

**GRADE 9**

# **Mathematics**

Teacher Toolkit: CAPS Planner and Tracker

**2020 TERM 2**



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## A. ABOUT THE TRACKER AND RESOURCES

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



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

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



*But who will help me?*

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



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

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



*How do I use the planner and tracker?*

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



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

1. Find the textbook that YOU are using.

2. Use the planning page each week to plan your teaching for the week. It will help you link the CAPS content and skills to relevant material in the textbook, the teacher's guide, and other materials such as the DBE workbook.

3. Keep a record of the date when you were able to complete the topic. It may be different from the date you planned, and for different classes. Write this date in the column on the right for your records.

4. At the end of the week, reflect and check if you are up to date. Make notes in the blank space.

5. Be ready to have a professional and supportive curriculum coverage conversation with your HoD (or subject or phase head).

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



## 2. Purpose of the tracker

The Grade 9 Mathematics Curriculum and Assessment Planner and Tracker is a tool to support you in your role as a professional teacher. Its main purpose is to help you to keep pace with the time requirements and the content coverage of the CAPS. 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 9 is based on the requirements prescribed by the Department of Basic Education's Curriculum and Assessment Policy Statement (CAPS) for Mathematics in the Senior Phase. The work set out for each day is linked directly to the topics and subtopics given in the CAPS, and the 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 sets of approved 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. 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 Learning and Teaching Support Materials (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, *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 Book 1*

The tracker for each of the eight published books gives links to worksheets in the 2017 DBE workbooks relevant to the content prescribed for each day. The worksheets in the DBE workbooks are referred to by worksheet number and page. These workbooks should be used in conjunction with the Learner's Book activities as mentioned above. You should review them before each lesson, and decide how best to use them – for teaching, revision, extension or for consolidation, in class or for homework. Also, the pages might be slightly different in the edition you are using, so you should always check that the page you are referred to in the tracker is still relevant to the work.

In addition, the tracker for each of the eight approved LTSMs also gives links to relevant pages in the *Sasol Inzalo Learner's Book 1* to help you find relevant resources here.

## 6. Managing time allocated in the tracker

The CAPS prescribes four and a half hours of Mathematics per week in Grade 9. The tracker provides a suggested plan for five lessons a week, with the first four lessons expected to be an hour long, and the fifth, 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 second term. Eight of these hours is given for assessments and revision. The programme in the tracker completes the formal teaching programme in eight weeks, leaving Week 9 for revision and Week 10 for the formal examination period. Should you use this tracker in a year in which the second term is longer or shorter than 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 that the KwaZulu-Natal *sequence* of topics for Term 2 is not the same as that of the CAPS. However, the topics covered are the same.

## 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. CAPS states that **“tests, examinations, projects, assignments and investigations are recommended for Mathematics”** (p. 155). An overview of the term indicating where the assessments will be done is provided in an Assessment Term Plan table 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’s Book to Learner’s Book, but are always in line with the CAPS specifications. It is suggested that you discuss testing times with your colleagues teaching other subjects in order to avoid the learners having to write several tests on the same day.

In 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 DBE Sasol/Inzalo Learner’s Book and Teacher’s Guide or ANA past papers and exemplars. For the mid-year examination, in addition to these options, you can use the exemplar paper which, together with a memorandum, and 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 and notes

The tracker suggests 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.

- 1. Review the term focus:** Start by looking at the CAPS and **orientating** yourself to the CAPS content focus for the term. It is important that you are clear about the content focus as this will frame everything you do in your Mathematics lessons during the term. **The time allocation per term** is given in the CAPS document on page 118. This indicates how many hours are 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. Also think 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](http://www.education.gov.za), [www.thutong.doe.gov.za/InclusiveEducation](http://www.thutong.doe.gov.za/InclusiveEducation)
    - Directorate Inclusive Education, Department of Basic Education. (2010). *Guidelines for Inclusive Teaching and Learning. Education White Paper 6. Special needs education: Building an inclusive education and training system*. Pretoria. [www.education.gov.za](http://www.education.gov.za), [www.thutong.doe.gov.za/InclusiveEducation](http://www.thutong.doe.gov.za/InclusiveEducation)
- 4. Plan the steps in your lesson, and think carefully about how much time to allocate to different learner activities.** Also think about how to organise the learners when they work. Most lessons should include the steps below 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 practice their mathematics and problem solving skills. It is important that you **prepare yourself for the classwork activity** because 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 that need additional support or extension by paying attention to how well they managed the homework, how they respond when you develop the new content, and how they cope with the class activities. While the rest of the class is busy working through the classwork activities, you should spend some time with those that need extra support and help them to work through the remediation activities. If learners successfully complete the daily classwork activities ahead of the rest of the class, be prepared 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 mathematics 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 to you that you should note your thoughts about the day's lesson. You will use these notes as you plan and prepare for your teaching and in discussions with your HOD and peers.

## C. ASSESSMENT TERM PLAN

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

**Note:** The DBE changes the requirements for formal assessment from time to time. If you receive official notification of such changes, you should adjust the programme given here accordingly.

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

School-base assessment	FORMS OF ASSESSMENT	Minimum requirements per term				Number of tasks per year	Weighting
		Term 1	Term 2	Term 3	Term 4		
	Test	1	1	1		3	40%
	Examination		1			1	
	Assignment	1		1	1	3	
	Investigation		1		1	2	
	Project			1		1	
	<b>Total</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>10*</b>	
<b>End-of-year examination</b>						1	60%

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

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

LTSMs	Investigation	Test Test content: All topics covered in Term 2	Mid-year examination
<b>Premier Mathematics</b>	<b>Week 6 – Day 30</b> <b>Formal assessment: Investigation</b> LB pp. 128–129 TG p. 81	<b>Week 5 – Day 21</b> <b>Formal assessment: Test</b> Select questions from <i>Term 2 Formal Assessment: Test</i> TG pp. 70–72 Memo TG pp. 73–75	<b>Common examination/Examination exemplar</b> <i>Term 2 Mid-year Examination</i> TG pp. 84–86 Memo TG pp. 87–90
<b>Spot On Mathematics</b>	<b>Week 6 – Day 30</b> <b>Formal assessment: Investigation</b> <i>Doubling the dimensions of a 2-D shape</i> Act. 4.4 LB pp. 155–156 Memo TG pp. 109–110	<b>Week 4 – Day 20</b> <b>Formal assessment: Test</b> Select questions from <i>Mid-year Examination</i> TG pp. 115–118 Memo TG pp. 119–120	<b>Common examination/Examination exemplar</b> <i>Mid-year Examination</i> TG pp. 115–118 Memo TG pp. 119–120
<b>Platinum Mathematics</b>	<b>Week 6 – Day 30</b> <b>Formal assessment: Investigation</b> <i>Plan and design a living space</i> LB pp. 146–147 TG p. 82	<b>Week 4 – Day 20</b> <b>Formal assessment: Test</b> Select questions from <i>Formal Assessment Exemplar: Mid-year Examination</i> TG pp. 158–160 Memo TG 161–162	<b>Common examination/Examination exemplar</b> Formal assessment exemplar: <i>Mid-year Examination</i> TG pp. 158–160 Memo TG 161–162
<b>Oxford Headstart Mathematics</b>	<b>Week – 6 Day 30</b> <b>Formal assessment: Investigation</b> <i>Investigate the change in perimeter and area of 2-D shapes if one or more dimensions change</i> Act. 1–2 LB pp. 339–344 TG pp. 238–239 <b>Note:</b> Draw up rubric for marking	<b>Week 5 – Day 21</b> <b>Formal assessment: Test</b> Select questions from <i>Examination Exemplar (June): Additional</i> TG pp. 248–251 Memo TG pp. 252–255	<b>Common examination/Examination exemplar</b> <i>Examination Exemplar (June): Additional</i> TG pp. 248–251 Memo TG pp. 252–255
<b>Oxford Successful Mathematics</b>	<b>Week 6 – Day 30</b> <b>Formal assessment: Investigation</b> <i>The properties of quadrilaterals</i> LB pp. 429–430 TB p. 319	<b>Week 5 – Day 21</b> <b>Formal assessment: Test</b> Select questions according to topics covered; add in questions TG pp. 321–322 Memo TG p. 323	<b>Common examination/Examination exemplar</b> <i>June Examination</i> TG pp. 327– 331 Memo TG pp. 332–335

