and 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.
- Revision tests can be found at the end of each topic in *Mathematics Today* (with full solutions in the Teacher's Guide). For each topic, remedial support and extension exercises are provided in the Teacher's Guide.
- Revision of each topic and an assessment can be found at the end of each term in the *Sasol Inzalo Mathematics* Books 1 and 2 with full solutions in the Teacher's Guide.

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

## **Premier Mathematics**

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.
- 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 Mathematics* Book 1 link to related content (worksheet and page numbers are referenced).
- 9. Date completed.

Where appropriate, notes to support your teaching in a particular week are provided in the last row of the table for that week.

## Weekly reflection

The tracker gives you space to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and 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 could teach it effectively?

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

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

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

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

Des         CAPS concepts and skills         CAPS pp.         LB ex.         LB pp.         TG pp.         DBE workbook         SasoI Inzalo (0         Class         Class           1		Premier Mathematics Week 1											
Image: second	Day CAPS concepts and skills		CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo			Class		
1							WORKDOOK						
1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1	1								L	Jate	comp	leted	
2       Algebraic expressions: Recognise and interpret rules or relationships represented in symbolic form       92       1       66–67       48–49       No. 1       No. 1–7       (pp. 2–3)       (pp. 145–150)       1       1       1         4       Recognise and identify conventions for writing algebraic       92       2       67–68       49       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       <	2												
4       Recognise and identify conventions for writing algebraic       92       2       67-68       49       Image: Constraint of the conventions of the convention of the conventing of the convention of the convention of the conventi	3	<b>Algebraic expressions:</b> Recognise and interpret rules or relationships represented in symbolic form	92	1	66–67	48–49	No. 1 (pp. 2–3)	No. 1–7 (pp. 145–150)					
5       Add and subtract like terms in algebraic expressions       92       3       68–69       49–50       No. 1–3 (pp. 152–153)       Image: constraint of the second	4	Recognise and identify conventions for writing algebraic expressions	92	2	67–68	49							
Reflection         Think about and make a note of: What well? What did not go well? What did not go 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?	5	Add and subtract like terms in algebraic expressions	92	3	68–69	49–50		No. 1–3 (pp. 152–153)					
Think about and make a note of: What went well? What did not go well? What did       What will you change next time? Why?         What will 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?				Reflecti	on								
HOD	get b	amers find difficult or easy to understand or do? What Will y d learners? Did you complete all the work set for the week? ack on track?	oort or ill you	0.0.									

	Premier Mathematics Week 2 #Supplement											
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		Class			
						WOIKDOOK		Dete				
6	Expand and simplify algebraic expressions using mixed operations	92	4	69–70	50		No. 4–8 (pp. 153–154)	Date		ed		
7	Multiply integers and monomials by monomials, binomials and trinomials	92	5	70–71	50–51	No. 40 (pp. 88–89)	No. 1–5 (pp. 150–151)					
8	Divide monomials, binomials and trinomials by integers or monomials	93	6	72–73	52–53	No. 39 (pp. 86–87)	No. 4–9 (pp. 157–159)					
9	Determine the squares, cubes, square roots and cube roots of single algebraic terms or like algebraic terms	93	7#	73–74	53	No. 41–42 (pp. 90–93)	No. 1–6 (pp. 160–161) No. 1–9 (pp. 162–163)					
10	Determine the numerical value of algebraic expressions by substitution; Revise algebraic expressions (use <i>DBE</i> <i>Workbook</i> or <i>Sasol Inzalo Mathematics</i> book)	93	8	74	53–54	No. 43–44 (pp. 94–97)	No. 1–3 (pp. 155–157) Revision worksheet (p. 164)					
			Reflectio	on	1	1						
Think the le exten get b	<b>about and make a note of:</b> What went well? What did no arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	hat will you ch	ange next tim	ne? Why?								
			н	DD:				Date:				

	Premier Mathematics Week 3												
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		Class				
						workbook							
								Da	te comp	letec	ł		
11	<b>Algebraic equations:</b> Set up equations to describe problem situations; Analyse and interpret equations that describe a given situation	94	1–2	75–76	55–56		No. 1–14 (pp. 165–169)						
12	Solve equations by inspection; Determine the numerical value of an expression by substitution	94	3–4	76–77	56–57								
13	Solve equations using additive and multiplicative inverses; Solve equations using laws of exponents	94	5–6	78–79	57–58		No. 1–8 (pp. 170–172) No. 1–3 (p. 172)						
14	<b>Constructions and Geometry of straight lines:</b> Construct circles and angles using a compass, ruler and protractor; Bisect lines and angles using a pair of compasses and a protractor	95	1–2	80–83	59–60	No. 45a–46 (pp. 98–103)	No. 1–2 (pp. 173–175) No. 1–2 (p. 176)						
15	Construct perpendicular lines at a given point or from a given point	95	3	84–85	61	No. 47 (pp. 104–105)	No. 1–2 (p. 177) No. 1–2 (p. 178)						
Note	: 1. Refer to Day 11: Supplement this section with a workshe 2. Refer to Day 14: Learners must have ruler, sharp pencil,	eet. compass, prc	otractor for o	constructions.									
			Reflec	tion									
Reflection         Think about and make a note of: What 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?													

Date:

	Premier Mathematics Week 4												
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		С	lass			
						workbook							
								D	ate co	omplete	ed		
16	Construct angles of 30°, 45° and 60° and their multiples without using a protractor	95	7	88	64–65	No. 48a–48b (pp. 106–109)	No. 1–3 (p. 179) No. 1–2 (p. 180) No. 1–2 (pp. 181–182)						
17	Recognise and describe pairs of angles formed by perpendicular and intersecting lines	98	1	103–104	71	No. 61 (pp. 140–141)	No. 1–2 (pp. 211–213) No. 1–3 (p. 214) No. 1–5 (pp. 215–216)						
18	Recognise and describe pairs of angles formed by perpendicular and intersecting lines cont. (use DBE Workbook)	98				No. 62 (pp. 142–143)	No. 1–2 (p. 216) No. 1–3 (p. 217) No. 1–6 (pp. 218–219)						
19	Recognise and describe pairs of angles formed by parallel lines cut by a transversal	98	2	104–108	72		No. 1–3 (pp. 219–221) No. 1–5 (p. 221) No. 1–3 (pp. 222–223) No. 1–5 (pp. 223–224)						
20	Solve geometric problems using the relationships between pairs of angles	98	3 (no. 1a–f)	108–109	73		No. 1–5 (pp. 224–225) No. 1–3 (p. 226)						

Reflection											
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?	What will you change next time? Why?										
	HOD: Date:										

Premier Mathematics Week 5											
		i i cinici	*Selec	it							
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		С	lass	
						workbook					
								Da	ate co	omplete	d
21	Solve geometric problems using the relationships between pairs of angles cont.	98	3 (no. 1g–p)	109–110	73		No. 1–7 (pp. 227–228)				
22	Solve geometric problems using the relationships between pairs of angles cont.	98	3 (no. 2)	110–111	73–74						
23	Solve geometric problems using the relationships between pairs of angles cont.	98	3 (no. 3–5)	111–113	74–75						
24	<b>Formal assessment: Test</b> (use questions extracted from the Term 2 mid-year examination to set own test)				80–82* Memo 82–83						
25	<b>Constructions and Geometry of 2-D shapes:</b> Construct triangles given its three sides; Construct triangles given two sides and the included angle	95	4–5	85–87	62–63		No. 1–5 (pp. 182–185)				
Note	: Refer to Day 25: Learners must have ruler, sharp pencil, co	mpass, protra	actor for cons	structions.		,					
			Reflecti	on							
Think the le exten get b	a <b>bout and make a note of:</b> What went well? What did not arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	nat did Moport or vill you	/hat will you	change next	time? Why?						
			н	OD:				Date:			

	Premier Mathematics Week 6												
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo			Class			
						WORKDOOK			<b>.</b>		1.4.4		
26	By construction, investigate the angles in a triangle; Go over test done previously	95	8	89–90	65–66	No. 49 (pp. 110–111)	No. 1–3 (p. 185) No. 1–2 (p. 186) No. 1–2 (p. 186)		Jate	comp	letec		
27	Formal assessment: Investigation		Inv.	114–115	76–77								
28	Identify and write clear definitions of triangles	96	1	93–94	68		No. 1–2 (p. 193) No. 1–4 (p. 194) No. 1–2 (pp. 194–195)						
29	Go over investigation; Discuss findings and compare to definitions written up in previous lesson	96											
30	Solve problems involving triangles (use Sasol Inzalo Mathematics book)	96					No. 1–6 (pp. 195–197) No. 1–9 (pp. 197–199)						
		•	Reflect	tion	1								
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?					change next	time? Why?							
			ŀ	HOD:				Date	:				

	Premier Mathematics Week 7													
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo			Class				
						WORKDOOK		_						
31	Construct quadrilaterals	95	6	87–88	63–64		No. 1–2 (pp. 187–188) No. 1–2 (p. 188) No. 1–3 (p. 189)		Date	comp	leted			
32	By construction, investigate sides and angles in quadrilaterals	95	9	90–92	67	No. 50a–50b (pp. 112–115)	Worksheet (p. 190)							
33	Identify and write clear definitions of quadrilaterals	96	2	95–96	68–69	No. 57 (pp. 130–131)	No. 1–3 (pp. 200–203)							
34	Discuss similar and congruent 2-D shapes; Solve problems involving similar and congruent figures (use <i>Sasol Inzalo Mathematics</i> book)	97	3	97–98	69	No. 54 (pp. 122–123)	No. 1–3 (p. 205) No. 1–4 (p. 206) No. 1–2 (pp. 207–208) No. 1–4 (pp. 208–209)							
35	Solve geometric problems involving unknown sides and angles in triangles and quadrilaterals	97	4 (no. 1–4)	98–101	69–70	No. 58–59 (pp. 132–135)	No. 1–5 (pp. 204–205)							
			Reflect	ion										
Think the le exten get b	a <b>about and make a note of:</b> What went well? What did not earners find difficult or easy to understand or do? What will y id learners? Did you complete all the work set for the week? ack on track?	: go well? Wh ou do to sup If not, how v	nat did V oport or vill you	Vhat will you	change next	time? Why?								
			F	IOD:				Date	:					

		Premier	Mathema *Selec	a <b>tics We</b>	ek 8							
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo			Class		
						workbook						
									Date	comp	leted	
36	Solve geometric problems involving unknown sides and angles in triangles and quadrilaterals cont.; Revise geometry of 2-D shapes	97	4 (no. 5–10) 2	101–102 117–118	71	No. 60a–60b (pp. 136–139)	Worksheet (p. 210) No. 1–4 (p. 229) Worksheet (p. 230)					
37	<b>The Theorem of Pythagoras:</b> Develop the Theorem of Pythagoras	105	1	142–143	95	No. 77–78 (pp. 32–35)	No. 1–6 (pp. 41–45)					
38	Use the Theorem of Pythagoras to determine whether a triangle is a right-angled triangle		No. 1–4 (pp. 51–52)									
39	Use the Theorem of Pythagoras to calculate the missing length in a right-angled triangle; Use the Theorem of Pythagoras to solve problems in different contexts	105	3         144–146         96–97         No. 79         No. 1–4         (pp. 46–48)         No. 1–5         (pp. 48–49)         (pp. 48–49)         (pp. 48–49)         (pp. 48–49)         (pp. 48–40)         (pp. 48–40)									
40	Revise the Theorem of Pythagoras (use Sasol Inzalo Mathematics Book 2 or DBE Workbook 2)	105				No. 80–81* (pp. 38–41)	No. 1–5 (pp. 50–51)					
Note	: The Theorem of Pythagoras is found in Sasol Inzalo Mathe	matics Book	2 and in the	DBE Workbo	ook 2. (It is ta	ught in Term 3 ac	cording to the C/	APS.)				
			Reflect	ion								
Think the le exten get b	a <b>about and make a note of:</b> What went well? What did not earners find difficult or easy to understand or do? What will y id learners? Did you complete all the work set for the week? ack on track?	nat did M port or vill you	Vhat will you (	change next	time? Why?							
			н	IOD:				Date	:			

	Premier Mathematics Week 9: Catch-up and revision (examination preparation) – plan your week												
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		1	Class				
						WORKDOOK					4 - 4		
41									Date	compie	ted		
42													
43													
44													
45													
		Reflect	lection										
the le exten get b	arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	port or vill you											
			F	IOD:				Date	:				

Premier Mathematics Wee	ek 10: Mid-year examination
End-of-tern	n reflection
Think about and make a note of: <ol> <li>Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</li> </ol>	3. What ONE change should you make to your teaching practice to help you teach more effectively next term?
2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?	4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in the future? What plan will you make to get back on track?
HOD:	Date:

## **Spot On Mathematics**

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 Mathematics* Book 1 link to related content (worksheet and page numbers are referenced).
- 9. Date completed.

Where appropriate, notes to support your teaching in a particular week are provided in the last row of the table for that week.

#### Weekly reflection

The tracker gives you space to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and 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 could teach it effectively?

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

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

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

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

	Spot On Mathematics       Week 1         ay       CAPS concepts and skills       CAPS pp.       LB act.       LB pp.       TG pp.       DBE       Sasol Inzalo       Class													
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE	Sasol Inzalo	Class Date complete						
						WORKDOOK								
								D	Date co	omple	eted			
1														
2														
3	Algebraic expressions: Revision of algebraic language	92	8.1	100–101	129–131		No. 1–7 (pp. 145–150)							
4	Expand and simplify algebraic expressions: Multiplication	92	8.2 (no. 1–3)	102–104	132–133	No. 40 (pp. 88–89)	No. 1–5 (pp. 150–151)							
5	Expand and simplify algebraic expressions: Multiplication	92	8.2 (no. 4–7)	104	133–134		No. 1–3 (pp. 152–153)							
Note	Refer to Day 4 and 5: Use a set of cards showing algebraic	questions an	nd answers.								·			
			Reflecti	on										
the le exten get b	arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	port or vill you												
			Н	OD:				Date:						

	Spot On Mathematics Week 2													
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE	Sasol Inzalo			Class				
						WORKDOOK			Data		atad			
6	Expand and simplify algebraic expressions: Division	93	8.3 (no. 1–2)	105–106	135	No. 39 (pp. 86–87)	No. 4–8 (pp. 153–154)		Jate					
7	Expand and simplify algebraic expressions: Division	93	8.3 (no. 3–5)	106	136		No. 4–9 (pp. 157–159)							
8	Determine the squares, cubes, square roots and cube roots of single algebraic terms or like algebraic terms	93	8.4	107–108	137–138	No. 41 (pp. 90–91)	No. 1–6 (pp. 160–161) No. 1–9 (pp. 162–163)							
9	Determine the numerical value of algebraic expressions by substitution	93	8.5	110	139		No. 1–3 (pp. 155–157)							
10	Simplify algebraic expressions using different operations	93	Rev.	112	141–142	No. 42 (pp. 92–93) No. 43–44 (pp. 94–97)	Worksheet (p. 164)							
			Reflect	ion		1					I			
Think the le exter get b	Reflection         Think about and make a note of: What 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?													
		F	IOD:				Date							