LTSMs	Investigation	Test	Mid-year examination
<b>Clever: Keeping Maths Simple</b>	<b>Week 6 – Day 30</b> <b>Formal assessment: Investigation</b> LB p. 190 TG pp. 181–182	<b>Week 5 – Day 21</b> <b>Formal assessment: Test</b> Select geometry questions from <i>Mid-year Examination</i> TG pp. 186–188 Memo TG pp. 191–192	<b>Common examination/Examination exemplar</b> <i>Mid-year Examination</i> TG pp. 185–188 Memo TG pp. 189–192
<b>Solutions for All Mathematics</b>	<b>Week 6 – Day 30</b> <b>Formal assessment: Investigation</b> <i>Investigating how doubling any or all of the sides of a 2-D figure affects its perimeter and area</i> Act. 17.6 LB pp. 246–247 Memo TG pp. 197–198 <b>Note:</b> Draw up rubric for marking	<b>Week 5 – Day 21</b> <b>Formal assessment: Test</b> Select questions according to topics covered; add in questions TG pp. 422–424 Memo TG pp. 425–426	<b>Common examination/Examination exemplar</b> <i>Mid-year Examination</i> TG pp. 430–433 Memo TG pp. 434–436
<b>Mathematics Today</b>	<b>Week 6 – Day 30</b> <b>Formal assessment: Investigation</b> <i>Investigate right angles in structures</i> LB pp. 166–167 TG p. 71	<b>Week 5 – Day 21</b> <b>Formal assessment: Test</b> Select and supplement questions from <i>Mid-year Examination</i> TG pp. 73–75 Memo TG pp. 76–77	<b>Common examination/Examination exemplar</b> Formal Assessment: <i>Mid-year Examination</i> TG pp. 73–75 Memo TG pp. 76–77
<b>Sasol Inzalo Mathematics Book 1</b>	<b>Week 8 – Day 36 &amp; 37</b> <b>Formal assessment: Investigation</b> An investigation must be sourced from another set of LTSMs	<b>Week 5 – Day 21</b> <b>Formal assessment: Test</b> Set own test by sourcing material from other sets of LTSMs	<b>Common examination/Examination exemplar</b>

## 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 written 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. Extension and remedial activities are also suggested throughout the Teacher's Guide.
- *Oxford Successful Mathematics* has a consolidation exercise at the end of each chapter in the Learner's Book (with full solutions in the Teacher's Guide).

- *Clever: Keeping Maths Simple* does not have revision exercises but there is enough material in many of the exercises for revision purposes.
- *Solutions for All Mathematics* has a revision exercise (*Check what you know*) at the end of each unit. The final unit of each term comprises revision of all the units done during the term. Comprehensive solutions are provided in the Teacher's Guide. Enrichment is provided occasionally and is indicated by an enrichment icon.
- 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. There is also a separate photocopiable Worksheet Book covering all the topics.
- The *Sasol Inzalo Mathematics Book 1* provides worksheets at the end of each chapter with full solutions in the Teacher's Guide. A chapter on revision and assessment is given at the end of each book.

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

## D. TRACKERS FOR EACH SET OF APPROVED LTSMs

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### **Premier Mathematics**

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

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

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

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

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

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

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

Premier Mathematics Week 1											
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class			
								Date completed			
1											
2											
3	<b>The Theorem of Pythagoras:</b> Revise the theorem; Solve problems using the theorem	138	1	110–111	64	No. 58a (pp. 156–157)	No. 1–3 (pp. 235–239)				
4	Solve problems involving unknown lengths	138	2	112–113	64–65	No. 58b (pp. 158–159)	No. 1–4 (pp. 241–243) No. 1–3 (pp. 243–245)				
5	Identify if triangles are right-angled	138	3	114–115	65–66		No. 1–3 (pp. 239–240)				
Reflection											
<p><b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>					
HOD:						Date:					

**Premier Mathematics Week 2**

\*Select

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
6	Solve problems with 2-D shapes using the Theorem of Pythagoras; Solve problems with 3-D shapes	138	4-5*	116-119	66-68	No. 59a-b (pp. 160-163)						
7	Revision (use <i>Sasol Inzalo</i> book)	138					No. 1-4 (pp. 246-247) Worksheet (p. 248)					
8	<b>Area and perimeter of 2-D shapes:</b> Revision of SI units	139-140	1	120-121	76-77	No. 60 (pp. 164-165)	No. 1-3 (p. 257)					
9	Perimeter of 2-D shapes	139-140	2	122-123	77-78	No. 61 (pp. 166-167)	No. 1-5 (pp. 249-252)					
10	Area of 2-D shapes	139-140	3 (no. 1-3)	124-125	78	No. 62 (pp. 168-169)	No. 1-4 (pp. 253-254) No. a-d (p. 263)					

**Reflection**

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

What will you change next time? Why?

**HOD:**

**Date:**



**Premier Mathematics Week 3**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
11	Area of 2-D shapes	139–140	3 (no. 4–10)	125–126	78–79	No. 63 (pp. 170–171)	No. 1–3 (pp. 258–259) No. 1–2 (p. 260) No. 1–2 (pp. 261–262)					
12	Circumference and area of circles; Revision (use <i>Sasol Inzalo</i> book)	139–140	4	126–128	79–80	No. 64 (pp. 172–173)	No. 1–5 (pp. 255–256) Worksheet (p. 266)					
13	<b>Constructions and the geometry of straight lines:</b> Construct angles; Construct angles of 45°, 30°, 60° and their multiples without using a protractor	134	2 (no. 1–4)	79–80 82–85	48–49	No. 39–40a (pp. 100–103)	No. 1–8 (pp. 182–183)					
14	Construct angles of 45°, 30°, 60° and their multiples without using a protractor cont.	134	2 (no. 5–13)	85	49–50	No. 40b (pp. 104–105)	No. 1–2 (p. 183) Step 1–3 (pp. 180–181)					
15	Construct perpendicular lines (use <i>Sasol Inzalo</i> book)	134					No. 1–2 (pp. 175–177) No. 1–3 (pp. 177–178) No. 1–2 (pp. 178–180)					

**Note:** Refer to Day 13: 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?

What will you change next time? Why?

**HOD:**

**Date:**

**Premier Mathematics Week 4**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
16	Revise the relationship between angles formed by perpendicular lines and solve geometric problems	137	1	102–103	60	No. 53–54 (pp. 142–145)	No. 1–7 (pp. 219–223)					
17	Revise the relationship between angles formed by intersecting lines and solve geometric problems	137	2	103–105	60–61		No. 1–10 (pp. 224–225)					
18	Revise the relationship between angles formed by parallel lines cut by a transversal and solve geometric problems	137	3	105–108	61–62	No. 55a–b (pp. 146–149)	No. 1–2 No. 1–9 (pp. 226–229)					
19	Solve geometric problems involving parallel lines	137	4	109	62–63		No. 1–2 (pp. 230–231)					
20	Revision	137	Rev. (no. 10)	132	83	No. 56 (pp. 150–151)	No. 1–3 (pp. 232–234)					

**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

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
21	<b>Formal assessment: Test</b> (Select questions from <i>Term 2 Formal Assessment: Test</i> )				70–72 Memo 73–75							
22	<b>Constructions and geometry of 2-D shapes:</b> Construct triangles and bisecting angles of a triangle	134	1 (no. 1–3, 5)	79–82	48	No. 41a–b (pp. 106–109)	No. 1–3 (p. 184)					
23	By construction, investigate the angles in a triangle	134	3	85	50		No. 1–2 No. 1–5 (pp. 185–187)					
24	Classifying triangles: Revise properties and definitions of triangles	135	1	91–92	54	No. 47 (pp. 122–123)	No. 1–4 (pp. 197–200)					
25	Revise properties and definitions of triangles cont.	135	1 (no. 3)#	92	54	No. 48a–b (pp. 124–127)	No. 1–3 (pp. 201–202)					

**Note:** Refer to Day 22: 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?

What will you change next time? Why?

HOD:

Date:

**Premier Mathematics Week 6**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
26	By construction, explore the minimum conditions for two triangles to be congruent	134	4	86–87	51		(pp. 187–191)					
27	Through investigation, establish the minimum conditions for congruent triangles	136	3 (no. 1)	96	57	No. 52a (pp. 138–139)	No. 1–2 (p. 207) No. 1–6 (pp. 208–209)					
28	Through investigation, establish the minimum conditions for congruent triangles cont.	136	3 (no. 2–3 and ex. p. 97)	96–97	57	No. 52b (pp. 140–141)	No. 1–4 (pp. 209–211)					
29	Through investigation, establish the minimum conditions for similar triangles cont.	136	4	98–99	58	No. 51a–b (pp. 134–137)	No. 1–3 (pp. 211–212) No. 1–3 (pp. 213–214)					
30	<b>Formal assessment: Investigation</b>		Inv.	128–129	81							
<b>Reflection</b>												
<p><b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>						
						<p><b>HOD:</b> _____ <b>Date:</b> _____</p>						

**Premier Mathematics Week 7**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
31	Solve problems with similar triangles (use <i>Sasol Inzalo</i> book)	136					No. 1–6 (pp. 215–217)					
32	Solve geometric problems	136	5	99–101	59	No. 57a (pp. 152–153)	No. 1–2 (pp. 217–218)					
33	Revision; Go over investigation done in previous week	136	Rev. (no. 2–5)	130–131	82–83	No. 57b (pp. 154–155)						
34	Construct quadrilaterals; By construction, investigate the sides, angles and diagonals in quadrilaterals: square and rectangle	134	1 (no. 4, 6) 5	81 87–88	48 51–52	No. 42a (pp. 110–111)	No. 1–5 (p. 192) No. 1–4 (p. 194)					
35	By construction, investigate the sides, angles and diagonals in quadrilaterals: parallelogram and rhombus	134	5	88–89	52	No. 42b (pp. 112–113)	No. 1–4 (pp. 192–193)					
Reflection												
<p><b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>						
HOD:						Date:						

**Premier Mathematics Week 8**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
36	By construction, investigate the sides, angles and diagonals in quadrilaterals: kite; By construction, explore the sum of the interior angles of polygons	134	5–6	89–90	52–53	No. 43–46 (pp. 114–121)	No. 1–6 (pp. 193–194) No. 1–2 (p. 195)					
37	Classifying quadrilaterals: Revise and write clear definitions of quadrilaterals	135	2 (no. 1–3)	93–95	55	No. 49 (pp. 128–129)	Worksheet (p. 196) No. 1–8 (pp. 203–206)					
38	Solve problems involving properties of quadrilaterals	136	2 (no. 4–6)	95	56–57	No. 50a–b (pp. 130–133)	No. 1–2 (pp. 206–207)					
39	Revise	136	Rev. (no. 1, 6–9)	130–132	82–83							
40	Revise (use <i>Term 2 Mid-year Examination Questions 6–7</i> )	134–140			86 Memo 89–90							

**Note:** The *Sasol Inzalo* book has a revision and assessment chapter (pp. 267–282) which can be used for revision purposes in Week 8 and 9.

**Reflection**

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

What will you change next time? Why?

**HOD:**

**Date:**

**Premier Mathematics Week 9 Catch-up and revision (examination preparation) – Plan your week**

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

What will you change next time? Why?

HOD:

Date:

**Premier Mathematics Week 10 Mid-year examination**

**End-of-term reflection**

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

- |  |   |
|--|---|
| <p>1. Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</p> <p>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?</p> | <p>3. What ONE change should you make to your teaching practice to help you teach more effectively next term?</p> <p>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 <b>on track</b>?</p> |
|--|---|

**HOD:**

**Date:**



## Spot On Mathematics

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

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

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

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

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

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

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
1												
2												
3	<b>The Theorem of Pythagoras:</b> Revise the theorem; Solve problems using the theorem (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	138				No. 58a (pp. 156–157)	No. 1–3 (pp. 235–239)					
4	Solve problems involving unknown lengths	138	4.1 (no. 1#)	139–141	103–104	No. 58b (pp. 158–159)	No. 1–4 (pp. 241–243) No. 1–3 (pp. 243–245)					
5	Solve problems with 2-D shapes using the Theorem of Pythagoras	138	4.1 (no. 2–6)	140–142	105		No. 1–3 (pp. 239–240)					

### Reflection

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

What will you change next time? Why?

HOD:

Date:

**Spot On Mathematics Week 2**

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class					
								Date completed					
6	Solve problems with 2-D shapes using the Theorem of Pythagoras (use <i>DBE workbook</i> )	138				No. 59a–b (pp. 160–163)							
7	Revision (use <i>Sasol Inzalo</i> book)	138					No. 1–4 (pp. 246–247) Worksheet (p. 248)						
8	<b>Area and perimeter of 2-D shapes:</b> Revision of SI units; Perimeter of 2-D shapes	139–140	4.2 (no. 1–3)	143–146	106	No. 60 (pp. 164–165)	No. 1–3 (p. 257)						
9	Perimeter of 2-D shapes (including circumference of circles)	139–140	4.2 (no. 4–9)	146–147	106–107	No. 61 (pp. 166–167)	No. 1–5 (pp. 249–252)						
10	Area of 2-D shapes	139–140	4.3 (no. 5)	148–152	108	No. 62 (pp. 168–169)	No. 1–4 (pp. 253–254) No. a–d (p. 263)						

**Reflection**

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

What will you change next time? Why?

HOD:

Date:

**Spot On Mathematics Week 3**

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
11	Area of 2-D shapes cont.	139–140	4.3 (no. 1–4)	152	108	No. 63 (pp. 170–171)	No. 1–3 (pp. 258–259) No. 1–2 (p. 260) No. 1–2 (pp. 261–262)					
12	Revision of area of circles (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	139–140				No. 64 (pp. 172–173)	No. 1–5 (pp. 255–256) Worksheet (p. 266)					
13	<b>Constructions and the geometry of straight lines:</b> Construct geometric figures (lines and angles), including bisecting angles	134	3.1	100–103	85–87	No. 39–40a (pp. 100–103)	No. 1–2 (pp. 175–177) No. 1–3 (pp. 177–178) No. 1–2 (pp. 178–180) Step 1–3 (pp. 180–181)					
14	Construct angles of 45°, 30°, 60° and their multiples without using a protractor (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	134				No. 40b (pp. 104–105)	No. 1–8 (pp. 182–183) No. 1–2 (p. 183)					
15	Lines and angles (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	137				No. 53–54 (pp. 142–145)	No. 1–7 (pp. 219–223) No. 1–10 (pp. 224–225)					

**Note:** Refer to Day 13: 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?

What will you change next time? Why?

**HOD:**

**Date:**

### Spot On Mathematics Week 4

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
16	Revise the relationship between angles formed by parallel lines cut by a transversal (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	137				No. 55a–b (pp. 146–149)	No. 1–2 No. 1–9 (pp. 226–229)					
17	Revise the relationship between pairs of angles (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book )	137				No. 56 (pp. 150–151)	No. 1–7 (pp. 219–223)					
18	Revise the relationship between angles formed by perpendicular, intersecting and parallel lines and solve geometric problems	137	3.6 (no. 1–3)	129–132	97–98		No. 1–2 (pp. 230–231)					
19	Revise the relationship between angles formed by perpendicular, intersecting and parallel lines and solve geometric problems; Go over investigation done in previous week	137	3.6 (no. 4–7)	133	98–99		No. 1–3 (pp. 232–234)					
20	<b>Formal assessment: Test</b> (Select questions from <i>Mid-year Examination</i> )				115–118 Memo 119–120							

#### Reflection

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

What will you change next time? Why?

HOD:

Date:

## Spot On Mathematics Week 5

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
21	<b>Constructions and geometry of 2-D shapes:</b> By construction, investigate the angles in a triangle, focusing on the exterior angles of a triangle	134	Inv.	104–108	88–89	No. 41a (pp. 106–107)	No. 1–3 (p. 184)					
22	By construction, investigate the angles in a triangle, focusing on the exterior angles of a triangle cont.	134	3.2 (no. 1–4)	109	88–89	No. 41b (pp. 108–109)	No. 1–2 No. 1–5 (pp. 185–187)					
23	Revise properties and definitions of triangles; Go over test done in previous week	135		114–115#	93	No. 47–48b (pp. 122–127)	No. 1–4 (pp. 197–200) No. 1–3 (pp. 201–202)					
24	By construction, explore the minimum conditions for two triangles to be congruent	134	3.2 (no. 5–7)	108–109	89–90		(pp. 187–191)					
25	Through investigation, establish the minimum conditions for congruent triangles; Congruent triangles	136	3.4 (no. 1, 3)#	115–118; 123–124	93	No. 52a–b (pp. 138–141)	No. 1–2 (p. 207) No. 1–6 (pp. 208–209) No. 1–4 (pp. 209–211)					

**Note:** Refer to Day 21: 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?

What will you change next time? Why?

**HOD:**

**Date:**

**Spot On Mathematics Week 6**

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
26	Through investigation, establish the minimum conditions for similar triangles	136	Inv.	119–120	93	No. 51a (pp. 134–135)	No. 1–3 (pp. 211–212) No. 1–3 (pp. 213–214)					
27	Similar triangles	136	3.4 (no. 2)	121 123	93	No. 51b (pp. 136–137)	No. 1–6 (pp. 215–217)					
28	Solve geometric problems	136	3.4 (no. 4–8)	122 124–125	93–94	No. 57a–b (pp. 152–155)	No. 1–2 (pp. 217–218)					
29	By construction, investigate the sides, angles and diagonals in quadrilaterals	134	Inv. (no. 1–3)	110–112	91	No. 42a (pp. 110–111)	No. 1–2 (pp. 217–218)					
30	<b>Formal assessment: Investigation</b> <i>Doubling the dimensions of a 2-D shape</i>		4.4	155–156	109–110							

**Reflection**

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

What will you change next time? Why?

HOD:

Date:

**Spot On Mathematics Week 7**

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
31	By construction, investigate the sides, angles and diagonals in quadrilaterals cont.	134	Inv. (no. 3–6)	112–113	91	No. 42b (pp. 112–113)	No. 1–4 (pp. 192–193) No. 1–6 (pp. 193–194) No. 1–2 (p. 195)					
32	Revise and write clear definitions of quadrilaterals; Properties of quadrilaterals	135	3.5 (no. 1–4)	126–128	95	No. 49 (pp. 128–129)	Worksheet (p. 196) No. 1–8 (pp. 203–206)					
33	Properties of quadrilaterals	135	3.5 (no. 5–8)	128	95–96	No. 50a–b (pp. 130–133)	No. 1–2 (pp. 206–207)					
34	Revision	136	Rev. 3 (no. 5–12)*	136–137	101–102	No. 43–46 (pp. 114–121)						
35	Revision of geometry of 2-D shapes and straight lines	136–137	Rev. (no. 1–4)	134–136	100–101							
Reflection												
<p><b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>						
HOD:						Date:						



## Spot On Mathematics Week 8

\*Select

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
36	Revision of geometry of 2-D shapes and straight lines cont.	136–137	Rev. (no. 5–8)	136–137	101–102							
37	Revision of geometry of 2-D shapes and straight lines cont.	136–137	Rev. (no. 9–12)	137–138	102							
38	Revision	134–140	Rev. (no. 1–4)*									
39	Revision	134–140	Rev. (no. 1–4)*									
40	Revision	134–140	Rev. (no. 1–4)*									

**Notes:** 1. Refer to Day 39, 40 and 41: Select from revision activity at end of each unit.  
2. The *Sasol Inzalo* book has a revision and assessment chapter (pp. 267–282) which can be used for revision purposes in Week 8 and 9.