	Spot On Mathematics       Week 3         ay       CAPS concepts and skills       CAPS pp.       LB act.       LB pp.       TG pp.       DBE       Sasol Inzalo       Class													
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE	Sasol Inzalo		С	lass				
						WOIKDOOK					latad	1		
11	<b>Algebraic equations:</b> Set up equations to describe problem situations; Analyse and interpret equations that describe a given situation; Solve equations by inspection	94	9.1	114–115	143–145		No. 1–14 (pp. 165–169)				eteu			
12	Solve equations using additive and multiplicative inverses	94	9.2	116–117	146–148		No. 1–8 (pp. 170–172)							
13	Solve equations using laws of exponents	94	9.3 Rev. (no. 5)	118 121	149 152		No. 1–3 (p. 172)							
14	<b>Constructions and Geometry of straight lines:</b> Measure and construct angles using a protractor	95	10.1	124–126	156–157	No. 45–46 (pp. 98–103)								
15	Bisect lines and angles using a pair of compasses and a protractor; Construct angles of 30°, 45° and 60° and their multiples without using a protractor	95	10.2	127–129	158	No. 48a–48b (pp. 106–109)	No. 1–2 (pp. 173–175) No. 1–2 (p. 176) No. 1–3 (p. 179) No. 1–2 (p. 180) No. 1–2 (pp. 181–182)							
Note	: Refer to Day 14: Learners must have ruler, sharp pencil, co	mpass, protra	actor for cor	nstructions.										
			Reflect	tion										
Think the le exter get b	a <b>about and make a note of:</b> What went well? What did not earners find difficult or easy to understand or do? What will y id learners? Did you complete all the work set for the week? ack on track?	What will you	change next	time? Why?										
			1	HOD:				Date:						

	Spot On Mathematics       Week 4         Day       CAPS concepts and skills       CAPS pp.       LB act.       LB pp.       TG pp.       DBE       Sasol Inzalo       Class													
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE	Sasol Inzalo			Class				
						WORKDOOK			<b>.</b>					
16	Construct perpendicular lines at a given point or from a given point (use DBE Workbook or Sasol Inzalo Mathematics book)	95				No. 47 (pp. 104–105)	No. 1–2 (p. 177) No. 1–2 (p. 178)		Jate	comp	Dieted			
17	Recognise and describe pairs of angles formed by perpendicular and intersecting lines	98	12.1	156–157	179–181	No. 61 (pp. 140–141)	No. 1–2 (pp. 211–213) No. 1–3 (p. 214) No. 1–5 (pp. 215–216)							
18	Recognise and describe pairs of angles formed by parallel lines cut by a transversal cont.	98	12.2	158–159	182–183	No. 62 (pp. 142–143)	62 2–143) (pp. 219–221) No. 1–5 (p. 221) No. 1–3 (pp. 222–223) No. 1–5 (pp. 223–224)							
19	Solve geometric problems using the relationships between pairs of angles	98	12.3 (no. 1)	160–161	184		No. 1–5 (pp. 224–225) No. 1–3 (p. 226)							
20	Solve geometric problems using the relationships between pairs of angles cont.	98	12.3 (no. 2–3)	161	185									
		1	Reflec	tion	1	1		1 1			I			
Think the le exten get b	<b>a about and make a note of:</b> What went well? What did not earners find difficult or easy to understand or do? What will y ad learners? Did you complete all the work set for the week? ack on track?	nat did port or vill you	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	Sasol Inzalo		Clas	5				
						WORKDOOK								
21	Solve geometric problems using the relationships between pairs of angles cont. (use <i>Sasol Inzalo</i> <i>Mathematics</i> book)	98					No. 1–7 (pp. 227–228)							
22	Solve geometric problems using the relationships between pairs of angles cont.	98	Rev. (no. 1–4)	163	187									
23	<b>Formal assessment: Test</b> (use questions extracted from Term 2 end-of-term assessment to set your own test)				188–189 Memo 190–191									
24	<b>Constructions and Geometry of 2-D shapes:</b> By construction, investigate the angles in a triangle	95	10.3 (no. 1–3)	130–132	159	No. 49 (pp. 110–111)	No. 1–5 (pp. 182–185)							
25	By construction, investigate the angles in a triangle cont.	95	10.3 (no. 4–7)		159–160		No. 1–3 (p. 185) No. 1–2 (p. 186) No. 1–2 (p. 186)							
Note	Refer to Day 24: Learners must have ruler, sharp pencil, co	mpass, protra	actor for cons	structions.		·				· ·				
Think the le exter get b	Note: Refer to Day 24: Learners must have ruler, sharp pencil, compass, protractor for constructions.  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?													
			н	IOD:				Date:						

	Spot On Mathematics       Week 6         Day       CAPS concepts and skills       CAPS pp.       LB act.       LB pp.       TG pp.       DBE       Sasol Inzalo       Class													
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE	Sasol Inzalo		Class					
						WORKDOOK								
								Date	comp	leted				
26	Identify and write clear definitions of triangles; Go over test done in previous week	96	11.1	142–143	168–169		No. 1–2 (p. 193) No. 1–4 (p. 194) No. 1–2 (pp. 194–195)							
27	Solve problems involving triangles (use Sasol Inzalo Mathematics book)	97					No. 1–6 (pp. 195–197) No. 1–9 (pp. 197–199)							
28	Similar and congruent 2-D shapes: Investigation – Group work	97	Inv.	147–148	172–173	No. 56 (pp. 128–129)	No. 1–3 (p. 205) No. 1–4 (p. 206) No. 1–2 (pp. 207–208)							
29	Similar and congruent 2-D shapes	97	11.3	149	173	No. 54–55b (pp. 122–127)	No. 1–4 (pp. 208–209)							
30	By construction, investigate sides and angles in quadrilaterals	95	10.4 (no. 1–2)	133–134	161		No. 1–2 (pp. 187–188) No. 1–2 (p. 188) No. 1–3 (p. 189)							
Note	: Refer to Day 28: Provide cardboard to cut out congruent tr	riangles.												
	Reflection													
Think the le exter get b	hink about and make a note of: What went well? What did not go well? What did ne learners find difficult or easy to understand or do? What will you do to support or ktend learners? Did you complete all the work set for the week? If not, how will you et back on track?													
			F	IOD:				Date:						

	Spot On Mathematics Week 7													
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE	Sasol Inzalo			Class				
						WORKBOOK			Date	comp	letec	4		
31	By construction, investigate sides and angles in quadrilaterals cont.	95	10.4 (no. 4–7)	135	161		Worksheet (p. 190)			<u></u>		-		
32	Identify and write clear definitions of quadrilaterals	96	11.2	144–146	170–171	No. 50a–50b (pp. 112–115)	No. 1–3 (pp. 200–203)							
33	Solve geometric problems involving unknown sides and angles in triangles and quadrilaterals	97	11.4	150–151	174–175		No. 1–5 (pp. 204–205)							
34	Solve geometric problems involving unknown sides and angles in triangles and quadrilaterals cont. (use <i>DBE Workbook</i> )	97				No. 57 (pp. 130–131)	Worksheet (p. 210)							
35	Formal assessment: Investigation		lnv.	136–137	162–163									
		Reflect	ion											
the le exten get b	arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	port or vill you												
		н	IOD:				Date							

	Spot On Mathematics Week 8													
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE	Sasol Inzalo		(	Class				
						WOIKDOOK			ato (	comp	latad			
36	Go over findings from investigation; Revise Geometry of 2-D shapes	97	Rev.	153	177	No. 58–59 (pp. 132–135) No. 60a–60b (pp. 136–139) No. 63 (pp. 144–145)	No. 1–4 (p. 229) Worksheet (p. 230)		ate	.01110	leteu			
37	<b>The Theorem of Pythagoras:</b> Develop the Theorem of Pythagoras	105	15.1	196–197	235–237	No. 77–78 (pp. 32–35)	No. 1–6 (pp. 41–45)							
38	Use the Theorem of Pythagoras to determine whether a triangle is a right-angled triangle	105	15.2 (no. 3)	198–199	239		No. 1–4 (pp. 51–52)							
39Use the Theorem of Pythagoras to determine the length of an unknown side in a triangle10515.2 (no. 1-2)198–199238No. 79 (pp. 36–37)No. 1-4 (pp. 46–48) No. 1-5 (pp. 48–49)No. 1-5 (pp. 48–49)														
40	Use the Theorem of Pythagoras to solve problems in different contexts; Revise the Theorem of Pythagoras	105	15.3 Rev.	200–201 203–204	240–241 243–244	No. 80–81 (pp. 38–41)	No. 1–5 (pp. 50–51)							
Note	The Theorem of Pythagoras is found in Sasol Inzalo Mathe	matics Book	2 and in the	DBE Workbo	ook 2. (It is ta	ught in Term 3 ac	cording to the C	APS.)						
			Reflect	ion										
Think the le exten get b	Think about and make a note of: What went well? What did not go well? What did       What will you change next time? Why?         Private of the weak of the weak of the weak? If not, how will you get back on track?       What will you change next time? Why?													
			Date:											

Spot On Mathematics Week 9: Catch-up and revision (examination preparation) – plan your week											
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE	Sasol Inzalo	Class			
						WORKDOOK					
41									Date	comple	ted
41											
42											
43											
44											
45											
Reflection											
the le exten get b	arners find difficult or easy to understand or do? What v d learners? Did you complete all the work set for the we ack on track?	/ill you do to sup ek? If not, how v	oport or will you								
					HOD: D				Date:		

Spot On Mathematics Week 10: Mid-year examination									
End-of-term reflection									
Think about and make a note of: <ol> <li>Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</li> </ol>	3. What ONE change should you make to your teaching practice to help you teach more effectively next term?								
2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?	4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in the future? What plan will you make to get back on track?								
HOD:	Date:								

## **Platinum Mathematics**

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 Mathematics* Book 1 link to related content (worksheet and page numbers are referenced).
- 9. Date completed.

Where appropriate, notes to support your teaching in a particular week are provided in the last row of the table for that week.

#### Weekly reflection

The tracker gives you space to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and 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 could teach it effectively?
- Did the purpose of the lesson succeed? For instance, did the learners reach

a good understanding of the key concepts for the day? Could they use the language expected from them? Could they write what was expected from them?

- Did the learners cope with the work set for the day? For instance, did they finish the classwork? Was their classwork done adequately? Did you assign the homework?
- Are your Learners' Books up to date?
- Does what the learners have done in their books correlate with the tracked comments in the tracker?

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

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

The reflection should be based on the daily lessons you have taught each week. It will provide you with a record for the next time you implement the same lesson, 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	Sasol Inzalo		Class				
						workbook							
								Date	comp	leted			
1													
2													
3	<b>Algebraic expressions:</b> Recognise and interpret rules or relationships and simplify algebraic expressions	92	8.1	74–75	36–37	No. 1 (pp. 2–3)	No. 1–7 (pp. 145–150)						
4	Recognise and identify coefficients and exponents in algebra	92	8.2–8.3	76–77	37–38		No. 1–5 (pp. 150–151)						
5	Add and subtract like terms in algebraic expressions	92	8.4#	77–78	38	No. 40 (pp. 88–89)	No. 1–3 (pp. 152–153)						
Note	Refer to Day 3: Put a chart on the classroom wall, showing	various polyr	nomials.			1	1						
			Reflect	ion									
the le exten get b	arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	ou do to sup If not, how w	port or vill you			unie: wny:							
			ŀ	IOD:			Ι	Date:					

	Platinum Mathematics Week 2											
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		(	Class		1
						WOIKDOOK			)ato (	comp	lotod	1
6	Multiply integers and monomials by monomials, binomials and trinomials	92	8.5	79–80	38		No. 1–3 (pp. 155–157)					
7	Divide monomials by monomials, binomials and trinomials (use DBE Workbook)	93				No. 39 (pp. 86–87)	No. 4–9 (pp. 157–159)					
8	Simplify algebraic expressions using different operations (use DBE Workbook or Sasol Inzalo Mathematics book)	93				No. 42 (pp. 92–93)	No. 4–8 (pp. 153–154)					
9	Simplify algebraic expressions using different operations cont. (use <i>DBE Workbook</i> )				No. 43 (pp. 94–95)							
10	Determine the squares, cubes, square roots and cube roots of single algebraic terms or like algebraic terms (use <i>DBE Workbook</i> or <i>Sasol Inzalo Mathematics</i> book); Revise Algebraic expressions	Rev.	81	38	No. 41 (pp. 90–91) No. 44 (pp. 96–97)	No. 1–6 (pp. 160–161) No. 1–9 (pp. 162–163) Rev. worksheet (p. 164)						
			Reflect	ion								
Think the le exter get b	a <b>bout and make a note of:</b> What went well? What did not arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	t go well? Wh 'ou do to sup ' If not, how w	at did V port or <i>i</i> ll you	What will you	change next	time? Why?						
HOD: Date:												

	Platinum Mathematics Week 3											
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		1	Class		
						WORKDOOK		<u> </u>				
11	Algebraic equations: Set up equations to describe	94	9.1	82–84	39–40		No. 1–14		Date	complet	ed	
	problem situations; Solve equations by inspection; Determine the numerical value of an expression by substitution						(pp. 165–169)					
12	Solve equations using additive and multiplicative inverses and laws of exponents; Set up and solve equations that describe a given situation	94	9.2	85–86	40–41		No. 1–8 (pp. 170–172) No. 1–3 (p. 172)					
13	Revise Algebraic equations	94	Rev.	87	41							
14	<b>Constructions and Geometry of straight lines:</b> Construct perpendicular bisectors	10.1	90–91	44–45	No. 47 (pp. 104–105)	No. 1–2 (pp. 173–175) No. 1–2 (p. 176)						
15	Construct perpendicular lines at a given point or from a given point; Construct angles using a protractor	10.2 (no. 1–2)	92–94	45–46	No. 45a–45b (pp. 98–101)	No. 1–2 (p. 177)						
Note	<ul> <li>s: 1. Refer to Day 12: Provide pairs of scales with different w</li> <li>2. Refer to Day 14: Learners must have ruler, sharp pencil,</li> </ul>	eights to exp compass, pr	lain how to s otractor for o	solve equatic	ons.							
			Reflect	ion								
Think the le exten get b	a <b>bout and make a note of:</b> What went well? What did not arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	t go well? Wh rou do to sup If not, how w	at did V port or /ill you	Vhat will you	change next	time? Why?						
			F	IOD:				Date	•			

		Platinum	Mathem	atics We	eek 4						
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo			Class	
						WOIKDOOK			<b>D</b> -+-		المعدما
16	Construct perpendicular lines at a given point or from a given point; Construct angles using a protractor cont.	95	10.2 (no. 3–4)	92–94	45–46	No. 46 (pp. 102–103)	No. 1–2 (p. 178)		Jate	comp	leted
17	Recognise and describe pairs of angles formed by perpendicular and intersecting lines	98	12.1	132–135	64–65	No. 61 (pp. 140–141)	No. 1–2 (pp. 211–213) No. 1–3 (p. 214)				
18	Recognise and describe pairs of angles formed by parallel lines cut by a transversal	12.2	135–139	65	No. 62 (pp. 142–143)	No. 1–5 (pp. 215–216) No. 1–3 (pp. 219–221) No. 1–5 (p. 221)					
19	Measure and classify angles; Bisect angles; Construct angles of 45° without using a protractor	95	10.3–10.4	95–98	46–47	No. 48a (pp. 106–107)					
20	Construct angles of 30°, 45° and 60° and their multiples without using a protractor	95	10.5	98–99	47–48	No. 48b (pp. 108–109)	No. 1–3 (p. 179) No. 1–2 (p. 180) No. 1–2 (pp. 181–182)				
			Reflect	ion							
Think the le exten get b	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?				change next	time? Why?					
		F	IOD:				Date	:			