### Reflection

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

What will you change next time? Why?

HOD:

Date:

**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 workbook	Sasol Inzalo	Class				
								Date completed				
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?

What will you change next time? Why?

**HOD:**

**Date:**

**Spot On Mathematics Week 10 Mid-year examination**

**End-of-term reflection**

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

- |  |   |
|--|---|
| <p>1. Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</p> | <p>3. What ONE change should you make to your teaching practice to help you teach more effectively next term?</p>   |
| <p>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?</p>  | <p>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 <b>on track</b>?</p> |

**HOD:**

**Date:**

## Platinum Mathematics

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

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

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

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

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

- *What went well?*
- *What did not go well?*
- *What did the learners find difficult or easy to understand or do?*
- *What will you do to support or extend learners?*
- *Did you complete all the work set for the week?*
- *If not, how will you get back on track?*
- *What will you change 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 workbook	Sasol Inzalo	Class					
								Date completed					
1													
2													
3	<b>The Theorem of Pythagoras:</b> Revise the theorem; Solve problems using the theorem	138	11.1 (no. 1–3)#	98–100	48–50	No. 58a (pp. 156–157)	No. 1–3 (pp. 235–239)						
4	Solve problems involving unknown lengths	138	11.1 (no. 4–5)	101	50	No. 58b (pp. 158–159)	No. 1–4 (pp. 241–243) No. 1–3 (pp. 243–245)						
5	Solve problems with 2-D shapes using the Theorem of Pythagoras	138	11.2	102	51–52	No. 59a (pp. 160–161)							

**Reflection**

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

What will you change next time? Why?

HOD:

Date:

**Platinum Mathematics Week 2**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
6	The converse of the Theorem of Pythagoras: Identify if triangles are right-angled	138	11.3 Rev.	103–105	52–54	No. 59b (pp. 162–163)	No. 1–3 (pp. 239–240)					
7	Revision (use <i>Sasol Inzalo</i> book)	138					No. 1–4 (pp. 246–247) Worksheet (p. 248)					
8	<b>Area and perimeter of 2-D shapes:</b> Revision of SI units; Area and perimeter	139–140	14.1	148–151	84–85	No. 60 (pp. 164–165)	No. 1–3 (p. 257) No. 1–5 (pp. 249–252)					
9	Area and perimeter of composite shapes	139–140	14.2	153–156	85–86	No. 61 (pp. 166–167)	No. 1–4 (pp. 253–254) No. a–d (p. 263) No. 1–5 (pp. 255–256)					
10	Solve problems involving area and perimeter	139–140	14.3 (no. 1–3)	157–158	86	No. 62 (pp. 168–169)	No. 1–3 (pp. 258–259) No. 1–2 (p. 260) No. 1–2 (p. 261–262)					
Reflection												
<p><b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>						
						<p><b>HOD:</b> _____ <b>Date:</b> _____</p>						

Platinum Mathematics Week 3											
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class			
								Date completed			
11	Solve problems involving area and perimeter; Doubling dimensions of a 2-D shape (use <i>Sasol Inzalo</i> book)	139–140	14.3 (no. 4–6)	158	86–87	No. 63 (pp. 170–171)	No. 1–4 (pp. 264–265)				
12	Revision	139–140	Rev.	159	87–88	No. 64 (pp. 172–173)	Worksheet (p. 266)				
13	<b>Constructions and the geometry of straight lines:</b> Construct geometric figures, including bisecting angles	134	12.1 (no. 1–4)	106–111	55–57	No. 39 (pp. 100–101)	No. 1–8 (pp. 182–183)				
14	Construct angles of 45°, 30°, 60° and their multiples without using a protractor	134	12.1 (no. 5)	110–111	57	No. 40a (pp. 102–103)	No. 1–2 (p. 183) Step 1–3 (pp. 180–181)				
15	Construct perpendicular lines (use <i>Sasol Inzalo</i> book); Lines and angles (use <i>DBE workbook</i> )	134				No. 53–54 (pp. 142–145)	No. 1–2 (pp. 175–177) No. 1–3 (pp. 177–178) No. 1–2 (pp. 178–180)				
<b>Note:</b> Refer to Day 13: Learners must have ruler, sharp pencil, compass, protractor for constructions.											
Reflection											
<b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?					What will you change next time? Why?						
					HOD: _____ Date: _____						

**Platinum Mathematics Week 4**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
16	Revise the relationship between angles formed by intersecting lines	137	10.1	86–88	45–46		No. 1–7 (pp. 219–223) No. 1–10 (pp. 224–225)					
17	Revise the relationship between angles formed by parallel lines cut by a transversal (use <i>DBE workbook</i> ); Go over investigation done in previous week	137				No. 55a–b (pp. 146–149)	No. 1–2 No. 1–9 (pp. 226–229)					
18	Revise the relationship between angles formed by parallel lines	137	10.2	89–92	46		No. 1–2 (pp. 230–231)					
19	Solve geometric problems	137	10.3	93–96	46–47	No. 56 (pp. 150–151)	No. 1–3 (pp. 232–234)					
20	<b>Formal assessment: Test</b> (Select questions from <i>Formal Assessment Exemplar: Mid-year Examination</i> )				158–160 Memo 161–162							
<b>Reflection</b>												
<p><b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>						
						<p><b>HOD:</b> _____ <b>Date:</b> _____</p>						



Platinum Mathematics Week 5											
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class			
								Date completed			
21	<b>Constructions and geometry of 2-D shapes:</b> By construction, investigate the angles in a triangle	134	12.2 (no. 1)	112–117	58	No. 40b (pp. 104–105)	No. 1–3 (p. 184)				
22	By construction, investigate the angles in a triangle cont.	134	12.2 (no. 2–5)	117	59–60		No. 1–2 No. 1–5 (pp. 185–187)				
23	Revise properties and definitions of triangles	135	13.1	124–126	69–70	No. 47–48b (pp. 122–127)	No. 1–4 (pp. 197–200) No. 1–3 (pp. 201–202)				
24	By construction, explore the minimum conditions for two triangles to be congruent (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book); Go over test done in previous week	134				No. 41a–b (pp. 106–109)	(pp. 187–191)				
25	Through investigation, establish the minimum conditions for congruent triangles; Congruent triangles	136	13.6–13.7	132–136	73–75	No. 52a–b (pp. 138–141)	No. 1–2 (p. 207) No. 1–6 (pp. 208–209) No. 1–4 (pp. 209–211)				
<b>Note:</b> Refer to Day 21: Learners must have ruler, sharp pencil, compass, protractor for constructions.											
Reflection											
<b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?					What will you change next time? Why?						
					HOD: _____ Date: _____						

**Platinum Mathematics Week 6**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
26	Through investigation, establish the minimum conditions for similar triangles	136	13.8	137–139	75–76	No. 51a–b (pp. 134–137)	No. 1–3 (pp. 211–212) No. 1–3 (pp. 213–214)					
27	Solve problems with similar triangles (use <i>Sasol Inzalo</i> book)	136					No. 1–6 (pp. 215–217)					
28	By construction, investigate the sides, angles and diagonals in quadrilaterals	134	12.3 (no. 1)	118–119	61–62	No. 42a (pp. 110–111)	No. 1–5 (p. 192) No. 1–4 (p. 194)					
29	By construction, investigate the sides, angles and diagonals in quadrilaterals cont.	134	12.3 (no. 2–3)	119	62–63	No. 42b (pp. 112–113)	No. 1–4 (pp. 192–193) No. 1–6 (pp. 193–194)					
30	<b>Formal assessment: Investigation</b> <i>Plan and design a living space</i>		Inv.	146–147	82							
<b>Reflection</b>												
<p><b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>						
						<p><b>HOD:</b> _____ <b>Date:</b> _____</p>						

**Platinum Mathematics Week 7**

\*Select

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
31	By construction, explore the sum of the interior angles of polygons	134	12.4	120	63–64	No. 43–44 (pp. 114–117)	No. 1–2 (p. 195)					
32	Revise construction of geometric figures	134	Rev.*	121	65–67	No. 45–46 (pp. 118–121)						
33	Classifying quadrilaterals: Revise and write clear definitions of quadrilaterals	135	13.2	127–128	71	No. 49 (pp. 128–129)	Worksheet (p. 196)					
34	Work with properties of quadrilaterals	136	13.3 13.4	128–130	72	No. 50a (pp. 130–131)	No. 1–8 (pp. 203–206)					
35	Work with properties of quadrilaterals cont.	136	13.5	130–131	72–73	No. 50b (pp. 132–133)	No. 1–2 (pp. 206–207)					

**Reflection**

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

What will you change next time? Why?