	Platinum Mathematics Week 5												
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		(	Class			
						WOIKDOOK					lotor	1	
21	Solve geometric problems using the relationships between pairs of angles	98	12.3	140–142	65–66		No. 1–3 (pp. 222–223) No. 1–5 (pp. 223–224)			Jonip	leteu		
22	Solve geometric problems using the relationships between pairs of angles cont.	98	Rev. (no. 1–3)	143	66		No. 1–5 (pp. 224–225) No. 1–3 (p. 226)						
23	Solve geometric problems using the relationships between pairs of angles cont. (use <i>Sasol Inzalo</i> <i>Mathematics</i> book)					No. 1–7 (pp. 227–228)							
24	<b>Formal assessment: Test</b> (use questions extracted from Formal Assessment Exemplar: Mid-year Examination to set your own test)				152–153 Memo 154–155								
25	<b>Constructions and Geometry of 2-D shapes:</b> By construction, investigate the angles in a triangle	95	10.6–10.7 (no. 1–3)	100–103	49–50	No. 49 (pp. 110–111)	No. 1–5 (pp. 182–185)						
Note	Refer to Day 25: Learners must have ruler, sharp pencil, co	mpass, protra	actor for con	structions.		1							
			Reflect	ion									
Think the le exten get b	a <b>bout and make a note of:</b> What went well? What did no arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	nat did V oport or vill you	Vhat will you	change next	time? Why?								
			н	IOD:				Date:					

	Platinum Mathematics Week 6										
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		Class		
						WORKDOOK					
								Date	completed		
26	By construction, investigate the angles in a triangle cont.; Go over test done in previous week	95	10.7 (no. 4–6)	103	50–51		No. 1–3 (p. 185) No. 1–2 (p. 186) No. 1–2 (p. 186)				
27	Identify and write clear definitions of triangles	96	11.1	110–113	56–57		No. 1–2 (p. 193) No. 1–4 (p. 194)				
28	Solve geometric problems involving unknown sides and angles in triangles	97	11.2	114–116	58		No. 1–2 (pp. 194–195)				
29	Solve geometric problems involving triangles (use <i>Sasol Inzalo Mathematics</i> book)	97					No. 1–6 (pp. 195–197) No. 1–9 (pp. 197–199)				
30	By construction, investigate sides and angles in quadrilaterals	95	10.8 (no. 1–2)	104–106	51–53	No. 50a-50b (pp. 112–115)	No. 1–2 (pp. 187–188) No. 1–2 (p. 188) No. 1–3 (p. 189) Worksheet (p. 190)				
			Reflecti	ion							
Think the le exter get b	a <b>about and make a note of:</b> What went well? What did not earners find difficult or easy to understand or do? What will y ad learners? Did you complete all the work set for the week? ack on track?	nat did Woport or vill you	Vhat will you	change next	time? Why?						
			н	IOD:				Date:			

	Platinum Mathematics Week 7										
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		Class		
						WORKDOOK					
21	<b>Formal according to Investigation</b> (Lee Revision as the		Pov	107	52 54			Dat	e completed		
51	investigation)		Kev.	107	55-54						
32	Go over findings from investigation; Identify and write clear definitions of quadrilaterals in terms of their angles	95–96	11.3	117–119	58–59	No. 57 (pp. 130–131)	No. 1–3 (pp. 200–203)				
33	Identify and write clear definitions of quadrilaterals in terms of their sides	96	11.4–11.5	120–122	59						
34	Discuss similar and congruent 2-D shapes; Solving problems involving similar and congruent figures (use <i>Sasol Inzalo Mathematics</i> book)	97	11.6	123–125	59–60	No. 54–56 (pp. 122–129)	No. 1–3 (p. 205) No. 1–4 (p. 206) No. 1–2 (pp. 207–208) No. 1–4 (pp. 208–209)				
35	Solve geometric problems involving unknown sides and angles in triangles and quadrilaterals	97	11.7 (no. 1–4)	126–128	61–62	No. 58 (pp. 132–133)	No. 1–5 (pp. 204–205)				
			Reflecti	on							
Refle 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?					change next	time? Why?					
		н	OD:				Date:				

		Mathema *Selec	atics We	eek 8							
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		Class	;	
						WOIKDOOK			to com		L
36	Solve geometric problems involving unknown sides and angles in triangles and quadrilaterals cont.; Revise Geometry of 2-D shapes	97	11.7 (no. 5–8) Rev.	128–129 130–131	62 63	No. 59 (pp. 134–135) No. 60a–60b (pp. 136–139)	Worksheet (p. 210) No. 1–4 (p. 229)				
37	<b>The Theorem of Pythagoras:</b> Revision of squares, square roots and surds; Develop the Theorem of Pythagoras	105	15.1* 15.2	176–177	84–87	No. 77–78 (pp. 32–35)	No. 1–6 (pp. 41–45)				
38	Use the Theorem of Pythagoras to calculate the missing length in a right-angled triangle	105	15.3 (no. 1–3)	178–179	87–88	No. 79 (pp. 36–37)	No. 1–4 (pp. 46–48) No. 1–5 (pp. 48–49)				
39	Use the Theorem of Pythagoras to solve problems	105	15.3 (no. 4–8)	179	88–89		No. 1–5 (pp. 50–51)				
40	Use the Theorem of Pythagoras to determine whether a triangle is a right-angled triangle; Revise the Theorem of Pythagoras	105	15.4 Rev.*	180 181	89–90 90–91	No. 80–81 (pp. 38–41)	No. 1–4 (pp. 51–52)				
Note	The Theorem of Pythagoras is found in Sasol Inzalo Mathe	matics Book	2 and in the	DBE Workbo	ook 2. (It is ta	ught in Term 3 ac	cording to the C/	APS.)		·	
			Reflecti	on							
Think the le exten get b	a <b>about and make a note of:</b> What went well? What did not earners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	t go well? Wh 'ou do to sup ' If not, how v	nat did M port or vill you	/hat will you	change next	time? Why?					
			Date:								

	Platinum Mathematics Week 9	: Catch-up	and revis	sion (exan	nination p	reparation) -	- plan your w	eek			
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		Class		
						WORKDOOK					
								Date	e comp	leted	
41											
42											
43											
44											
45											
			Reflect	ion						·	
the le exten get b	arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	νου do to sup If not, how w	port or vill you					Data			
			H	IOD:				Date:			

Platinum Mathematics Week 10: Mid-year examination									
End-of-term reflection									
Think about and make a note of: <ol> <li>Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</li> </ol>	3. What ONE change should you make to your teaching practice to help you teach more effectively next term?								
2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?	4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in the future? What plan will you make to get back on track?								
HOD:	Date:								

## **Oxford Headstart Mathematics**

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 Mathematics* Book 1 link to related content (worksheet and page numbers are referenced).
- 9. Date completed.

Where appropriate, notes to support your teaching in a particular week are provided in the last row of the table for that week.

### Weekly reflection

The tracker gives you space to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and 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 could teach it effectively?

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

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

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

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

	Ox	start Mat	hematics	Week 1					
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE	Sasol Inzalo		Class
						WOIKDOOK			
1								Date	e completed
2									
3	<b>Algebraic expressions:</b> Algebraic language; Recognise and interpret rules or relationships represented in symbolic form	92	1–2	143–145	133–136		No. 1–7 (pp. 145–150)		
4	Add and subtract like terms in algebraic expressions	92	1–2	146–147	136–139	No. 40 (No. 88–89)	No. 1–5 (pp. 150–151)		
5	Multiply integers and monomials by monomials, binomials and trinomials	1–3	148–150	140–143		No. 1–3 (pp. 152–153)			
			Reflect	ion					
the le exter get b	earners find difficult or easy to understand or do? What will y id learners? Did you complete all the work set for the week? ack on track?	port or vill you							
		F	IOD:				Date:		

	Oxt	<b>start Mat</b> #Supple	t <b>hematics</b>	Week 2						
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE	Sasol Inzalo		Class	
						WORKDOOK				
								Da	te complete	ed
6	Divide monomials and binomials by integers or monomials	93	4–5	150–151	143–144		No. 4–9 (pp. 157–159)			
7	Divide trinomials by integers or monomials	93	6	152	144–145	No. 39 (pp. 86–87)				
8	Simplify algebraic expressions using different operations; Simplify expressions involving exponents	93	7–8	152–153	145–146	No. 42 (pp. 92–93)	No. 4–8 (pp. 153–154)			
9	Determine the squares, cubes, square roots and cube roots of single algebraic terms or like algebraic terms	9#	153–154	146–147	No. 41 (pp. 90–91)	No. 1–6 (pp. 160–161) No. 1–9 (pp. 162–163)				
10	Determine the numerical value of algebraic expressions by substitution; Revise algebraic expressions	10 Rev.	154–155 156	147 148	No. 43–44 (pp. 94–97)	No. 1–3 (pp. 155–157) Rev. worksheet (p. 164)				
			Reflect	ion						
Refle 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?					change next	time? Why?				
		ŀ	HOD:				Date:			

	Ox	ford Head	<b>start Mat</b> *Sele	t <b>hematics</b>	Week 3							
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE	Sasol Inzalo			Class		
						workbook						
									Date	comp	leteo	þ
11	<b>Algebraic equations:</b> Solve equations by inspection; Solve equations using additive and multiplicative inverses; Check solutions by substitution	94	1–3*	158–160	149–153		No. 1–14 (pp. 165–169)					
12	Solve equations using additive and multiplicative inverses	94	4–8*	161–163	154–156		No. 1–8 (pp. 170–172)					
13	Set up equations to describe problem situations; Analyse and interpret equations that describe a given situation	94	9–12*	163–168	156–158		No. 1–3 (p. 172)					
14	<b>Constructions and Geometry of straight lines:</b> Measure angles (using a protractor) and determine values of angles (use <i>DBE Workbook</i> )	95				No. 45a–45b (pp. 98–101)						
15	Construct angles using a protractor	95	Mental maths 1	185–186	169–171	No. 46 (pp. 102–103)						
Note	: Refer to Day 14: Learners must have ruler, sharp pencil, co	mpass, protra	actor for con	structions.								
			Reflect	ion								
Think the le exter get b	<b>a about and make a note of:</b> What went well? What did no earners find difficult or easy to understand or do? What will <u>y</u> ad learners? Did you complete all the work set for the week? ack on track?	nat did V port or vill you	Vhat will you	change next	time? Why?							
		ŀ	HOD:				Date	:				

	Ox	ford Head	start Ma	thematics	Week 4					
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE	Sasol Inzalo		Class	
						workbook				
								Dat	e completed	
16	Bisect lines and angles using a pair of compasses and a protractor	95	2	186–189	171–173	No. 47 (pp. 104–105)	No. 1–2 (pp. 173–175) No. 1–2 (p. 176)			
17	Construct perpendicular lines; Construct angles of 30°, 45° and 60° and their multiples without using a protractor	95	3–4	189–191	173–175	No. 48a–48b (pp. 106–109)	No. 1–2 (p. 177) No. 1–2 (p. 178)			
18	Recognise and describe pairs of angles formed by perpendicular and intersecting lines	98	Mental maths 1–2	171–177	161–163	No. 61 (pp. 140–141)	No. 1–2 (pp. 211–213) No. 1–3 (p. 214) No. 1–5 (pp. 215–216)			
19	Recognise and describe pairs of angles formed by intersecting lines cont.	98	3–4	177–179	164–165	No. 62 (pp. 142–143)	No. 1–2 (p. 216) No. 1–3 (p. 217) No. 1–6 (pp. 218–219)			
20	Recognise and describe pairs of angles formed by parallel lines cut by a transversal	98	5–8	180–183	165–168		No. 1–3 (pp. 219–221) No. 1–5 (p. 221) No. 1–3 (pp. 222–223) No. 1–5 (pp. 223–224)			
			Reflect	tion						
Think the le exter get b	a <b>about and make a note of:</b> What went well? What did not earners find difficult or easy to understand or do? What will y id learners? Did you complete all the work set for the week? eack on track?	t go well? Wh you do to sup ? If not, how v	nat did \ oport or vill you	What will you	change next	time? Why?				
			H	HOD:				Date:		

	Ox	ford Head	start Mat	hematics	Week 5						
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE	Sasol Inzalo			Class	
						WOIKDOOK			Data		latad
21	Solve geometric problems using the relationships between pairs of angles	98	8 (no. 3–4)	184	168				Jate	comp	
22	Solve geometric problems using the relationships between pairs of angles cont.	98	Rev. (no. 2–4)	224	200–201		No. 1–7 (pp. 227–228)				
23	Solve geometric problems using the relationships between pairs of angles cont. (use <i>Examination</i> <i>Exemplar</i> )	98	1-4	227	203–204						
24	<b>Formal assessment: Test</b> (use questions selected from Examination Exemplar 2 November: Additional Paper 3)				381–386 Memo 386–390						
25	<b>Constructions and Geometry of 2-D shapes:</b> By construction, investigate the angles in a triangle	95	1–2	193–194	176–177		No. 1–5 (pp. 182–185)				
Note	Refer to Day 25: Learners must have ruler, sharp pencil, co	mpass, protra	actor for con	structions.							
			Reflect	ion				_			
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?					change next	ume: wny:					
		н	IOD:				Date	:			

	Ox	ford Head	start Mat	thematics	Week 6					
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE	Sasol Inzalo		Class	
						workbook				
								Date	completed	
26	Investigate the angles in a triangle cont.	95	3	194	177–178	No. 49 (pp. 110–111)	No. 1–3 (p. 185) No. 1–2 (p. 186) No. 1–2 (p. 186)			
27	Identify and write clear definitions of triangles	96	1–2	202–204	183–185		No. 1–2 (p. 193) No. 1–4 (p. 194) No. 1–2 (pp. 194–195)			
28	Solve geometric problems involving unknown sides and angles in triangles	97	3	204–208	185–188		No. 1–6 (pp. 195–197) No. 1–9 (pp. 197–199)			
29	Construct quadrilaterals	95	5	191–192	174–175		No. 1–2 (pp. 187–188) No. 1–2 (p. 188) No. 1–3 (p. 189)			
30	Investigate sides and angles of quadrilaterals	96	4–6	196–198	178–180	No. 50a–50b (pp. 112–115)	No. 1–5 (pp. 204–205)			
			Reflect	tion						
Think the le exten get b	a <b>about and make a note of:</b> What went well? What did not arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	What will you	change next	time? Why?						
				Date:						

	Ox	ford Head	<b>start Mat</b> *Select #Sup	t <b>hematics</b>	Week 7						
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE	Sasol Inzalo		С	lass	
						WORKDOOK					
								D	ate c	omplete	ed
31	Revision (use Sasol Inzalo Mathematics book)	96					Worksheet (p. 190)				
32	Identify and write clear definitions of quadrilaterals	96	1–2	209–211	190–191	No. 57 (pp. 130–131)	No. 1–3 (pp. 200–203)				
33	Discuss polygons; <b>Formal assessment: Investigation</b> (Use Investigating the sum of interior angles of polygons)		7 Inv.	199–201	180–182						
34	Solve geometric problems involving unknown sides and angles in quadrilaterals; Go over investigation	97	3#	211–212	191–192	No. 60a–60b (pp. 136–139)	No. 1–5 (pp. 204–205)				
35	Discuss similar and congruent 2-D shapes; Investigate conditions for congruent triangles and identify congruent triangles	97	1–7*	213–220	193–198	No. 54 (pp. 122–123) No. 55a–55b (pp. 124–127) No. 57 (pp. 130–131)	No. 1–3 (p. 205) No. 1–4 (p. 206) No. 1–2 (pp. 207–208)				
			Reflect	ion							
Think the le exten get b	a <b>about and make a note of:</b> What went well? What did no arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	nat did V port or vill you	What will you	change next	time? Why?						
			ŀ	HOD:				Date:			