**HOD:**

**Date:**

**Platinum Mathematics Week 8**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
36	Solve geometric problems involving 2-D shapes	136	13.9 (no. 1–3)	140–142	76–78							
37	Solve geometric problems involving 2-D shapes cont.	136	13.9 (no. 3–5)	142–143	78–79							
38	Revision	136	Rev. (no. 1a–e)	97	47	No. 57a (pp. 152–153)						
39	Revision cont.	136	Rev. (no. 1f–h, 2)	97	47	No. 57b (pp. 154–155)						
40	Revision cont.	136										

**Note:** The *Sasol Inzalo* book has a revision and assessment chapter (pp. 267–282) which can be used for revision purposes in Week 8 and 9.

**Reflection**

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

What will you change next time? Why?

**HOD:**

**Date:**

**Platinum Mathematics Week 9 Catch-up and revision (examination preparation) – Plan your week**

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

What will you change next time? Why?

**HOD:**

**Date:**

**Platinum Mathematics Week 10 Mid-year examination**

**End-of-term reflection**

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

- |  |   |
|--|---|
| <p>1. Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</p> <p>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?</p> | <p>3. What ONE change should you make to your teaching practice to help you teach more effectively next term?</p> <p>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 <b>on track</b>?</p> |
|--|---|

**HOD:**

**Date:**

## Oxford Headstart Mathematics

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

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

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

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

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

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

## Oxford Headstart Mathematics Week 1

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
1												
2												
3	<b>The Theorem of Pythagoras:</b> Revise the theorem	138		315–317#	224–225	No. 58a (pp. 156–157)	No. 1–3 (pp. 235–239)					
4	Identify if triangles are right-angled	138	1	317	225		No. 1–3 (pp. 239–240)					
5	Solve problems involving unknown lengths	138	2 (no. 1–2)	319–320	225–226	No. 58b (pp. 158–159)	No. 1–4 (pp. 241–243) No. 1–3 (pp. 243–245)					

### Reflection

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

What will you change next time? Why?

**HOD:**

**Date:**



## Oxford Headstart Mathematics Week 2

\*Select

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
6	Solve problems with 2-D shapes using the Theorem of Pythagoras; Revision (use <i>DBE workbook</i> )	138	2 (no. 3–7)	318–320	226–227	No. 59a–b* (pp. 160–163)						
7	Revision (use <i>Sasol Inzalo</i> book)	138					No. 1–4 (pp. 246–247) Worksheet (p. 248)					
8	<b>Area and perimeter of 2-D shapes:</b> Revision of SI units; Perimeter of triangles	139–140	1–2	321–322	227–229	No. 60 (pp. 164–165)	No. 1–3 (p. 257)					
9	Perimeter of quadrilaterals; Perimeter of other polygons	139–140	3–4	322–326	229–231	No. 61 (pp. 166–167)	No. 1–5 (pp. 249–252)					
10	Revision of SI units; Area of triangles; Area of quadrilaterals	139–140	1–2	327–330	231–233	No. 62 (pp. 168–169)	No. 1–4 (pp. 253–254) No. 1–3 (pp. 258–259)					
<b>Reflection</b>												
<p><b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>						
HOD:						Date:						

**Oxford Headstart Mathematics Week 3**

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
11	Area of quadrilaterals cont.	139–140	3–4	331–334	233–234	No. 63 (pp. 170–171)	No. 1–2 (p. 260) No. 1–2 (pp. 261–262)					
12	Circumference and area of circles; Area of composite shapes; Revision	139–140	1–3	335–338	234–237	No. 64 (pp. 172–173)	No. 1–5 (pp. 255–256) No. a–d (p. 263) Worksheet (p. 266)					
13	<b>Constructions and the geometry of straight lines:</b> Construct geometric figures, including bisecting angles	134	1–2	252–255	185–188	No. 39 (pp. 100–101)						
14	Construct angles of 90°, 45°, 30°, 60° and their multiples without a protractor	134	3 (no. 1a–d)	255–257	188–189	No. 40a (pp. 102–103)	No. 1–8 (pp. 182–183)					
15	Construct angles of 45°, 30°, 60°, 90° and their multiples without a protractor cont.	134	3 (no. 1e–j, 2)	257	188–189	No. 40b (pp. 104–105)	No. 1–2 (p. 183) Step 1–3 (pp. 180–181)					

**Note:** Refer to Day 13: 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?

What will you change next time? Why?

**HOD:**

**Date:**

**Oxford Headstart Mathematics Week 4**

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
16	Construct perpendicular lines (use <i>Sasol Inzalo</i> book)	134					No. 1–2 (pp. 175–177) No. 1–3 (pp. 177–178) No. 1–2 (pp. 178–180)					
17	Revise the relationship between angles formed by intersecting lines	137	1	296–298	208–210	No. 53–54 (pp. 142–145)	No. 1–7 (pp. 219–223)					
18	Solve geometric problems involving intersecting lines	137	2	298–300	210–212	No. 56 (pp. 150–151)	No. 1–10 (pp. 224–225)					
19	Revise the relationship between angles formed by parallel lines cut by a transversal	137	1	301–303	213–214	No. 55a–56 (pp. 146–151)	No. 1–2 No. 1–9 (pp. 226–229)					
20	Solve geometric problems involving parallel lines	137	2	304–307	214–216		No. 1–2 (pp. 230–231) No. 1–3 (pp. 232–234)					
Reflection												
<p><b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>						
						<p>HOD: _____ Date: _____</p>						

**Oxford Headstart Mathematics Week 5**

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class					
								Date completed					
21	<b>Formal assessment: Test</b> (Select questions from <i>Examination Exemplar (June): Additional</i> )				248–251 Memo 252–255								
22	<b>Constructions and geometry of 2-D shapes:</b> By construction, investigate the angles in a triangle	134	1–2	258–259	189–192		No. 1–3 (p. 184) No. 1–2 No. 1–5 (pp. 185–187)						
23	Revise properties and definitions of triangles	135	1	273–276	196–198	No. 47 (pp. 122–123)	No. 1–4 (pp. 197–200)						
24	Solve geometric problems involving sides and angles in triangles	136	2	277–278	198–199	No. 48a–b (pp. 124–127)	No. 1–3 (pp. 201–202)						
25	By construction, explore the minimum conditions for two triangles to be congruent	134	3	260–262	192–193	No. 41a–b (pp. 106–109)	– (pp. 187–191)						

**Note:** Refer to Day 22: 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?

What will you change next time? Why?

**HOD:**

**Date:**

**Oxford Headstart Mathematics Week 6**

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class					
								Date completed					
26	By construction, explore the minimum conditions for two triangles to be similar cont.	134	4	262–264	193		No. 1–2 (p. 207) No. 1–6 (pp. 208–209)						
27	Revise the minimum conditions for congruent (and similar) triangles	136	1	285–287	203–205	No. 52a (pp. 138–139)	No. 1–4 (pp. 209–211)						
28	Solve geometric problems involving properties of congruent triangles	136	2	287–288	205–206	No. 52b (pp. 140–141)							
29	Solve geometric problems involving properties of similar triangles	136	3 (no. 1–2)	289–293	206–207	No. 51a–b (pp. 134–137)	No. 1–3 (pp. 211–212) No. 1–3 (pp. 213–214) No. 1–6 (pp. 215–217)						
30	<b>Formal assessment: Investigation</b> <i>Investigate the change in perimeter and area of 2-D shapes if one or more dimensions change</i>		1–2	339–344	238–239								

**Note:** Refer to Day 30: Draw up your own rubric for marking the investigation.

**Reflection**

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

What will you change next time? Why?

**HOD:**

**Date:**

**Oxford Headstart Mathematics Week 7**

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
31	Solve geometric problems (use <i>Sasol Inzalo</i> book)	136					No. 1–2 (pp. 217–218)					
32	By construction, investigate the sides, angles and diagonals: parallelogram and rhombus	134	5 (no. 1–2)	264–267	193–194	No. 42a (pp. 110–111)	No. 1–4 (pp. 192–193)					
33	By construction, investigate the sides, angles and diagonals: rectangle, square, kite	134	5 (no. 3–5)	264–267	193–194	No. 42b (pp. 112–113)	No. 1–5 (p. 192) No. 1–4 (p. 194)					
34	Explore the sum of the interior angles of polygons	134	6	268–269	194–195	No. 43–46 (pp. 114–121)	No. 1–2 (p. 195)					
35	Revise and write clear definitions of quadrilaterals; Go over investigation done in previous week	135	1	279–282	200–201	No. 49 (pp. 128–129)	Worksheet (p. 196) No. 1–8 (pp. 203–206)					

**Reflection**

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

What will you change next time? Why?