	Ox	ford Head	<b>start Ma</b> Select #Su	thematics	Week 8						
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE	Sasol Inzalo		C	lass	
						WORKDOOK					
								Da	ate co	omplet	ed:
36	Investigate conditions for similarity; Revise Geometry of 2-D shapes (use <i>Sasol Inzalo Mathematics</i> book)	97	8–9* Rev.	220–225	198–201	No. 56 (pp. 128–129)	No. 1–4 (pp. 208–209) Worksheet (p. 210) No. 1–4 (p. 229) Worksheet (p. 230)				
37	<b>The Theorem of Pythagoras:</b> Develop the Theorem of Pythagoras	105	1	268–269	247–249	No. 77–78 (pp. 32–35)	No. 1–6 (pp. 41–45)				
38	Use the Theorem of Pythagoras to determine whether a triangle is a right-angled triangle	No. 1–4 (pp. 51–52)									
39	Use the Theorem of Pythagoras to calculate the missing length in a right-angled triangle	No. 79 (pp. 36–37)	No. 1–4 (pp. 46–48) No. 1–5 (pp. 48–49)								
40	Revise the Theorem of Pythagoras (use Sasol Inzalo Mathematics Book 2 or DBE Workbook 2)	105				No. 80–81* (pp. 38–41)	No. 1–5 (pp. 50–51)				
Note	: The Theorem of Pythagoras is found in Sasol Inzalo Mathe	matics Book	2 and in the	e DBE Workbo	ook 2. (It is ta	ught in Term 3 ac	cording to the CA	APS.)			
			Reflec	tion							
Think the le exten get b	a <b>about and make a note of:</b> What went well? What did no earners find difficult or easy to understand or do? What will y ad learners? Did you complete all the work set for the week? ack on track?	at did port or vill you	What will you	change next	time? Why?						
HOD: Date:											

	Oxford Headstart Mathematics We	ek 9: Cato	ch-up and	revision (	examinati	on preparati	on) – plan yo	ur w	veek		
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE	Sasol Inzalo			Class	
						WOIKDOOK			Data		latad
41									Date	comp	leted
42											
43											
44											
45											
			Reflect	ion	1		1	1			
the le exten get b	arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	vou do to sup 9 If not, how v	port or vill you								
			F	IOD:				Date	:		

Oxford Headstart Mathematics	Week 10: Mid-year examination
End-of-ter	n reflection
Think about and make a note of: <ol> <li>Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</li> </ol>	3. What ONE change should you make to your teaching practice to help you teach more effectively next term?
2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?	4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in the future? What plan will you make to get back on track?
HOD:	Date:

# **Oxford Successful Mathematics**

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 Mathematics Book 1 link to related content (worksheet and page numbers are referenced).
- 9. Date completed.

Where appropriate, notes to support your teaching in a particular week are provided in the last row of the table for that week.

### Weekly reflection

The tracker gives you space to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and 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 could teach it effectively?

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

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

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

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

	Ox	<b>ssful Ma</b> #Supplei	thematics	Week 1						
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		Class	
						WOIKDOOK				
1								Date	e completed	
2										
3	<b>Algebraic expressions:</b> Multiply integers or monomials by monomials and binomials	92	1–2	113–115	117–119		No. 1–7 (pp. 145–150)			
4	Multiply integers or monomials by trinomials	92	3#	116	119–120	No. 40 (pp. 88–89)	No. 1–5 (pp. 150–151)			
5	Divide monomials and binomials by integers or monomials	93	1–2	117–119	120–122		No. 1–3 (pp. 152–153)			
			Reflect	ion					· · · ·	
the le exten get b	arners find difficult or easy to understand or do? What will d learners? Did you complete all the work set for the week? ack on track?	you do to sup ? If not, how w	port or /ill you							
			ŀ	HOD:				Date:		

	Oxt	essful Mat	hematics	Week 2								
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		C	lass		
						WORKDOOK						
6	Divide trinomials by integers or monomials	93	3	119–120	122	No. 39 (pp. 86–87)	No. 4–9 (pp. 157–159)			ompi	etea	
7	Expand and simplify algebraic expressions using mixed operations	93	1	121–122	123–124		No. 4–8 (pp. 153–154)					
8	Determine the squares, cubes, square roots and cube roots of single algebraic terms or like algebraic terms	93	1–2	123–125	125–127	No. 41 (pp. 90–91)	No. 1–6 (pp. 160–161) No. 1–9 (pp. 162–163)					
9	Determine the numerical value of algebraic expressions by substitution	93	1	126–127	127–128		No. 1–3 (pp. 155–157)					
10	Determine the numerical value of algebraic expressions by substitution cont.; Revise algebraic expressions (use Sasol Inzalo Mathematics book or DBE Workbook )	93	1	126–127	127–128	No. 42–44 (pp. 92–97)	Rev. worksheet (p. 164)					
			Reflect	ion								
Think the le exter get b	a <b>about and make a note of:</b> What went well? What did no parners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	t go well? Wh you do to sup ' If not, how w	at did V port or <i>i</i> ll you	Vhat will you	change next	time? Why?						
			F	IOD:				Date:				

	Oxt	ord Succe	essful Ma	athematics	Week 3						
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		1	Class	
						WORKDOOK					
									Date	complete	ed
11	Algebraic equations: Set up equations to describe problem situations; Solve equations by inspection; Determine the numerical value of an expression by substitution; Solve equations using additive and multiplicative inverses	94	Rev. 1	128–130	129–131		No. 1–14 (pp. 165–169)				
12	Solve equations using laws of exponents	94	1	131–132	131–132		No. 1–8 (pp. 170–172) No. 1–3 (p. 172)				
13	Revise algebraic equations (Consolidation)	94	Cons.	134	132–133						
14	<b>Constructions and Geometry of straight lines:</b> Bisect lines and angles using a pair of compasses; Construct perpendicular lines at a given point or from a given point	1	136–141	134–136	No. 47 (pp. 104–105)	No. 1–2 (pp. 173–175) No. 1–2 (p. 176)					
15	Construct angles using a compass, ruler and protractor/ without a protractor	95	2	141–144	136–137	No. 45a–46 (pp. 98–103)	No. 1–2 (p. 177) No. 1–2 (p. 178)				
Note	Refer to Day 14: Learners must have ruler, sharp pencil, co	mpass, protra	actor for co	nstructions.			·				
			Reflec	tion							
Think the le exter get b	a <b>about and make a note of:</b> What went well? What did not earners find difficult or easy to understand or do? What will y id learners? Did you complete all the work set for the week? ack on track?	nat did port or vill you	What will you	change next	time? Why?						
					Date	•					

	Oxt	ford Succe	essful Ma	thematics	Week 4							
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo			Class		1
						WOIKDOOK			Jato	comp	lotor	1
16	Construct angles using a compass, ruler and protractor/ without a protractor	95	2	141–144	136–137	No. 48a–48b (pp. 106–109)	No. 1–3 (p. 179) No. 1–2 (p. 180) No. 1–2 (pp. 181–182)			comp		
17	Recognise and describe pairs of angles formed by perpendicular and intersecting lines	98	1	183–185	162–164		No. 1–2 (pp. 211–213) No. 1–3 (p. 214)					
18	Recognise and describe pairs of angles formed by intersecting lines cont.	98	2	185–186	164–165		No. 1–5 (pp. 215–216)					
19	Recognise and describe pairs of angles formed by intersecting lines cont.	186–189	165–167		No. 1–2 (p. 216) No. 1–3 (p. 217) No. 1–6 (pp. 218–219)							
20	Solve geometric problems using the relationships between pairs of angles	98	5	189–190	167–169		No. 1–3 (pp. 222–223) No. 1–5 (pp. 223–224)					
Reflection												
Think the le exter get b	a <b>about and make a note of:</b> What went well? What did no earners find difficult or easy to understand or do? What will y ad learners? Did you complete all the work set for the week? ack on track?	nat did N port or <i>i</i> ill you	What will you	change next	time? Why?							
HOD: Date:												

	Oxt	essful Mat	thematics	Week 5								
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo	zalo Class				
						WOIKDOOK			) ato (	comp	latad	
21	Recognise and describe pairs of angles formed by parallel lines cut by a transversal	98	Inv. 1 Inv. 2	191–195	169–172	No. 61 (pp. 140–141) No. 62 (pp. 142–143)	No. 1–3 (pp. 219–221) No. 1–5 (p. 221)			.omp	leteu	
22	Recognise and describe pairs of angles formed by parallel lines cut by a transversal cont.	98	Inv. 3	195–197	172–174							
23	Solve geometric problems using the relationships between pairs of angles	98	4	197–199	174–176	No. 63 (pp. 144–145)	No. 1–5 (pp. 224–225) No. 1–3 (p. 226)					
24	Solve geometric problems using the relationships between pairs of angles cont. (use <i>Sasol Inzalo</i> <i>Mathematics</i> book)	98					No. 1–7 (pp. 227–228)					
25	<b>Formal assessment: Test</b> (select questions from <i>Control Test 2</i> and supplement with other questions)				340–341 Memo 342–343							
			Reflect	ion	-							
Think the le exter get b	a <b>about and make a note of:</b> What went well? What did not earners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	at did V port or <i>i</i> ll you	Vhat will you	change next	time? Why?							
		F	IOD:				Date:					

Oxford Successful Ma					Week 6					
Day CAPS concepts and skills CAPS pp.			LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		Class	
						workbook				
								Date	comp	leted
26	<b>Constructions and Geometry of 2-D shapes:</b> Investigate properties of triangles	95–96	1	145–147	137–138		No. 1–5 (pp. 182–185)			
27	By construction, investigate the angles in a triangle	95	Inv.	147–148	138–139		No. 1–3 (p. 185) No. 1–2 (p. 186) No. 1–2 (p. 186)			
28	Identify and write clear definitions of triangles; Solve geometric problems involving unknown sides and angles in triangles	96	1–2	161–164	148–150		No. 1–2 (p. 193) No. 1–4 (p. 194) No. 1–2 (pp. 194–195) No. 1–6 (pp. 195–197)			
29	Solve geometric problems involving unknown sides and angles in triangles cont.	97	3	164–167	150–152		No. 1–9 (pp. 197–199)			
30	By construction, investigate sides and angles in quadrilaterals	95	1	153–156	143–144	No. 50a–50b (pp. 112–115)	No. 1–2 (pp. 187–188) No. 1–2 (p. 188) No. 1–3 (p. 189) Worksheet (p. 190)			
Note	Refer to Day 26: Learners must have ruler, sharp pencil, co	mpass, protra	actor for con	structions.						
			Reflect	ion						
Think the le exter get b	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?			Vhat will you	change next	time? Why?				
			ŀ	HOD:				Date:		

Oxford Successful Ma					Week 7						
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		(	Class	
						workbook			Date comple		
								D	Date o	complet	ted
31	Formal assessment: Investigation		Inv. 2	156–157	144–146						
32	Go over findings from investigation; Identify and write clear definitions of quadrilaterals	96	1	168–171	152–153	No. 57 (pp. 130–131)	No. 1–3 (pp. 200–203)				
33	Solve geometric problems involving unknown sides and angles in quadrilaterals	97	2	171–172	154	No. 58–59 (pp. 132–135)	No. 1–5 (pp. 204–205)				
34	Solve geometric problems involving unknown sides and angles in quadrilaterals cont.	97	3	172–173	155–156	No. 60a–60b (pp. 136–139)	Worksheet (p. 210)				
35	By construction, investigate congruent triangles; Discuss congruent 2-D shapes	1 Inv. 1–2	149–151 174–177	140–141 156–158	No. 54–55b (pp. 122–127)	No. 1–3 (p. 205) No. 1–4 (p. 206) No. 1–2 (pp. 207–208)					
			Reflect	ion							
Think the le exter get b	a <b>about and make a note of:</b> What went well? What did not parners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	at did V port or <i>i</i> ll you	Vhat will you	change next	time? Why?						
			F	IOD:				Date:			

Oxford Successful Ma					Week 8							
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo			Class		
						WORKDOOK						
36	By construction, investigate similar Triangles; Discuss similar 2-D shapes; Revise Geometry of 2-D shapes (use Sasol Inzalo Mathematics book)	95 97	2 Inv. 3–4	151–152 177–179	142–143 158–160	No. 56 (pp. 128–129)	No. 1–4 (pp. 208–209) No. 1–4 (p. 229) Worksheet (p. 230)		Date	comp	letec	2
37	<b>The Theorem of Pythagoras:</b> Develop the Theorem of Pythagoras	105	1–2	248–250	217–219	No. 77–78 (pp. 32–35)	No. 1–6 (pp. 41–45)					
38	Use the Theorem of Pythagoras to determine whether a triangle is a right-angled triangle	105	3	251	220–221		No. 1–4 (pp. 51–52)					
39	Use the Theorem of Pythagoras to calculate the missing length in a right-angled triangle	105	1 (no. 1–5)	252–254	221–223	No. 79 (pp. 36–37)	No. 1–4 (pp. 46–48) No. 1–5 (pp. 48–49)					
40	Use the Theorem of Pythagoras to calculate the missing length in a right-angled triangle; Revise the Theorem of Pythagoras	105	1 (no. 6–7) 2 Cons.	254–255 257	223–225 225–226	No. 80–81 (pp. 38–41)	No. 1–5 (pp. 50–51)					
Note	The Theorem of Pythagoras is found in Sasol Inzalo Mathe	matics Book	2 and in the	DBE Workbo	ook 2. (It is ta	ught in Term 3 ac	cording to the C	APS.)	1			L
			Reflect	ion								
Think the le exten get b	a <b>about and make a note of:</b> What went well? What did no arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	nat did V port or vill you	Vhat will you	change next	time? Why?							
		IOD:				Date	•					

	Oxford Successful Mathematics We	ek 9: Cato	ch-up and	revision (	examinati	ion preparati	on) – plan yo	ur weel	<b>‹</b>			
Day	Day CAPS concepts and skills		LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		Class			
						WORKDOOK						
								Date	comple	eted		
41												
42												
43												
44												
45												
	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?												
			H	IOD:				Date:				

Oxford Successful Mathematics	Week 10: Mid-year examination
End-of-terr	n reflection
Think about and make a note of: <ol> <li>Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</li> </ol>	3. What ONE change should you make to your teaching practice to help you teach more effectively next term?
2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?	4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in the future? What plan will you make to get back on track?
HOD:	Date:

## **Clever: Keeping Maths Simple**

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 Mathematics* Book 1 link to related content (worksheet and page numbers are referenced).
- 9. Date completed.

Where appropriate, notes to support your teaching in a particular week are provided in the last row of the table for that week.

### Weekly reflection

The tracker gives you space to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and 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 could teach it effectively?