HOD:

Date:

**Oxford Headstart Mathematics Week 8**

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
36	Solve geometric problems involving sides and angles in quadrilaterals	136	2 (no. 1–5)	282–283	201–203	No. 50a (pp. 130–131)	No. 1–2 (pp. 206–207)					
37	Solve geometric problems involving sides and angles in quadrilaterals; Revision	136	2 (no. 6–9) Rev.	284 294	203 207	No. 50b (pp. 132–133)						
38	Solve mixed geometric problems	136	1–2 (no. 1–3)	308–311	217–219							
39	Solve mixed geometric problems cont.	136	2 (no. 4–8)	311–312	219–221	No. 57a (pp. 152–153)						
40	Revision	136	Rev.	313	221–222	No. 57b (pp. 154–155)						

**Note:** The *Sasol Inzalo* book has a revision and assessment chapter (pp. 267–282) which can be used for revision purposes in Week 8 and 9.

**Reflection**

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

What will you change next time? Why?

**HOD:**

**Date:**

**Oxford Headstart Mathematics Week 9 Catch-up and revision (examination preparation) – Plan your week**

Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
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?

What will you change next time? Why?

**HOD:**

**Date:**



**Oxford Headstart Mathematics Week 10 Mid-year examination**

**End-of-term reflection**

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

- |  |   |
|--|---|
| <p>1. Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</p> <p>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?</p> | <p>3. What ONE change should you make to your teaching practice to help you teach more effectively next term?</p> <p>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 <b>on track</b>?</p> |
|--|---|

**HOD:**

**Date:**

## Oxford Successful Mathematics

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

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

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

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

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

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

**Oxford Successful Mathematics Week 1**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
1												
2												
3	<b>The Theorem of Pythagoras:</b> Revise the theorem (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	138				No. 58a (pp. 156–157)	No. 1–3 (pp. 235–239)					
4	Solve problems involving unknown lengths	138	1	228–230	169–171	No. 58b (pp. 158–159)	No. 1–4 (pp. 241–243) No. 1–3 (pp. 243–245)					
5	Solve problems with 2-D (and 3-D) shapes using the Theorem of Pythagoras	138	2	231–232	171–172		No. 1–3 (pp. 239–240)					

**Reflection**

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

What will you change next time? Why?

HOD:

Date:

**Oxford Successful Mathematics Week 2**

\*Select

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
6	Solve practical problems with 2-D (and 3-D) shapes using the Theorem of Pythagoras; Revision (use <i>DBE workbook</i> )	138	3	232–234	173–174	No. 59a–b* (pp. 160–163)						
7	Revision (use <i>Sasol Inzalo</i> book)	138					No. 1–4 (pp. 246–247) Worksheet (p. 248)					
8	<b>Area and perimeter of 2-D shapes:</b> Revision of SI units; Area and perimeter	139–140	1	235–238	175–177	No. 60–61 (pp. 164–167)	No. 1–3 (p. 257) No. 1–5 (pp. 249–252) No. 1–4 (pp. 253–254)					
9	Area of 2-D shapes	139–140	2–3	238–240	177–180	No. 62–63 (pp. 168–171)	No. a–d (p. 263) No. 1–3 (pp. 258–259) No. 1–2 (p. 260) No. 1–2 (pp. 261–262)					
10	Circumference and area of circles	139–140	1–2*	241–245	180–184	No. 64 (pp. 172–173)	No. 1–5 (pp. 255–256)					
Reflection												
<p><b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>						
<p><b>HOD:</b></p>						<p><b>Date:</b></p>						

**Oxford Successful Mathematics Week 3**

\*Select

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
11	Doubling of dimensions of 2-D shapes; Revision of area and perimeter	139–140	1 Cons.*	246–251	184–191		Worksheet (p. 266)					
12	<b>Constructions and the geometry of straight lines:</b> Construct geometric figures, including bisecting angles of a triangle	134	1–3	166–171	135–138	No. 39 (pp. 100–101)						
13	Construct angles of 90°, 45°, 30°; 60° without using a protractor	134	1–2	172–174	138–140	No. 40a (pp. 102–103)	No. 1–8 (pp. 182–183) No. 1–2 (p. 183) Step 1–3 (pp. 180–181)					
14	Construct perpendicular lines (use <i>Sasol Inzalo</i> book)	134					No. 1–2 (pp. 175–177) No. 1–3 (pp. 177–178) No. 1–2 (pp. 178–180)					
15	Revise the relationship between angles formed by perpendicular and intersecting lines and solve geometric problems	137	1	209–211	158–159	No. 53–54 (pp. 142–145)	No. 1–7 (pp. 219–223)					

**Note:** Refer to Day 12: 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?

What will you change next time? Why?

**HOD:**

**Date:**

**Oxford Successful Mathematics Week 4**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
16	Revise the relationship between angles formed by perpendicular and intersecting lines and solve geometric problems cont.	137	2	211–212	160		No. 1–10 (pp. 224–225)					
17	Revise the relationship between angles formed by parallel lines cut by a transversal (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	137				No. 55a–b (pp. 146–149)	No. 1–2 No. 1–9 (pp. 226–229)					
18	Revise the relationship between angles formed by parallel lines cut by a transversal and solve geometric problems	137	1–2	213–216	160–162	No. 56 (pp. 150–151)	No. 1–2 (pp. 230–231)					
19	Solve geometric problems involving parallel lines	137	3–4	217–219	162–163							
20	Solve geometric problems involving lines and angles	137	3	222–223	165–166		No. 1–3 (pp. 232–234)					

**Reflection**

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

What will you change next time? Why?

**HOD:**

**Date:**

**Oxford Successful Mathematics Week 5**

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class					
								Date completed					
21	<b>Formal assessment: Test</b> (Select questions according to topics covered; add in questions)				321–322 Memo 323								
22	<b>Constructions and geometry of 2-D shapes:</b> By construction, investigate the angles in a triangle	134	1	175–177	140–141	No. 40b (pp. 104–105)	No. 1–3 (p. 184)						
23	By construction, investigate the angles in a triangle cont.	134	2	177–178	141		No. 1–2 No. 1–5 (pp. 185–187)						
24	Revise properties and definitions of triangles	135	1#	195–196	151–153	No. 47–48a (pp. 122–125)	No. 1–4 (pp. 197–200) No. 1–3 (pp. 201–202)						
25	Solve geometric problems using properties of triangles	136	2–3	196–199	153–154	No. 48b (pp. 126–127)							

**Note:** Refer to Day 21: 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?

What will you change next time? Why?

**HOD:**

**Date:**

**Oxford Successful Mathematics Week 6**

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
26	By construction, explore the minimum conditions for two triangles to be congruent	134	1	179–182	142–143	No. 41a (pp. 106–107)	– (pp. 187–191) No. 1–2 (p. 207) No. 1–6 (pp. 208–209)					
27	Revise the minimum conditions for similar and congruent triangles; Solving problems using congruency	136	1	204–206	157–158		No. 1–4 (pp. 209–211)					
28	By construction, explore the minimum conditions for two triangles to be similar	134	2	183–184	143–144	No. 41b (pp. 108–109)	No. 1–3 (pp. 211–212) No. 1–3 (pp. 213–214)					
29	Solving problems using similarity	136	2#	206–208	158	No. 52a–b (pp. 138–141)	No. 1–6 (pp. 215–217)					
30	<b>Formal assessment: Investigation</b> <i>The properties of quadrilaterals</i>		Inv.	429–430	319							
<b>Reflection</b>												
<p><b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>						
						<p><b>HOD:</b> _____ <b>Date:</b> _____</p>						



**Oxford Successful Mathematics Week 7**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
31	Solve geometric problems involving triangles	136	1–2	220–222	163–165		No. 1–2 (pp. 217–218)					
32	By construction, investigate the sides, angles and diagonals in quadrilaterals: square	134	Inv. 1	185	145	No. 42a (pp. 110–111)	No. 1–5 (p. 192) No. 1–4 (p. 194)					
33	By construction, investigate the sides, angles and diagonals in quadrilaterals	134	Inv. 2	186–187	145–146	No. 42b (pp. 112–113)	No. 1–4 (pp. 192–193) No. 1–6 (pp. 193–194)					
34	Go over findings from the investigation, then write clear definitions of quadrilaterals	135	1	200–202	155	No. 49 (pp. 128–129)	Worksheet (p. 196) No. 1–8 (pp. 203–206)					
35	By construction, explore the sum of the interior angles of polygons	134	1–2	188–189	147–148	No. 43–46 (pp. 114–121)	No. 1–2 (p. 195)					
<b>Reflection</b>												
<p><b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>						
HOD:						Date:						

**Oxford Successful Mathematics Week 8**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
36	Solve geometric problems using properties of quadrilaterals	136	2	202–203	156	No. 50a–b (pp. 130–133)	No. 1–2 (pp. 206–207)					
37	Solve geometric problems	136	Cons. (no. 1–3.2)	225	166–167							
38	Solve geometric problems cont.	136	Cons. (no. 3.3–5)	226	167	No. 51a–b (pp. 134–137)						
39	Application of geometric figures and lines cont. (use <i>DBE workbook</i> )	136				No. 57a–b (pp. 152–155)						
40	Revision	136										

**Note:** The *Sasol Inzalo* book has a revision and assessment chapter (pp. 267–282) which can be used for revision purposes in Week 8 and 9.

**Reflection**

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

What will you change next time? Why?

**HOD:**

**Date:**

**Oxford Successful Mathematics Week 9 Catch-up and revision (examination preparation) – Plan your week**

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

What will you change next time? Why?

HOD:

Date:

End-of-term reflection

Think about and make a note of:

- |  |   |
|--|---|
| <p>1. Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</p> <p>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?</p> | <p>3. What ONE change should you make to your teaching practice to help you teach more effectively next term?</p> <p>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 <b>on track</b>?</p> |
|--|---|

HOD:

Date:

## Clever: Keeping Maths Simple

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

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

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

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

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

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

## Clever: Keeping Maths Simple Week 1

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
1												
2												
3	<b>The Theorem of Pythagoras:</b> Revise the theorem; Solve problems involving unknown lengths	138	What you...#	168	161–166	No. 58a (pp. 156–157)	No. 1–3 (pp. 235–239)					
4	Solve problems involving unknown lengths; Identify right-angled triangles	138	1	168–171	166	No. 58b (pp. 158–159)	No. 1–4 (pp. 241–243) No. 1–3 (pp. 239–240)					
5	Solve problems involving unknown lengths (option: using Pythagorean triples)	138	2	171–173	166–167		No. 1–3 (pp. 243–245)					

### Reflection

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

What will you change next time? Why?

HOD:

Date:

## Clever: Keeping Maths Simple Week 2

\*Select

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
6	Solve problems with 2-D shapes using the Theorem of Pythagoras; Revise the Theorem of Pythagoras (use <i>DBE workbook</i> )	138	3	173–175	167–169	No. 59a–b (pp. 160–163)						
7	Revision (use <i>Sasol Inzalo</i> book)	138					No. 1–4 (pp. 246–247) Worksheet (p. 248)					
8	<b>Area and perimeter of 2-D shapes:</b> Revision of area and perimeter	139–140	<i>What you...</i>	176	170–175	No. 60 (pp. 164–165)	No. 1–5 (pp. 249–252)					
9	Area of shaded part of 2-D shapes	139–140	1	177–178	175–176	No. 61 (pp. 166–167)	No. 1–4 (pp. 253–254) No. a–d (p. 263)					
10	Area and perimeter of 2-D shapes	139–140	2*	178–182	176–178	No. 62 (pp. 168–169)	No. 1–5 (pp. 255–256) No. 1–3 (pp. 258–259) No. 1–2 (p. 260) No. 1–2 (pp. 261–262)					
Reflection												
<b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?						
						HOD:						Date:

**Clever: Keeping Maths Simple Week 3**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
11	Conversions between SI units; Doubling dimensions	139–140	3 (no. 1–2)	182–186	178–179	No. 63 (pp. 170–171)	No. 1–3 (p. 257)					
12	Conversions between SI units cont.; Doubling dimensions cont.; Revision (use <i>Sasol Inzalo</i> book)	139–140	3 (no. 3–8)	186–187	179–180	No. 64 (pp. 172–173)	No. 1–4 (pp. 264–265) Worksheet (p. 248)					
13	<b>Constructions and the geometry of straight lines:</b> Construct geometric figures, including bisecting angles of a triangle	134	<i>What you...</i>	112	117–125	No. 39 (pp. 100–101)						
14	Construct angles of 45°, 30°, 60° and their multiples without using a protractor	134	1 (no. 1)	112–119	126	No. 40a (pp. 102–103)	No. 1–8 (pp. 182–183) No. 1–2 (p. 183) Step 1–3 (pp. 180–181)					
15	Construct perpendicular lines (use <i>Sasol Inzalo</i> book)	134					No. 1–2 (pp. 175–177) No. 1–3 (pp. 177–178) No. 1–2 (pp. 178–180)					

**Note:** Refer to Day 13: 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?

What will you change next time? Why?

**HOD:**

**Date:**



**Clever: Keeping Maths Simple Week 4**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
16	Revise the relationship between angles formed by perpendicular and intersecting lines and solve geometric problems	137	What you... 1 (no. 1)	160–162	153–155	No. 53–54 (pp. 142–145)	No. 1–7 (pp. 219–223)					
17	Revise the relationship between angles formed by perpendicular and intersecting lines and solve geometric problems cont.	137	1 (no. 2–5)	162–163	155–156		No. 1–10 (pp. 224–225)					
18	Revise the relationship between angles formed by parallel lines cut by a transversal and solve geometric problems	137	2 (no. 1)	163–165	157–158	No. 55a–b (pp. 146–149)	No. 1–2 No. 1–9 (pp. 226–229)					
19	Solve geometric problems involving parallel lines	137	2 (no. 2–3)	166–167	158–159	No. 56 (pp. 150–151)	No. 1–2 (pp. 230–231)					
20	Solve geometric problems involving parallel lines cont.	137	2 (no. 4–6)	166–167	159–160		No. 1–3 (pp. 232–234)					
Reflection												
<p><b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>						
HOD:						Date:						

## Clever: Keeping Maths Simple Week 5

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class					
								Date completed					
21	<b>Formal assessment: Test</b> (Select geometry questions from <i>Mid-year Examination</i> )				186–188 Memo 191–192								
22	<b>Constructions and geometry of 2-D shapes:</b> By construction, investigate the angles in a triangle	134	1 (no. 2–6)	119–120	127–128	No. 40b (pp. 104–105)	No. 1–3 (p. 184)						
23	By construction, investigate the angles in a triangle cont.	134	Inv. 1	120–122	128–130		No. 1–2 No. 1–5 (pp. 185–187)						
24	Revise properties and definitions of triangles	135	What you...#	134–136	135–140	No. 47 (pp. 122–123)	No. 1–4 (pp. 197–200)						
25	Revise properties and definitions of triangles (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	135				No. 48a–b (pp. 124–127)	No. 1–3 (pp. 201–202)						

**Note:** Refer to Day 21: 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?

What will you change next time? Why?

HOD:

Date:

**Clever: Keeping Maths Simple Week 6**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
26	By construction, explore the minimum conditions for two triangles to be congruent	134	Inv. 4	131–132	134	No. 41a (pp. 106–107)	– (pp. 187–191)					
27	By construction, explore the minimum conditions for two triangles to be congruent cont.	134	4	132–133	134	No. 41b (pp. 108–109)	No. 1–2 (p. 207) No. 1–6 (pp. 208–209)					
28	Go over investigation findings; Establish the minimum conditions for congruent triangles	136	3 (no. 1)	145–149	144–146	No. 52a–b (pp. 138–141)						
29	Congruent triangles	136	3 (no. 2–4)	149–150	146							
30	<b>Formal assessment: Investigation</b>		Inv.	190	181–182							
<b>Reflection</b>												
<p><b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>						
HOD:						Date:						

**Clever: Keeping Maths Simple Week 7**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
31	Through investigation, establish the minimum conditions for similar triangles; Similar triangles	136	Inv. 2 4	151–155	146–147	No. 51a–b (pp. 134–137)	No. 1–3 (pp. 211–212) No. 1–3 (pp. 213–214)					
32	Solve problems with similar triangles (use <i>Sasol Inzalo</i> book)	136					No. 1–6 (pp. 215–217) No. 1–2 (pp. 217–218)					
33	By construction, investigate the sides, angles and diagonals in quadrilaterals	134	Inv. 3	126–128	133	No. 42a (pp. 110–111)	No. 1–4 (pp. 192–193) No. 1–6 (pp. 193–194)					
34	By construction, investigate the sides, angles and diagonals in quadrilaterals: square and rectangle	134	3	129–130	133–134	No. 42b (pp. 112–113)	No. 1–5 (p. 192) No. 1–4 (p. 194)					
35	Revise and write clear definitions of quadrilaterals	135	1	136–141	140–141	No. 49 (pp. 128–129)	Worksheet (p. 196) No. 1–8 (pp. 203–206)					
Reflection												
<p><b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>						
<p><b>HOD:</b></p>						<p><b>Date:</b></p>						

**Clever: Keeping Maths Simple Week 8**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
36	Classifying quadrilaterals	135	Inv. 1 2	141–145	141–144	No. 50a–b (pp. 130–133)						
37	By construction, explore the sum of the interior angles of polygons	134	Inv. 2 Ex. 2	124–126	130–132	No. 43–44 (pp. 114–117)	No. 1–2 (p. 195)					
38	Solve geometric problems	136	5 (no. 1–3)	155–157	148–150	No. 57a–b (pp. 152–155)	No. 1–2 (pp. 206–207)					
39	Solve geometric problems cont.	136	5 (no. 4–8)	158–159	150–151							
40	Revise	134–140	Cont. Test	191–192	183–184							

**Note:** The *Sasol Inzalo* book has a revision and assessment chapter (pp. 267–282) which can be used for revision purposes in Week 8 and 9.

**Reflection**

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

What will you change next time? Why?

HOD:

Date:

**Clever: Keeping Maths Simple Week 9 Catch-up and revision (examination preparation) – Plan your week**

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

What will you change next time? Why?