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

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

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

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

	Cle	ever: Keep	oing Math	s Simple	Week 1							
Day CAPS concepts and skills		CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		Clas	s		
						WORKDOOK						
1								Da	te com	pleted		
2												
3	<b>Algebraic expressions:</b> Recognise and interpret rules or relationships represented in symbolic form	92	What you	109–110	94–103		No. 1–7 (pp. 145–150)					
4	Recognise and identify conventions for writing algebraic expressions	92	1	111–113	103		No. 1–5 (pp. 150–151)					
5	Add and subtract like terms in algebraic expressions	2 (no. 1–5)	113–116	103–104	No. 40 (pp. 88–89)	No. 1–3 (pp. 152–153)						
	Reflection											
the le exter get b	arners find difficult or easy to understand or do? What will y id learners? Did you complete all the work set for the week? ack on track?	port or vill you										
		н	OD:				Date:					

	Cle	oing Math	s Simple	Week 2								
Day CAPS concepts and skills CAPS p			LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		C	lass		
						WORKDOOK					atad	
6	Add and subtract like terms in algebraic expressions	92	2 (no. 6–11)	116–117	104–105		No. 4–8 (pp. 153–154)					
7	Multiply integers and monomials by monomials, binomials and trinomials	92	3 (no. 1–6)	117–118 120	105–106							
8	Divide monomials, binomials and trinomials by integers or monomials	93	3 (no. 7–12)	118–119 121	106	No. 39 (pp. 86–87)	No. 4–9 (pp. 157–159)					
9	Determine the squares, cubes, square roots and cube roots of single algebraic terms or like algebraic terms	93	4–5 (no. 1–3)	122–124	106–107		No. 1–6 (pp. 160–161) No. 1–9 (pp. 162–163)					
10	Determine the squares, cubes, square roots and cube roots of single algebraic terms or like algebraic terms; Determine the numerical value of algebraic expressions by substitution; Revise algebraic expressions (use Sasol Inzalo Mathematics book or DBE Workbook)	93	5 (no. 4–7)	125	107	No. 41 (pp. 90–91) No. 42–44 (pp. 92–97)	No. 1–3 (pp. 155–157) Worksheet (p. 164)					
			Reflecti	on								
Think the le exter get b	about and make a note of: What went well? What did no arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	nat did M port or vill you	/hat will you	change next	time? Why?							
		Н	OD:				Date:					

	Cle	oing Math	s Simple	Week 3								
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		Class			
						workbook						
								Date	Date complete			
11	<b>Algebraic equations:</b> Solve equations by inspection; Set up equations to describe problem situations	94	What you	126	108–112		No. 1–14 (pp. 165–169)					
12	Solve equations using additive and multiplicative inverses; Solve equations using laws of exponents	94	1 (no. 1–2)	127–132	112–114		No. 1–8 (pp. 170–172) No. 1–3 (p. 172)					
13	Determine the numerical value of an expression by substitution; Set up equations to describe problem situations	94	1 (no. 3–10)	132–133	114–115							
14	<b>Constructions and Geometry of straight lines:</b> Construct circles and angles using a compass, ruler and protractor; Construct perpendicular lines at a given point or from a given point (use <i>Sasol Inzalo Mathematics</i> book)	95	What you	134 135–141	116–121	No. 45–46 (pp. 98–103)	No. 1–2 (p. 177) No. 1–2 (p. 178)					
15	Bisect lines and angles using a pair of compasses without a protractor; Construct angles of 30°, 45° and 60° and their multiples without using a protractor	95	1 (no. 1–2, 4)	142–147 151–152	121 123	No. 47–48b (pp. 104–109)	No. 1–2 (pp. 173–175) No. 1–2 (p. 176) No. 1–3 (p. 179) No. 1–2 (p. 180) No. 1–2 (pp. 181–182)					
Note	Refer to Day 14: Learners must have ruler, sharp pencil, co	mpass, protra	actor for con	structions.								
			Reflect	ion								
<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?			nat did V oport or vill you	Vhat will you	change next	time? Why?						
		IOD:				Date:						
	Cle	ever: Keep	oing Math	s Simple	Week 4							
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Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		Class			
						workbook						
								Date	completed			
16	Recognise and describe pairs of angles formed by perpendicular and intersecting lines	98	What you 1	187–190	147–150		No. 1–2 (pp. 211–213) No. 1–3 (p. 214) No. 1–5 (pp. 215–216)					
17	Recognise and describe pairs of angles formed by perpendicular and intersecting lines cont.	98	2	191–194	151–155		No. 1–2 (p. 216) No. 1–3 (p. 217) No. 1–6 (pp. 218–219)					
18	Recognise and describe pairs of angles formed by parallel lines cut by a transversal	98	3 (no. 1–2)	194–197	156–157	No. 61 (pp. 140–141)	No. 1–3 (pp. 219–221) No. 1–5 (p. 221)					
19	Solve geometric problems using the relationships between pairs of angles	98	3 (no. 3–5)	198–199	157–159	No. 62 (pp. 142–143)						
20	Solve geometric problems using the relationships between pairs of angles cont. (use <i>Sasol Inzalo</i> <i>Mathematics</i> book)	98					No. 1–3 (pp. 222–223) No. 1–5 (pp. 223–224)					
			Reflect	ion					· · · ·			
Think the le exter get b	<b>about and make a note of:</b> What went well? What did no earners find difficult or easy to understand or do? What will y ad learners? Did you complete all the work set for the week? ack on track?	t go well? Wh vou do to sup ? If not, how v	nat did V oport or vill you	Vhat will you	change next	time? Why?						
			H	IOD:				Date:				

	Cle	ever: Keep	oing Math	ns Simple	Week 5							
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		C	lass		
						WORKDOOK						
									Date c	omp	letec	1
21	Solve geometric problems using the relationships between pairs of angles cont. (use <i>Sasol Inzalo</i> <i>Mathematics</i> book)	98					No. 1–5 (pp. 224–225) No. 1–3 (p. 226) No. 1–7 (pp. 227–228)					
22	<b>Formal assessment: Test</b> (use questions selected from <i>mid-year examination</i> to create your own test)				164–167 Memo 168–171							
23	<b>Constructions and Geometry of 2-D shapes:</b> Construct triangles and investigate the angles in a triangle	95	Ex. 1 (no. 3a, 5) Act. 1–2	149–153	122–125		No. 1–5 (pp. 182–185)					
24	By construction, investigate the angles in a triangle	95	Act. 3–4	154–155	125		No. 1–3 (p. 185) No. 1–2 (p. 186) No. 1–2 (p. 186)					
25	By construction, investigate and calculate the angles in triangles	95	2 (no. 1–2, 5a, c, f)	158–159	126–128	No. 49 (pp. 110–111)						
Note	Refer to Day 23: Learners must have ruler, sharp pencil, co	mpass, protra	actor for cor	structions.	1							
			Reflect	tion								
Think the le exter get b	<b>about and make a note of:</b> What went well? What did note earners find difficult or easy to understand or do? What will y ad learners? Did you complete all the work set for the week? ack on track?	t go well? Wh You do to sup Y lf not, how v	nat did V port or vill you	Nhat will you	change next	time? Why?						
			ŀ	HOD:				Date:				

	Cle	ver: Keep	oing Math	s Simple	Week 6							
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		С	lass		
						WORKDOOK						
								Da	ate co	ompl	eted	
26	Identify and write clear definitions of triangles; Solve geometric problems involving unknown sides and angles in triangles	96–97	1	160–169	129–134		No. 1–2 (pp. 194–195)					
27	Solve geometric problems involving unknown sides and angles in triangles cont. (use <i>Sasol Inzalo Mathematics</i> book)	97					No. 1–6 (pp. 195–197) No. 1–9 (pp. 197–199)					
28	Construct quadrilaterals; Investigate the interior angles of quadrilaterals	95	Ex. 1 (no. 3) Act. 4	148–149 152 155	122–123 125		No. 1–2 (pp. 187–188) No. 1–2 (p. 188) No. 1–3 (p. 189)					
29	By construction, investigate sides and angles of parallelograms; Calculate angles of quadrilaterals	95 97	Act. 5 Ex. 2 (no. 3–4, 5b, d, e, g, h)	156–159	127–128	No. 50a–b (pp. 112–115)	Worksheet (p. 190)					
30	Formal assessment: Investigation		Inv.	200	160							
			Reflect	ion								
Think the le exten get b	a <b>bout and make a note of:</b> What went well? What did not arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	: go well? Wh ou do to sup If not, how w	at did V port or <i>i</i> ll you	Vhat will you	change next	time? Why?						
			F	IOD:				Date:				

	Cle	ever: Keep	oing Math	s Simple	Week 7							
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo			Class		1
						WOIKDOOK			Jato	comp	lotor	1
31	Identify and write clear definitions of quadrilaterals (using findings from investigation)	96	Ex. 2 Act. 1–3 Act. 4–6 Ex. 3	169–177	135–138	No. 57 (pp. 130–131)	No. 1–3 (pp. 200–203)			comp	letet	
32	Discuss similar and congruent 2-D shapes	97	Act. 7 Ex. 4	177–181	138–140	No. 54–56 (pp. 122–129)	No. 1–3 (p. 205) No. 1–4 (p. 206) No. 1–2 (pp. 207–208)					
33	Solve problems involving similar and congruent figures (use <i>Sasol Inzalo Mathematics</i> book)	97					No. 1–4 (pp. 208–209)					
34	Solve geometric problems involving unknown sides and angles in triangles and quadrilaterals	97	5 (no. 1–8)	182–185	141–143	No. 58 (pp. 132–133)	No. 1–5 (pp. 204–205)					
35	Solve geometric problems involving unknown sides and angles in triangles and quadrilaterals cont.	97	5 (no. 9–15)	186	143–145	No. 59 (pp. 134–135)	Worksheet (p. 210)					
			Reflecti	ion			• •					
Think the le exten get b	a <b>about and make a note of:</b> What went well? What did not arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	t go well? Wh ′ou do to sup ' If not, how v	nat did V port or vill you	/hat will you	change next	time? Why?						
			н	IOD:				Date:	:			

	Cle	ever: Keep	o <b>ing Math</b> *Selee	rs Simple	Week 8						
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo			Class	
						workbook					
								1	Date	complete	ed
36	Revise (use <i>Control Test</i> )	97	Control Test	201–202	161–163	No. 60a–b (pp. 136–139)	No. 1–4 (p. 229) Worksheet (p. 230)				
37	<b>The Theorem of Pythagoras:</b> Develop the Theorem of Pythagoras	105	What you 1	236–238	209–213	No. 77–78 (pp. 32–35)	No. 1–6 (pp. 41–45)				
38	Use the Theorem of Pythagoras to determine whether a triangle is a right-angled triangle	105	2	239	213–214		No. 1–4 (pp. 51–52)				
39	Use the Theorem of Pythagoras to calculate the missing length in a right-angled triangle	105	3	240–242	214–216	No. 79 (pp. 36–37)	No. 1–4 (pp. 46–48) No. 1–5 (pp. 48–49)				
40	Use the Theorem of Pythagoras to calculate the missing length in a right-angled triangle; Revise the Theorem of Pythagoras (use <i>DBE Workbook 2</i> )	105	4	243–245	217–218	No. 80–81* (pp. 38–41)	No. 1–5 (pp. 50–51)				
Note	: The Theorem of Pythagoras is found in Sasol Inzalo Mathe	matics Book	2 and in the	DBE Workbo	bok 2. (It is ta	ught in Term 3 ac	cording to the CA	APS.)		<b>I</b> I	
			Reflect	ion							
Think the le exten get b	a <b>about and make a note of:</b> What went well? What did not arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	t go well? Wh You do to sup ' If not, how w	at did V port or <i>i</i> ill you	Vhat will you	change next	time? Why?					
			F	IOD:				Date	:		

	Clever: Keeping Maths Simple We	ek 9: Catc	h-up and	revision (e	examinati	on preparati	on) – plan yo	ur we	eek		
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		C	Class	
						WORKDOOK					
									Date o	omple	ted
41											
42											
43											
44											
45											
			Reflect	ion							
the le exten get b	arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	You do to sup ? If not, how v	port or vill you					Data			
			н	IOD:				Date:			

Clever: Keeping Maths Simple	Week 10: Mid-year examination
End-of-ter	n reflection
Think about and make a note of: <ol> <li>Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</li> </ol>	3. What ONE change should you make to your teaching practice to help you teach more effectively next term?
2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?	4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in the future? What plan will you make to get back on track?
HOD:	Date:

# Solutions for All Mathematics

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 Mathematics* Book 1 link to related content (worksheet and page numbers are referenced).
- 9. Date completed.

Where appropriate, notes to support your teaching in a particular week are provided in the last row of the table for that week.

### Weekly reflection

The tracker gives you space to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and 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 could teach it effectively?

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

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

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

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

	So	lutions fo	r All Math	ematics	Week 1						
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		(	Class	
						WORKDOOK					
1										:ompie <sup>.</sup>	tea
2											
3	<b>Algebraic expressions:</b> Recognise and interpret rules or relationships represented in symbolic form; Add and subtract like terms in algebraic expressions	92	Getting started	150–152	94–98		No. 1–7 (pp. 145–150)				
4	Multiply integers and monomials by monomials, binomials and trinomials	92	Act. 10.1 Ex. 10.1	153–155	98–100	No. 40 (pp. 88–89)	No. 1–5 (pp. 150–151)				
5	Multiply integers and monomials by monomials, binomials and trinomials	92	Act. 10.2	156–157	100		No. 1–3 (pp. 152–153)				
			Reflecti	on							
the le exten get b	arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	You do to sup	port or /ill you								
			н	OD:				Date:			

	So	lutions fo	<b>r All Math</b> #Supplen	nematics	Week 2						
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		(	Class	
						WOIKDOOK					
6	Divide monomials, binomials and trinomials by integers or monomials	93	Act. 10.3 Ex. 10.2	157–158	100–101		No. 4–8 (pp. 153–154)			:ompi	eted
7	Divide monomials, binomials and trinomials by integers or monomials	93	Act. 10.4#	159	101–102	No. 39 (pp. 86–87)	No. 4–9 (pp. 157–159)				
8	Determine the squares, cubes, square roots and cube roots of single algebraic terms or like algebraic terms	93	Ex. 10.3 Act. 10.5	159–161	102–103	No. 41 (pp. 90–91)	No. 1–6 (pp. 160–161) No. 1–9 (pp. 162–163)				
9	Determine the numerical value of algebraic expressions by substitution	93	Ex. 10.4 Act. 10.6	162–163	103–104		No. 1–3 (pp. 155–157)				
10	Revise Algebraic Expressions (Check what you know)	92–93	Check what	164–165	104–105	No. 42 (pp. 92–93) No. 43–44 (pp. 94–97)	Rev. worksheet (p. 164)				
			Reflecti	on							
Think the le exten get b	a <b>bout and make a note of:</b> What went well? What did no harners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	t go well? Wh You do to sup ? If not, how v	nat did W port or vill you	/hat will you	change next	time? Why?					
			Н	OD:				Date:			

	So	lutions fo	<b>r All Math</b> *Selec	nematics	Week 3						
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		Class		
						workbook					
								Date	comp	letec	1
11	<b>Algebraic equations:</b> Solve equations by inspection; Set up equations to describe problem situations; Use substitution to check a solution	94	Getting started Act. 11.1 Ex. 11.1 Act. 11.2	166–169	107–110		No. 1–14 (pp. 165–169)				
12	Solve equations using additive and multiplicative inverses; Solve equations using laws of exponents	94	Act. 11.3 Ex. 11.2 Act. 11.4–11.7*	170–176	110–111		No. 1–8 (pp. 170–172) No. 1–3 (p. 172)				
13	Set up and solve equations to describe problem situations; Use substitution in equations to generate tables of ordered pairs	94	Act. 11.8 Ex. 11.4* Act. 11.10	178–182	112–117						
14	<b>Constructions and Geometry of straight lines:</b> Construct circles and angles using a compass, ruler and protractor	95	Getting started Act. 12.1 Ex. 12.1 Act. 12.2 Ex. 12.2	184–188	119–121	No. 45–46 (pp. 98–103)					
15	Bisect lines using a pair of compasses without using a protractor	95	Act. 12.3 Ex. 12.3	188–189	122		No. 1–2 (pp. 173–175) No. 1–2 (p. 176)				
Note	: Refer to Day 14: Learners must have ruler, sharp pencil, co	mpass, protra	actor for con	structions.							
			Reflecti	ion							
Think the le exten get b	a <b>about and make a note of:</b> What went well? What did not earners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	t go well? Wł ⁄ou do to sup ' If not, how v	nat did V port or vill you	Vhat will you	change next	time? Why?					
			н	IOD:				Date:			

	So	lutions fo	<b>r All Math</b> *Selec	nematics	Week 4							
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		C	Class		
						workbook						
								Da	ate c	ompl	eted	
16	Bisect angles using a pair of compasses without using a protractor cont.; Construct angles of 30°, 45° and 60° and their multiples without using a protractor (use <i>Sasol</i> <i>Inzalo Mathematics</i> book)	95	Act. 12.4 Ex. 12.4	189–191	122		No. 1–3 (p. 179) No. 1–2 (p. 180) No. 1–2 (pp. 181–182)					
17	Construct perpendicular lines at a given point and from a given point	95	Act. 12.5 Ex. 12.5 Act. 12.6 Ex. 12.6	191–194	123	No. 47 (pp. 104–105)	No. 1–2 (p. 177) No. 1–2 (p. 178)					
18	Revise constructions	95	Check what	195–196	123–124							
19	Recognise and describe pairs of angles formed by perpendicular and intersecting lines	98	Getting started Act. 16.1 Ex. 16.1 Act. 16.2 Ex. 16.2	244–250	154–157		No. 1–2 (pp. 211–213) No. 1–3 (p. 214) No. 1–5 (pp. 215–216)					
20	Recognise and describe pairs of angles formed by parallel lines cut by a transversal	98	Act. 16.3 Ex. 16.3 Act. 16.4 Ex. 16.4*	251–257	157–159	No. 61 (pp. 140–141) No. 62 (pp. 142–143)	No. 1–3 (pp. 219–221) No. 1–5 (p. 221) No. 1–3 (pp. 222–223) No. 1–5 (pp. 223–224)					
			Reflect	ion								
Think the le exter get b	<b>x about and make a note of:</b> What went well? What did no earners find difficult or easy to understand or do? What will y ad learners? Did you complete all the work set for the week? eack on track?	t go well? Wł /ou do to sup ' If not, how v	nat did V oport or vill you	Vhat will you	change next	time? Why?						
			н	IOD:				Date:				

	So	lutions fo	r All Math	nematics	Week 5						
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		(	Class	
						WORKDOOK					
								D	ate d	comple	eted
21	Discuss statements and their converses	98	Act. 16.5 Ex. 16.5	257–259	160						
22	Solve geometric problems using the relationships between pairs of angles	98	Act. 16.6 Ex. 16.6	259–261	160–161		No. 1–2 (p. 216) No. 1–3 (p. 217) No. 1–6 (pp. 218–219)				
23	Solve geometric problems using the relationships between pairs of angles cont.	98	Act. 16.7 Ex. 16.7 Check what	261–268	161–163		No. 1–5 (pp. 224–225) No. 1–3 (p. 226)				
24	Solve geometric problems using the relationships between pairs of angles cont. (use <i>Sasol Inzalo</i> <i>Mathematics</i> book)	98					No. 1–7 (pp. 227–228)				
25	<b>Formal assessment: Test</b> (select questions from Term 2 Control Test)				342–345 Memo 346–348						
			Reflect	ion							
Think the le exter get b	a <b>about and make a note of:</b> What went well? What did not earners find difficult or easy to understand or do? What will y id learners? Did you complete all the work set for the week? ack on track?	t go well? Wh you do to sup ? If not, how v	nat did V oport or vill you	Vhat will you	change next	time? Why?					
			H	IOD:				Date:			

	So	Week 6										
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		C	Class		
						workbook						
								D	ate c	omp	leted	
26	<b>Constructions and Geometry of 2-D shapes:</b> By construction, investigate the angles in a triangle	95	Getting started Act. 13.1 Ex. 13.1	197–199	125–127	No. 48a–b (pp. 106–109)	No. 1–5 (pp. 182–185)					
27	By construction, investigate the angles in a triangle cont.	95	Act. 13.2 Ex. 13.2*	200–201	127–129	No. 49 (pp. 110–111)	No. 1–3 (p. 185) No. 1–2 (p. 186) No. 1–2 (p. 186)					
28	Identify and write clear definitions of triangles; Solve geometric problems involving unknown sides and angles in triangles	96–97	Getting started Ex. 14.1 Act. 14.1 Ex. 14.2	208–214	136–140		No. 1–2 (p. 193) No. 1–4 (p. 194) No. 1–2 No. 1–6 (pp. 195–197) No. 1–9 (pp. 197–199) (pp. 194–195)					
29	Go over test done in previous week; By construction, investigate sides and angles in quadrilaterals	95	Act. 13.3 Ex. 13.3	202–203	130–131	No. 50a (pp. 112–113)	No. 1–2 (pp. 187–188) No. 1–2 (p. 188) No. 1–3 (p. 189)					
30	Formal assessment: Investigation		Unit 13	271–272	165–167							
Note	Refer to Day 26: Learners must have ruler, sharp pencil, co	, mpass, protra	actor for cons	structions.	1			<u> </u>		L		

Refle	ction
Refle 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?	Vhat will you change next time? Why?
	HOD: Date:

		f <b>or All Mathe</b> *Select	ematics	Week 7								
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		(	Class		
						WORKDOOK						
								D	Date o	:omp	eted	
31	Discuss findings of investigation; By construction, investigate sides and angles in quadrilaterals	95	Act. 13.4 Ex. 13.4	204–205	131–133	No. 50b (pp. 114–115)	Worksheet (p. 190)					
32	Identify and write clear definitions of quadrilaterals	96	Act. 14.2 Ex. 14.3	214–216	141–142	No. 57 (pp. 130–131)	No. 1–3 (pp. 200–203)					
33	Solve geometric problems involving unknown sides and angles in quadrilaterals	97	Act. 14.3 Ex. 14.4 Act. 14.4 Ex. 14.5	217–219	142–143	No. 58–59 (pp. 132–135)	No. 1–5 (pp. 204–205)					
34	Discuss similar and congruent 2-D shapes; Identify and describe the properties of similar triangles	97	Getting started Act. 15.1* Ex. 15.1 Act. 15.2 Act. 15.3 Ex. 15.2	225–234	146–150	No. 54 (pp. 122–123) No. 56 (pp. 128–129)	No. 1–3 (p. 205) No. 1–4 (p. 206) No. 1–2 (pp. 207–208)					
35	Identify and describe the properties of congruent shapes and triangles; Discuss and work with congruent triangles	97	Act. 15.4 Act. 15.5 Ex. 15.3 Act. 15.6 Ex. 15.4*	234–241	150–153	No. 55a–b (pp. 124–127)	No. 1–4 (pp. 208–209)					
			Reflectio	on								
Think the le exten get b	and make a note of: What went well? What did arners find difficult or easy to understand or do? What w d learners? Did you complete all the work set for the w ack on track?	? What did Wl o support or ow will you	hat will you o	hange next	time? Why?							
			но	DD:				Date:				

	So	<b>r All Matl</b> *Sele	hematics	Week 8							
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo			Class	
						WORKDOOK					
									Date	complete	ed
36	Revise Geometry of 2-D shapes	97	Unit 17* (Units 12–15)	270–274	165–168	No. 60a–b (pp. 136–139)	Worksheet (p. 210) No. 1–4 (p. 229) Worksheet (p. 230)				
37	<b>The Theorem of Pythagoras:</b> Develop the Theorem of Pythagoras	105	Getting started Act. 20.1–20.2 Ex. 20.1*	316–320	193–196	No. 77–78 (pp. 32–35)	No. 1–6 (pp. 41–45)				
38	Use the Theorem of Pythagoras to calculate the missing length in a right-angled triangle	105	Act. 20.3 Ex. 20.2	320–322	196–197	No. 79 (pp. 36–37)	No. 1–4 (pp. 46–48) No. 1–5 (pp. 48–49)				
39	Use the Theorem of Pythagoras to determine whether a triangle is a right-angled triangle	105	Act. 20.4 Ex. 20.3	322–323	197		No. 1–4 (pp. 51–52)				
40	Use the Theorem of Pythagoras to solve problems; Revise the Theorem of Pythagoras (use <i>DBE Workbook</i> 2)	105	Check what	324–325	198	No. 80–81* (pp. 38–41)	No. 1–5 (pp. 50–51)				
Note	: The Theorem of Pythagoras is found in Sasol Inzalo Mathe	matics Book	2 and in the	DBE Workbo	ook 2. (It is ta	ught in Term 3 ac	cording to the C/	APS.)			
			Reflect	ion							
Think the le exten get b	a <b>about and make a note of:</b> What went well? What did not earners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	nat did V vport or vill you	What will you	change next	time? Why?						
			ŀ	HOD:				Date:			

	Solutions for All Mathematics Wee	ek 9: Catcl	h-up and i	revision (e	xaminatio	on preparatio	on) – plan you	ır we	eek		
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo	Class			
						workbook					
									Date	comp	leted
41											
42											
43											
44											
45											
			Reflecti	ion			• •				Ì
the le exter get b	arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	vou do to sup 9 If not, how v	pport or vill you	,							
			Н	IOD:				Date	:		

Solutions for All Mathematics	Week 10: Mid-year examination
End-of-ter	n reflection
Think about and make a note of: <ol> <li>Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</li> </ol>	3. What ONE change should you make to your teaching practice to help you teach more effectively next term?
2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?	4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in the future? What plan will you make to get back on track?
HOD:	Date:

### **Mathematics Today**

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 Mathematics* Book 1 link to related content (worksheet and page numbers are referenced).
- 9. Date completed.

Where appropriate, notes to support your teaching in a particular week are provided in the last row of the table for that week.

#### Weekly reflection

The tracker gives you space to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and 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 could teach it effectively?

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

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

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

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

		Mather	natics To	day Wee	ek 1						
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		С	lass	
						WORKDOOK					
1								Da	ate co	omplet	ted
2											
3	Algebraic expressions: Algebraic language; Add and subtract like terms in algebraic expressions	92	8.1 8.2	90–91	36		No. 1–7 (pp. 145–150)				
4	Add and subtract like terms in algebraic expressions; laws of exponents	92	8.3 8.4	92–94	36–37	No. 40 (pp. 88–89)	No. 1–3 (pp. 152–153)				
5	Multiply integers and monomials by monomials	8.5	94	37		No. 1–5 (pp. 150–151)					
			Reflec	tion							
get b	arners find difficult or easy to understand or do? What will d learners? Did you complete all the work set for the week ack on track?	You do to sup ? If not, how w	port or /ill you								
				HOD:				Date:			

		matics Toc *Selec	day Wee	ek 2								
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo			Class		
						workbook						
								C	Date	comp	leted	1
6	Multiply integers and monomials by monomials, binomials and trinomials	92	8.6	95	37							
7	Divide monomials, binomials and trinomials by integers or monomials	93	8.7–8.8	96–97	37	No. 39 (pp. 86–87)	No. 4–8 (pp. 153–154) No. 4–9 (pp. 157–159)					
8	Simplify algebraic expressions involving multiple operations	93	8.9	98	37	No. 42 (pp. 92–93)						
9	Determine the squares, cubes, square roots and cube roots of single algebraic terms or like algebraic terms	93	8.10*–8.12	100–101	38	No. 41 (pp. 90–91)	No. 1–6 (pp. 160–161) No. 1–9 (pp. 162–163)					
10	Determine the numerical value of algebraic expressions by substitution; Revise algebraic expressions (use DBE Workbook or Sasol Inzalo Mathematics book)	93	8.13–8.16*	102–105	38–39	No. 43–44 (pp. 94–97)	No. 1–3 (pp. 155–157) Rev. worksheet (p. 164)					
			Reflecti	on								
Think the le exten get b	a <b>about and make a note of:</b> What went well? What did no harners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	nat did M oport or will you	/hat will you	change next	time? Why?							
			н	OD:				Date:				

	Mathematics Today Week 3												
Day	CAPS concepts and skills	CAPS pp.	*Selec LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Date	Class Date complet				
11	<b>Algebraic equations:</b> Set up equations to describe problem situations; Analyse and interpret equations that describe a given situation	94	9.1–9.2*	108–110	41–42		No. 1–14 (pp. 165–169)						
12	Solve equations using additive and multiplicative inverses	94	9.3	111–112	42–44		No. 1–8 (pp. 170–172)						
13	Solve equations using the laws of exponents; Use substitution to generate tables of ordered pairs	94	9.4–9.5*	112–114	44–46		No. 1–3 (p. 172)						
14	<b>Constructions and Geometry of straight lines:</b> Construct angles with or without a protractor	95	10.1	117–118	51–52	No. 45a–b (pp. 98–101)							
15	Construct angles of 30°, 45° and 60° and their multiples without using a protractor	10.2 (no. 1–2)	119–120 122	52	No. 46 (pp. 102–103)								
Note	Refer to Day 14: Learners must have ruler, sharp pencil, co	mpass, protra	actor for con	structions.									
			Reflect	ion									
Think the le exten get b	a <b>about and make a note of:</b> What went well? What did not earners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	nat did V port or vill you	Vhat will you	change next	time? Why?								
			F	IOD:				Date:					

		Mather	natics Too	day Wee	ek 4						
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		Class		
						workbook					
								Date	e comp	pletec	1
16	Construct angles of 30°, 45° and 60° and their multiples without using a protractor (use <i>DBE Workbook</i> or <i>Sasol</i> <i>Inzalo Mathematics</i> book)	95				No. 48a–b (pp. 106–109)	No. 1–3 (p. 179) No. 1–2 (p. 180) No. 1–2 (pp. 181–182)				
17	Bisecting lines; Construct perpendicular lines at a given point or from a given point	95	10.2 (no. 3–5)	121–123	52	No. 47 (pp. 104–105)	No. 1–2 (pp. 173–175) No. 1–2 (p. 176) No. 1–2 (p. 177) No. 1–2 (p. 178)				
18	Recognise and describe pairs of angles formed by perpendicular and intersecting lines	98	12.1 (no. 1–3)	146–147	62	No. 61 (pp. 140–141)	No. 1–2 (pp. 211–213) No. 1–3 (p. 214)				
19	Recognise and describe pairs of angles formed by perpendicular and intersecting lines cont.	98	12.1 (no. 4–5) 12.2	148–149	62–63		No. 1–5 (pp. 215–216)				
20	Recognise and describe pairs of angles formed by perpendicular and intersecting lines cont.	98	12.3–12.4	150–151	63		No. 1–2 (p. 216) No. 1–3 (p. 217) No. 1–6 (pp. 218–219)				
			Reflect	ion							
Thinl the le exter get b	<b>x about and make a note of:</b> What went well? What did no earners find difficult or easy to understand or do? What will y ad learners? Did you complete all the work set for the week? eack on track?	nat did V port or vill you	Vhat will you	change next	time? Why?						
			н	IOD:				Date:			

	Mathematics Today Week 5												
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		Class				
						workbook							
								Date of	complete	ed			
21	Recognise and describe pairs of angles formed by parallel lines cut by a transversal	98	12.5	151–153	63	No. 62 (pp. 142–143)	No. 1–3 (pp. 219–221) No. 1–5 (p. 221) No. 1–3 (pp. 222–223) No. 1–5 (pp. 223–224)						
22	Solve geometric problems using the relationships between pairs of angles	98	12.6 12.7 (no. 1–2)	154–155	63		No. 1–5 (pp. 224–225) No. 1–3 (p. 226)						
23	Solve geometric problems using the relationships between pairs of angles cont.	98	12.7 (no. 3–4)	155	63		No. 1–7 (pp. 227–228)						
24	Revise geometry of straight lines	98	Rev. Test	156	64								
25	<b>Formal assessment: Test</b> (select questions from Term 2 <i>Formal Assessment Test</i> to set your own test – modify to include geometry)				49 Memo 50								
			Reflecti	ion									
Think the le exter get b	<b>a about and make a note of:</b> What went well? What did not earners find difficult or easy to understand or do? What will y id learners? Did you complete all the work set for the week? ack on track?	: go well? Wh ou do to sup If not, how w	nat did W port or vill you	Vhat will you	change next	time? Why?							
			н	IOD:				Date:					

		Mather	matics Too	day Wee	ek 6						
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo		Class	5	1
						WORKDOOK					
								Dat	e com	pletec	k
26	<b>Constructions and Geometry of 2-D shapes:</b> By construction, investigate the angles in a triangle	95	10.3	124–125	53		No. 1–5 (pp. 182–185)				
27	By construction, investigate the angles in a triangle cont. (use <i>DBE Workbook</i> or <i>Sasol Inzalo Mathematics</i> book)	95				No. 49 (pp. 110–111)	No. 1–3 (p. 185) No. 1–2 (p. 186) No. 1–2 (p. 186)				
28	Identify and write clear definitions of triangles; Construct different types of triangles	95–96	11.1– 11.2	130–133	56–57		No. 1–2 (p. 193) No. 1–4 (p. 194) No. 1–2 (pp. 194–195)				
29	Solve geometric problems involving triangles (use Sasol Inzalo Mathematics book)	97					No. 1–6 (pp. 195–197) No. 1–9 (pp. 197–199)				
30	By construction, investigate sides and angles in quadrilaterals	95	10.4	126–127	53–54	No. 50a–b (pp. 112–115)	No. 1–2 (pp. 187–188) No. 1–2 (p. 188) No. 1–3 (p. 189) Worksheet (p. 190)				
Note	: Refer to Day 26: Learners must have ruler, sharp pencil, co	mpass, protra	actor for con	structions.							
			Reflect	ion							
Think the le exter get b	a <b>about and make a note of:</b> What went well? What did not earners find difficult or easy to understand or do? What will y ad learners? Did you complete all the work set for the week? ack on track?	nat did V port or vill you	Vhat will you	change next	time? Why?						
			F	IOD:				Date:			

	Mathematics Today Week 7									
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo			
						workbook				
								Date	compl	eted
31	Formal assessment: Investigation		Inv.	144	61					
32	Identify and write clear definitions of quadrilaterals (using the findings from the investigation); Construct different types of quadrilaterals using definitions	95–96	11.4	136	57–58	No. 57 (pp. 130–131)	No. 1–3 (pp. 200–203)			
33	Discuss congruent 2-D shapes	97	11.5	137–138	58	No. 55a-b (pp. 124–127)	No. 1–3 (p. 205) No. 1–4 (p. 206)			
34	Discuss similar 2-D shapes	97	11.6	138–140	58–59	No. 54, 56 (pp. 122–123, 128–129)	No. 1–2 (pp. 207–208) No. 1–4 (pp. 208–209)			
35	Solve geometric problems involving unknown sides and angles in triangles and quadrilaterals	97	11.7	141–142	59	No. 58–59 (pp. 132–135)	No. 1–5 (pp. 204–205)			
			Reflect	tion						
Think the le exten get b	a <b>about and make a note of:</b> What went well? What did not earners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	nat did N port or <i>i</i> ill you	What will you	change next	time? Why?					
		HOD:				Date:				

		natics To *Sele	<b>day Wee</b>	ek 8								
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Sasol Inzalo	Class				
						WORKDOOK						
									Date	comp	leted	
36	Solve geometric problems involving unknown sides and angles in triangles and quadrilaterals cont. (use <i>Sasol</i> <i>Inzalo Mathematics</i> book); Revise Geometry of 2-D Shapes	97	Rev.	143	59	No. 60a–b (pp. 136–139)	Worksheet* (p. 210) No. 1–4 (p. 229) Worksheet* (p. 230)					
37	The Theorem of Pythagoras: Develop the Theorem of Pythagoras	105	15.1	191–192	81	No. 77–78 (pp. 32–35)	No. 1–6 (pp. 41–45)					-
38	Use the Theorem of Pythagoras to determine whether a triangle is a right-angled triangle	105	15.2	193	81		No. 1–4 (pp. 51–52)					
39	Use the Theorem of Pythagoras to calculate the missing length in a right-angled triangle	105	15.3	194–195	81–82	No. 79 (pp. 36–37)	No. 1–4 (pp. 46–48) No. 1–5 (pp. 48–49)					
40	Revise the Theorem of Pythagoras (use Sasol Inzalo Mathematics book or DBE Workbook 2)	105				No. 80–81* (pp. 38–41)	No. 1–5 (pp. 50–51)					
Note	: The Theorem of Pythagoras is found in Sasol Inzalo Mathe	matics Book	2 and in the	DBE Workbo	ook 2. (It is ta	ught in Term 3 ac	cording to the C/	APS.)				
			Reflect	tion								
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?						
			I	HOD:				Date:				_

Mathematics Today Wee	k 10: Mid-year examination
End-of-terr	n reflection
Think about and make a note of: <ol> <li>Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</li> </ol>	3. What ONE change should you make to your teaching practice to help you teach more effectively next term?
2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?	4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in the future? What plan will you make to get back on track?
HOD:	Date:

# Sasol Inzalo Mathematics

This section maps out how you should use the Sasol Inzalo 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. Date completed.

Where appropriate, notes to support your teaching in a particular week are provided in the last row of the table for that week.

#### Weekly reflection

The tracker gives you space to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and 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 could teach it effectively?

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

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

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

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

	:	Sasol Inzalo N	<b>Nathematics</b>	Week 1				
Day	Day CAPS concepts and skills		LB ex.	LB pp.	TG pp.	DBE		Class
						WORKDOOK	Data	
1							Date	completed
2								
3	Algebraic expressions: Expanding algebraic expressions: Multiply often or multiply once – It is your choice	92	No. 1–7	147–150	145–150			
4	Product expressions and sum expressions	92	No. 1–5	150–151	150–151	No. 40 (pp. 88–89)		
5	Simplifying algebraic expressions: Expand, rearrange and then combine like terms	92	No. 1–8	152–154	152–154			
			Reflection			-1		<u> </u>
the le exten get b	arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	or bu						
		HOD:				Date:		

	:	Mathematics	Week 2							
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE	Class			1
						WORKDOOK				
6	Simplifying quotient expressions: From quotient expressions to sum expressions; Determine the numerical value of algebraic expressions by substitution	92	No. 1–3	155–157	155–157		Date	e comp	DIETEC	
7	Divide monomials, binomials and trinomials by integers or monomials	93	No. 4–9	157–159	157–159	No. 39 (pp. 86–87)				
8	Simplify algebraic expressions involving multiple operations (use DBE Workbook)	93				No. 42 (pp. 92–93)				
9	Squares, cubes and roots of expressions: Simplifying squares and cubes	93	No. 1–6	160–161	160–161					
10	Determine square and cube roots of expressions; Revise Algebraic expressions	93	No. 1–9 Worksheet	162–163 164	162–163 164	No. 41 (pp. 90–91) No. 43–44 (pp. 94–97)				
			Reflection							
Think the le exten get b	a <b>bout and make a note of:</b> What went well? What did not arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	: go well? What d ou do to support If not, how will ye	id What will y	/ou change next	time? Why?					
			HOD:				Date:			

	Sasol Inzalo Mathematics Week 3 #Supplement									
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE	Class				
						WORKDOOK				
							Date	comp	eted	
11	<b>Algebraic equations:</b> Thinking forwards and backwards: Doing and undoing what has been done	94	No. 1–14	167–169	165–169					
12	Solve equations using the additive and multiplicative inverses: Finding the unknown	94	No. 1–8	170–172	170–172					
13	Solving equations involving powers	94	No. 1–3#	172	172					
14	<b>Constructions and Geometry of straight lines:</b> Bisecting lines: Bisecting a line segment with a ruler; Bisecting a line segment with a compass and a ruler	95	No. 1–2 No. 1–2	175 176	173–175 176	No. 47 (pp. 104–105)				
15	Constructing perpendicular lines: A perpendicular line from a given point; A perpendicular line at a given point on a line	95	No. 1–2 No. 1–2	177 178	177 178					
Note	s: 1. Refer to Day 13: This exercise needs to be supplement 2. Refer to Day 14: Learners must have ruler, sharp pencil,	ed with an exercis compass, protrac	e from another s ctor for construct	source. tions.						
			Reflection							
Think the le exten get b	<b>about and make a note of:</b> What went well? What did no arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	d What will or ou	you change next	time? Why?						
HOD: Date:										

	:	Sasol Inzalo N	Mathematics	Week 4				
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE		Class
						WORKDOOK	Det	
16	Bisecting angles: Measuring and classifying angles; Bisecting angles without a protractor	95	No. 1–3 No. 1–2	179 180	179 180	No. 45a–46 (pp. 98–103)	Date	completed
17	Constructing special angles without a protractor: Constructing angles of 60°, 30° and 120°; Constructing angles of 90° and 45°	95	No. 1–2 No. 1–2	181–182 182	181–182 182	No. 48a–b (pp. 106–109)		
18	Angles on a straight line: Sum of angles on a straight line; Finding unknown angles on straight lines	98	No. 1–2 No. 1–3 No. 1–5	213 214 215–216	211–213 214 215–216	No. 61 (pp. 140–141)		
19	Vertically opposite angles: What are vertically opposite angles?; Finding unknown angles; Equations using unknown angles	98	No. 1–2 No. 1–3 No. 1–6	216 217 218–219	216 217 218–219			
20	Lines intersected by a transversal: Pairs of angles formed by a transversal	98	No. 1–3 No. 1–5	219–221 221	219–221 221	No. 62 (pp. 142–143)		
		1	Reflection					
Think the le exter get b	a <b>bout and make a note of:</b> What went well? What did not arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	t go well? What d ou do to support If not, how will yo	lid What will y t or ou	you change next	time? Why?			
			HOD:				Date:	

Sasol Inzalo Mathematics Week 5											
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE		С	lass		
						workbook					
							D	ate co	omple	eted	
21	Parallel lines intersected by a transversal: Investigating angle sizes	98	No. 1–3 No. 1–5	222–223 223–224	222–223 223–224						
22	Finding unknown angles on parallel lines: Working out unknown angles; Extension; Sum of the angles in a quadrilateral	98	No. 1–5 No. 1–3	224–225 226	224–225 226						
23	Solving more geometric problems: Angle relationships on parallel lines		No. 1–7	227–228	227–228						
24	Formal assessment: Test										
25	<b>Constructions and Geometry of 2-D shapes:</b> Constructing triangles	95	No. 1–5	182–185	182–185						
Note	<ul> <li>s: 1. Refer to Day 24: Set your own test or use selected que</li> <li>2. Refer to Day 25: Learners must have ruler, sharp pencil</li> </ul>	stions from anothe , compass, protrae	er set of LTSMs. ctor for construct	tions.							
			Reflection								
Think the le exten get b	a <b>about and make a note of:</b> What went well? What did no earners find difficult or easy to understand or do? What will <u>y</u> id learners? Did you complete all the work set for the week? ack on track?	id What will	you change next	time? Why?							
HOD: Date:											
	:	Sasol Inzalo N	<b>Nathematics</b>	Week 6							
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Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE		(	Class		
						WOIKDOOK		)ate (	omn	leted	
26	Properties of triangles: Properties of equilateral triangles; Properties of isosceles triangles; The sum of the angles in a triangles	95–96	No. 1–3 No. 1–2 No. 1–2	185 186 186	185 186 186	No. 49 (pp. 110–111)			.0110		
27	Types of triangles: Naming triangles according to their sides; Naming triangles according to their angles; Investigating the angles and sides of triangles	96	No. 1–2 No. 1–4 No. 1–2	193 193–194 194–195	191–193 193–194 194–195						
28	Unknown angles and sides of triangles: Working out unknown angles and sides	97	No. 1–6 No. 1–9	195–197 197–199	195–197 197–199						
29	Properties of quadrilaterals; Sum of the angles in a quadrilateral	96	No. 1–2 No. 1–2	187–188 188	187–188 188						
30	Constructing quadrilaterals: Constructing parallel lines to draw quadrilaterals; By construction, investigate sides and angles in quadrilaterals	95	No. 1–3 Worksheet	189 190	189 190	No. 50a–b (pp. 112–115)					
			Reflection			•		·			
Think the le exten get b	a <b>bout and make a note of:</b> What went well? What did not arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	: go well? What d ou do to support If not, how will yo	id What will y	you change next	time? Why?						
			HOD:				Date:				

		Sasol Inzalo I	Mathematics	Week 7						
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE		С	lass	
						WORKDOOK			amal	atad
31	Formal assessment: Investigation							ate co	ompi	eted
32	Types of quadrilaterals and their properties: The properties of different types of quadrilaterals	96	No. 1–3	200–203	200–203	No. 57 (pp. 130–131)				
33	Unknown angles and sides of quadrilaterals: Finding unknown angles and sides	97	No. 1–5	204–205	204–205	No. 58–59 (pp. 132–135)				
34	Congruency: What is congruency?; Identifying congruent angles and sides	97	No. 1–3 No. 1–4	205 206	205 206	No. 55a–b (pp. 124–127)				
35	Similarity: Checking for similarity; Using properties of similar and congruent figures; Revise (using worksheet)	97	No. 1–2 No. 1–4 Worksheet	207–208 208–209 210	207–208 208–209 210	No. 54, 56 (pp. 122–123, 128–129)				
Note	Refer to Day 31: An investigation needs to be sourced fror	n another set of L	TSMs.							
			Reflection							
Think the le exten get b	arners find difficult or easy to understand or do? What will y arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	t go well? What d You do to support I f not, how will yo	id What will y	ou change next	time? Why?					
			HOD:				Date:			

	:	Sasol Inzalo I	Mathematics *Select	Week 8						
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE			Class	
						workbook				
							I	Date	complete	ed
36	Solving more geometric problems: Including properties of triangles and quadrilaterals	97	No. 1–4 Worksheet	229 230	229 230	No. 60a–b (pp. 136–139)				
37	<b>The Theorem of Pythagoras:</b> The lengths of sides or right-angled triangles; What do you remember about triangles?; Investigating the relationship between the lengths of sides	105	No. 1–6	43–45	41–45	No. 77–78 (pp. 32–35)				
38	Working with the Theorem of Pythagoras: Working with the formula	105	No. 1–4	46–48	46–48	No. 79 (pp. 36–37)				
39	Finding the missing sides in right-angled triangles; Calculating the length of the hypotenuse	105	No. 1–5	48–49	48–49					
40	Calculating the length of any side in a right-angled triangle; Are the triangles right-angled or not?; Revise the Theorem of Pythagoras (use DBE Workbook 2)	105	No. 1–5 No. 1–4	50–51 51–52	50–51 51–52	No. 80–81* (pp. 38–41)				
Note	The Theorem of Pythagoras is found in Sasol Inzalo Mathe	matics Book 2 an	id in the DBE Wo	rkbook 2. (It is ta	ught in Term 3 a	ccording to the C	APS.)			
			Reflection							
Think the le exten get b	<b>about and make a note of:</b> What went well? What did not arners find difficult or easy to understand or do? What will y d learners? Did you complete all the work set for the week? ack on track?	t go well? What d 'ou do to support ' If not, how will y	lid What will y t or ou	/ou change next	time? Why?					
			HOD:				Date	:		

	Sasol Inzalo Mathematics Week	9: Catch-up a	nd rev	vision (e	examination	preparation)	– plan your v	weel	<b>‹</b>		
Day	CAPS concepts and skills	CAPS pp.	LB	ex.	LB pp.	TG pp.	DBE			Class	
							WOIKDOOK		Data		latad
41									Jate	comp	Dieted
42											
43											
44											
45											
			Reflecti	ion		<u>I</u>		1			
the le exter get b	earners find difficult or easy to understand or do? What will y ad learners? Did you complete all the work set for the week? ack on track?	ou do to support	or ou								
			н	IOD:				Date	:		

Sasol Inzalo Mathematics Week 10: Mid-year examination						
End-of-terr	n reflection					
Think about and make a note of: <ol> <li>Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</li> </ol>	3. What ONE change should you make to your teaching practice to help you teach more effectively next term?					
2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?	4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in the future? What plan will you make to get back on track?					
HOD:	Date:					

#### **E. ASSESSMENT RESOURCES**

FORMAL ASSESSMENT RECORD SHEET: TERM 2 GRADE 8 MATHEMATICS										
Investigation Test 2 Mid-year examination Total % Rating (1-7)										
Date of assessment										
Total marks for assessment										
Learner name										

**112** Grade 8 Mathematics

Examination
<b>Mid-Year</b>
Mathematics
00
Grade

Time: One hour and forty-five minutes

Total: 80 marks

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Scientific non-programmable calculators may be used.
 Diagrams are not drawn to scale.

## QUESTION 1:

1.1 Rewrite the following numbers in ascending order, by calculating values where necessary:	
0; ∛–125;–37; √144; 3³, (–6)²	(3)
1.2 The ratio of boys to girls in the swimming team is 3:2. If there are 15 hows what is the total number of members in the swimming team?	(2)
	1
OLIESTION 2.	[2]
2 1 Mer Nicket 48 Forence of B140 conditioned and and the most of B222 conditioned and a sector of B2	
	Q
a) How much did she pay in total tor the jerseys?	(7)
b) What profit did she make on each jersey?	(1)
2.2 Lucy's monthly salary is R16 500. If 9% is deducted for tax and 1% is deducted for UIF,	Ć
now much does Lucy receive each month?	(7)
OUESTION 3:	[2]
Simolify	
$3.1  (3y^2 + 7)^2$	(2)
$3.2 \sqrt{49a^{18}}$	(1)
2.5 - 7.7 - 7.7 - 7.7	(c)
3.4 $(3x^2 \times 7x)^0$	(1)
3.5 $\frac{-2pq^2 \times -3p^3q^5}{12p^3q^3}$	(3)
3.6 Write 23 045 000 in scientific notation.	(1)
	[11]
QUESTION 4:	Ē
1.1. The following is a nattern made of hearts:	
• • • • • • •	
• • •	
4.1.1 How many hearts will the fourth pattern have?	(1)
4.1.2 Explain in your own words how you would determine the number of hearts in each pattern which follows.	(1)
4.1.3 Give an equation that will give the number of hearts in each pattern. Let H be the number	
of hearts and n be the position of each pattern in the sequence.	(2)
4.1.4 Can a pattern in this sequence have 45 hearts?	(2)
4.2.1 Give the next two terms of the number pattern: -3; 12; -48;	(1)
4.2.2 Explain, in words, how this pattern is formed.	(1)
	[8]

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d	

Determine the missing values in the flow diagram provided, that is 5.1 and 5.2. Show all calculations.

Y

×



(E) (E) (E)

[3]

= -5x + 124(x + 1) - 3(x - 3)-2x + 6 = 16 $2 - \frac{x}{11} = -8$  $3x^4 = 243$ 7.4 7.1 7.2 7.3

(1)

(3)

**[9]** 

### QUESTION 8:

A student's bus ticket for a month costs R12,50 less than an adult's ticket. Four adult tickets and two student tickets cost R770,00. What is the cost of a student ticket?



4

# QUESTION 9:

Calculate the size, with reasons, of the missing angle D of the quadrilateral ABCD: 9.1





[15] (2)



(2)

(3) [**5**]

#### Grade 8 Mathematics Mid-Year Examination: Memorandum and Cognitive Levels of Questions

SOL	UTIONS	MARKS AND COMMENTS	COGNITIVE LEVELS
QUE	STION 1:		
1.1	0; $\sqrt[3]{-125}$ ; -37; $\sqrt{144}$ ; 3 <sup>3</sup> ; (-6) <sup>2</sup> = 0; -5; -37; 12; 27; 36 ✓✓ simplification Ascending order: -37; -5; 0; 12; 27; 36 ✓ final order	(3)	К
1.2	Let the total number be x. $\frac{x}{15} = \frac{5}{3} \checkmark \text{ equation (or in any other correct form)}$ $x = \frac{5}{3} \times 15$		
	$x = 25 \checkmark$ answer There are 25 members in the swimming team.	(2)	PS
QUE	STION 2:		
2.1	a) 160 × 48 1 280 <u>6 400</u> ✓ amount added <u>7 680</u> ✓ final answer Mrs Ndlovu paid R7 680 in total.	(2)	RP
2.2	b) $223 - 160 = 63$ She made R63 profit on each jersey. $\checkmark$ answer 9% + 1% = 10%	(1)	К
	10% of R16 500 = $\frac{100}{100}$ × 16 500 = 1 650 ✓ percentage 16 500 - 1 650 = R14 850 ✓ answer Lucy receives R14 850 per month <b>or</b> 100% - 10% = 90% ✓ percentage $\frac{90}{100}$ × 16 500 = 9 × 1 650 = R14 850 ✓ answer	(2)	СР

SOLU	JTIONS	MARKS AND COMMENTS	COGNITIVE LEVELS
QUE	STION 3:		
3.1	$(3y^2 + 7)^2 = (3y^2 + 7)(3y^2 + 7)$		
	$=9y^4 + 21y^2 + 21y^2 + 49$ $\checkmark$ multiplication		
	$= 9y^4 + 42y^2 + 49 \checkmark$ final answer	(2)	RP
3.2	$\sqrt{49a^{18}} = 7a^9 \checkmark \text{answer}$	(1)	К
3.3	$(-9x \div 3^4x^2)^3 = (\frac{-9x^4}{81x^8})^3 \checkmark = (\frac{-1}{9x^4})^3 \checkmark = \frac{-1}{729x^{12}} \checkmark$	(3)	СР
	simplification and final answer		
	or		
	$=(\frac{-3^{2}x^{4}}{3^{4}x^{8}})^{3} \checkmark = \frac{-3^{6}x^{12}}{3^{12}x^{24}} \checkmark = \frac{-1}{3^{6}x^{12}} = \frac{-1}{729x^{12}} \checkmark$		
	simplification and final answer		
3.4	$(3x^2 \times 7x)^0 = 1$ $\checkmark$ answer	(1)	К
3.5	$\frac{-2pq^{2} \times -3p^{3}q^{6}}{12n^{3}n^{3}} = \frac{6p^{4}q^{8}}{12n^{3}q^{3}} = \frac{pq^{5}}{2} \checkmark \checkmark \text{ simplification}$	(3)	RP
	and final answer		
3.6	$23\ 045\ 000 = 2,3045 \times 10^7$ $\checkmark$ answer	(1)	К
QUE	STION 4:		
4.1.1	The fourth pattern will have 17 hearts. $\checkmark$ answer	(1)	K
4.1.2	I will add four hearts to each pattern to obtain		
	the next pattern. 🗸 explanation	(1)	К
4.1.3	$H = 4n + 1 \checkmark \checkmark$ equation	(2)	RP
4.1.4	H = 4n + 1		
	$45 = 4n + 1$ $\checkmark$ equation		
	44 = 4n		
	11 = n The 11th pattern will have		6-
	45 hearts ✓ answer	(2)	CP
4.2.1	192; –768 ✓ number	(1)	К
4.2.2	Each term is multiplied by -4 to generate the		
	next term. 🗸 explanation	(1)	K

SOLUTIONS	MARKS AND	COGNITIVE SOLUTIONS		MARKS AND	COGNITIVE
	COMMENTS	LEVELS		COMMENTS	LEVELS
QUESTION 5:			QUESTION 7:		
5.1 $y = -(-2)^3 + 5 = -(-8) + 5 = 13$ $\checkmark$ substitution	(1)	RP	7.1 $-2x + 6 = 16$		
and answer			-2x = 10		
5.2 $-x^3 + 5 = 32 \checkmark$ equation			$\therefore x = -5 \checkmark$ final answer	(1)	RP
$-x^3 = 27$			7.2 $2 - \frac{x}{11} = -8$		
$x^3 = -27$	(2)	CP	$-\frac{x}{11} = -8 - 2$ $\checkmark$ equation and simplification		
$x = -3 \checkmark \text{answer}$	(2)	CF	$-\frac{x}{x} = -10$		
QUESTION 6:				(2)	DD
6.1.1 Degree of polynomial: 7 ✓ answer	(1)	K	$\therefore x = 110 \checkmark \text{ final answer}$	(2)	Kr
6.1.2 Four terms ✓ answer	(1)	К	7.3 $4(x + 1) - 3(x - 3) = -5x + 12$		
6.1.3 −3 ✓ answer	(1)	К	$4x + 4 - 3x + 9 = -5x + 12$ $\checkmark$ equation and		
$621\frac{5x-4y}{2}+\frac{5x-10y}{5}=\frac{5(5x-4y)+2(5x+10y)}{5}$			simplification $r + 5r = 12 - 13$ (simplification		
common denom			4r = -1		
25x - 30y + 10x + 20y					55
$= \frac{10}{10} \checkmark \text{simplification}$			$\therefore x = \frac{1}{6}$ or $-\frac{1}{6}$ $\checkmark$ final answer	(3)	RP
$=\frac{55x}{10}$			7.4 $3x^4 = 243$		
$=\frac{7x}{2}$ $\checkmark$ answer	(4)	RP	$x^4 = \frac{243}{3}$		
$(4,2,2,2)$ $(3r + 1)^2 - (3r - 5)(r + 1) + 4(r - 1)(r + 1)$			$x^4 = 81 = 3^4$ for equation and simplification		
$-(3r + 1)(3r + 1) - (3r^2 + 3r - 5r - 5) +$			$\therefore x = \pm 3 \checkmark \checkmark final answer (-1 if \pm is left out)$	(3)	СР
$4(x^2-1) \checkmark \checkmark multiplication$			QUESTION 8:		
$= 9x^{2} + 3x + 3x + 1 - 3x^{2} - 3x + 5x + 5 +$			Let the cost of a student ticket cost Br		
$4x^2 - 4$ $\checkmark$ simplification			Then an adult ticket will cost $R(r + 1250)$ $\checkmark$ expression		
$= 10x^2 + 8x + 2 \checkmark$ final answer	(4)	RP	$4(r + 12.50) + 2r = 770.00$ $\checkmark$ equation		
6.2.3 $\frac{8pq^2 + 10pq - 2q}{2q} = \frac{8pq^2}{2q} + \frac{10pq}{2q} - \frac{2q}{2q} \checkmark \checkmark$ separate			4x + 50 + 2x = 770		
terms			6x = 770 - 50		
$= 4pq + 5p - 1 \checkmark$ final simplified answer	(3)	СР	$6x = 720 \checkmark simplification$		
6.3 $de^2 - 2de - 3 - (-3de + 5 - 7de^2)$			$x = \frac{720}{6}$		
$= de^2 - 2de - 3 + 3de - 5 + 7de^2 \checkmark multiplication$			$\therefore x = 120 \checkmark \text{final answer}$		
$= 8de^2 + de - 8 \checkmark$ final answer	(2)	RP	The cost of a student ticket is R120.	(4)	PS

Grade 8 Mathematics

SOL	UTIONS	MARKS AND COMMENTS	COGNITIVE LEVELS	SOLUTIONS	MARKS AND COMMENTS	COGNITIVE LEVELS
<b>QUE</b> 9.1 9.2	<b>STION 9:</b> $\widehat{D} = 360^\circ - (75^\circ + 85^\circ + 102^\circ)$ (angles of quadrilateral) $\checkmark$ equation $= 360^\circ - 262^\circ$ $= 98^\circ \checkmark$ answer $3x + 20^\circ = 7x - 40^\circ$ (opp. angles of parallelogram) $\checkmark$ equation & reason $3x - 7x = -40^\circ - 20^\circ$	(2)	RP	9.6 $S$ T $T$ $A9^{\circ}$ $1$ $A9^{\circ}$ $1$ $C$ $5$ $Z$ $C$ $5$ $A$		
9.3	$-4x = -60^{\circ}$ $\therefore x = 15^{\circ} \checkmark \text{ answer}$ Let the length of each side of the rhombus be <i>l</i> . 4l = 88	(3)	RP			
	$\therefore l = 22 \text{ cm} \checkmark \text{answer i.e. each side is } 22 \text{ cm}.$	(1)	К	R R		
9.4 9.5	$\triangle ABC \equiv \triangle EDF  (side, angle, angle) \checkmark \checkmark reason$ $\frac{15}{6} \neq \frac{4}{4}  \therefore \text{ The sides are not in proportion. } \checkmark$ $explanation$	(2)	K	$C_3 = 180^\circ - (85^\circ + 49^\circ)$ (adj. angles on str. line) $= 180^\circ - 134^\circ$		
	So, the two rectangles are not similar. $\checkmark$ conclusion	(2)	RP	= 46° $\checkmark$ answer $\widehat{C}_{4} = 49^{\circ} \checkmark$ answer (vert. opp. $\angle$ 's)	(1) (1)	RP K

(1)

(2)

Κ

ΡS

 $\widehat{C}_{_{5}}\,=\,180^{\circ}\!-\!49^{\circ}$   $\checkmark$  answer  $\,$  (adj. angles on str. line)

 $\hat{B}_1 = 85^\circ + 49^\circ \checkmark equation \quad (alt. <math>\angle s; AS || QT)$ 

 $\widehat{B}^{}_{_1}=180^\circ-46^\circ=134^\circ~\text{(co-int.}~\text{s})~\text{s}$ 

= 134° 🗸 answer

equation and answer

Or

SOLUTIONS	MARKS AND COMMENTS	COGNITIVE LEVELS
QUESTION 10:		
10.1 $AB^2 = AC^2 + BC^2$ (Theorem of Pythagoras) $\checkmark$ any form of use of theorem		
$= 11^2 + 4^2$		
= 121 + 16		
= 137		
$\therefore AB = \sqrt{137} \approx 11,705 \text{ mm} \checkmark \text{final answer}$	(2)	RP
10.2 PQ = 16 cm, PR = 11 cm and QR = 5 cm		
$PQ^2 = 16^2$ $PR^2 + QR^2 = 11^2 + 5^2$		
= 256 🗸 = 121 + 25		
= 146 🗸 working out of relationship		
$\therefore PQ^2 \neq PR^2 + QR^2 \checkmark conclusion$		
$\triangle$ PQR is not a right-angled triangle	(3)	RP

### ANALYSIS OF COGNITIVE LEVELS OF MID-YEAR EXAMINATION

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

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 examination paper provided above. As can be seen, this differs slightly from the suggested weightings in the CAPS. This is acceptable, provided the two lower cognitive levels add up to approximately 70% while the two higher levels add up to approximately 30%.

able 2:	<b>WEIGHT</b>	ING OF	MARKS A	CROSS (	COGNITI	VE
	LEVELS	IN THE I	EXEMPLAI	R EXAMI	NATION	PAPER

Cognitive levels	Mark out of 80	Percentage	
Knowledge	19	23,7%	
Routine procedures	38	47,5%	
Complex procedures	15	18,8%	
Problem solving	8	10%	