**HOD:**

**Date:**

**Clever: Keeping Maths Simple Week 10 Mid-year examination**

**End-of-term reflection**

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

- |  |   |
|--|---|
| <p>1. Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</p> <p>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?</p> | <p>3. What ONE change should you make to your teaching practice to help you teach more effectively next term?</p> <p>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 <b>on track</b>?</p> |
|--|---|

**HOD:**

**Date:**

## Solutions for All Mathematics

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

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

1. Day/lesson number.
2. CAPS content linked to Learner's Book content.
3. CAPS page numbers at the start of each CAPS topic.
4. Learner's Book exercises that cover the CAPS content for the day. Where an exercise has been recommended for more than one day, it has been divided into two parts.
5. Page reference in the Learner's Book (LB page reference).
6. Page reference in your Teacher's Guide for the day's activities (TG page reference).
7. DBE workbook link to related content (worksheet and page numbers are referenced).
8. *Sasol Inzalo 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 think of ways of improving on the daily work that the learners in your class are doing. When you reflect you could think about things such as:

- Was your preparation for the lesson adequate? For instance, did you have all the necessary resources, had you thought through the content so that you understood it fully and so could teach it effectively?

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

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

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



## Solutions for All Mathematics Week 1

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class					
								Date completed					
1													
2													
3	<b>The Theorem of Pythagoras:</b> Revise the theorem; Solve problems using the theorem	138	Getting started#	223	180–181	No. 58a (pp. 156–157)	No. 1–3 (pp. 235–239)						
4	Pythagorean triples	138	Act. 16.1 Ex. 16.1	224–226	181–182	No. 58b (pp. 158–159)	No. 1–4 (pp. 241–243) No. 1–3 (pp. 243–245)						
5	Use the Theorem of Pythagoras to solve problems involving unknown lengths; Identify if triangles are right-angled (use <i>Sasol Inzalo</i> book)	138	Act. 16.2 Ex. 16.2	226–228	183	No. 59a (pp. 160–161)	No. 1–3 (pp. 239–240)						
Reflection													
<p><b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>							
						HOD:		Date:					

## Solutions for All Mathematics Week 2

\*Select

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
6	Solve problems with 2-D shapes using the Theorem of Pythagoras; Revision	138	Act. 16.4 Ex. 16.4 Check what...*	232–236	185–188	No. 59b (pp. 162–163)						
7	Revision cont. (use <i>Sasol Inzalo</i> book)	138					No. 1–4 (pp. 246–247) Worksheet (p. 248)					
8	<b>Area and perimeter of 2-D shapes:</b> Revision of SI units; Perimeter and area Conversions between SI units	139–140	<i>Getting started*</i> Act. 17.1 Ex. 17.1	237–241	189–194	No. 60–61 (pp. 164–167)	No. 1–3 (p. 257)					
9	Area of squares and rectangles; Heights and bases of shapes; Areas of triangles	139–140	Act. 17.2 Act. 17.3 Ex. 17.2 Act. 17.4	241–243	194–195	No. 62 (pp. 168–169)	No. 1–4 (pp. 253–254) No. a–d (p. 263)					
10	Perimeter of 2-D shapes	139–140	Act. 17.5 Ex. 17.3*	244–245	195–197	No. 63 (pp. 170–171)	No. 1–5 (pp. 249–252)					
Reflection												
<p><b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>						
						<p><b>HOD:</b> _____ <b>Date:</b> _____</p>						

**Solutions for All Mathematics Week 3**

\*Select

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
11	Area of polygons	139–140	Act. 17.7 Ex. 17.4*	248–251	198–202		No. 1–3 (pp. 258–259) No. 1–2 (p. 260) No. 1–2 (pp. 261–262)					
12	Circumference and area of circles; Revision (use <i>Sasol Inzalo</i> book)	139–140	Act. 17.9 Ex. 17.5*	252–254	203–204	No. 64 (pp. 172–173)	No. 1–5 (pp. 255–256) Worksheet (p. 266)					
13	<b>Constructions and the geometry of straight lines:</b> Construct geometric figures, including bisecting angles of a triangle	134	<i>Getting started</i> Act. 11.1 Ex. 11.1	156–158	131–133	No. 39 (pp. 100–101)						
14	Construct angles of 30° and 60° and their multiples without using a protractor	134	Act. 11.2 Ex. 11.2	158–160	133–135	No. 40a (pp. 102–103)	No. 1–8 (pp. 182–183)					
15	Construct angles of 45° and its multiples without using a protractor	134	Act. 11.3 Ex. 11.3	160–161	135–136	No. 40b (pp. 104–105)	No. 1–2 (p. 183) Step 1–3 (pp. 180–181)					

**Note:** Refer to Day 13: 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?

What will you change next time? Why?

**HOD:**

**Date:**

**Solutions for All Mathematics Week 4**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
16	Construct perpendicular lines (use <i>Sasol Inzalo</i> book)	134					No. 1–2 (pp. 175–177) No. 1–3 (pp. 177–178) No. 1–2 (pp. 178–180)					
17	Revise the relationship between angles formed by perpendicular and intersecting lines and solve geometric problems	137	<i>Getting started</i> Act. 15.1 Ex. 15.1	207–210	169–171	No. 53–54 (pp. 142–145)	No. 1–7 (pp. 219–223) No. 1–10 (pp. 224–225)					
18	Revise the relationship between angles formed by parallel lines cut by a transversal	137	Act. 15.2 Act. 15.3 Ex. 15.2	210–214	171–173	No. 55a–b (pp. 146–149)	No. 1–2 No. 1–9 (pp. 226–229)					
19	Use angle relationships to investigate properties of triangles; Solve geometric problems	137	Act. 15.4 Act. 15.5 Ex. 15.3	214–216	173–174	No. 56 (pp. 150–151)	No. 1–2 (pp. 230–231)					
20	Revision (use <i>Sasol Inzalo</i> book)	137					No. 1–3 (pp. 232–234)					

**Reflection**

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

What will you change next time? Why?

**HOD:**

**Date:**

**Solutions for All Mathematics Week 5**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class					
								Date completed					
21	<b>Formal assessment: Test</b> (Select questions according to topics covered; add in questions)				422–424 Memo 425–426								
22	<b>Constructions and geometry of 2-D shapes:</b> Construct triangles and quadrilaterals	134	Act. 11.4 Ex. 11.4	162–163	136–137		No. 1–3 (p. 184)						
23	By construction, investigate the angles in a triangle	134	<i>Getting started</i> Act. 12.1 Ex. 12.1	166–168	139–141	No. 41a (pp. 106–107)	No. 1–2 No. 1–5 (pp. 185–187)						
24	Revise properties and definitions of triangles	135	Act. 13.1–13.2	181–182	150–153	No. 47 (pp. 122–123)	No. 1–4 (pp. 197–200) No. 1–3 (pp. 201–202)						
25	Solve geometric problems involving triangles using properties of triangles	136	Ex. 13.1	182–183	153–154	No. 48a–b (pp. 124–127)							

**Note:** Refer to Day 22: 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?

What will you change next time? Why?

**HOD:**

**Date:**

**Solutions for All Mathematics Week 6**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
26	By construction, explore the minimum conditions for two triangles to be congruent	134	Act. 12.2 Ex. 12.2	168–170	141–142	No. 41b (pp. 108–109)	– (pp. 187–191)					
27	Through investigation, establish the minimum conditions for similar triangles	136	<i>Getting started</i> Act. 14.1 Ex. 14.1	192–195	160–162	No. 51a–b (pp. 134–137)	No. 1–3 (pp. 211–212) No. 1–3 (pp. 213–214)					
28	Through investigation, establish the minimum conditions for congruent triangles; Go over test done in previous week	136	Act. 14.2 Act. 14.3	195–197	162–163	No. 52a (pp. 138–139)	No. 1–2 (p. 207) No. 1–6 (pp. 208–209) No. 1–4 (pp. 209–211)					
29	Congruent and similar triangles; Solve geometric problems	136	Ex. 14.2 Act. 14.4	198–200	163–165	No. 52b (pp. 140–141)	No. 1–6 (pp. 215–217)					
30	<b>Formal assessment: Investigation</b> <i>Investigating how doubling any or all of the sides of a 2-D figure affects its perimeter and area</i>		Act. 17.6	246–247	197–198							

**Note:** Refer to Day 30: Create your own rubric for marking the investigation.

**Reflection**

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

What will you change next time? Why?

**HOD:**

**Date:**

## Solutions for All Mathematics Week 7

\*Select

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
31	Solve geometric problems cont.	136	Ex. 14.3 Check what...	200–206	165–168	No. 57a–b (pp. 152–155)	No. 1–2 (pp. 217–218)					
32	By construction, investigate the sides, angles and diagonals in quadrilaterals	134	Act. 12.3 Ex. 12.3	170–172	142–143	No. 42a–b (pp. 110–113)	No. 1–5 (p. 192) No. 1–4 (p. 194)					
33	By construction, investigate the sides, angles and diagonals in quadrilaterals cont.	134					No. 1–4 (pp. 192–193) No. 1–6 (pp. 193–194)					
34	Classifying quadrilaterals: Revise and write clear definitions of quadrilaterals	135	Act. 13.3 Ex. 13.2 Act. 13.4 Ex. 13.3*	180 183–186	154–156	No. 49 (pp. 128–129)	Worksheet (p. 196) No. 1–8 (pp. 203–206)					
35	Solve geometric problems involving quadrilaterals using properties of quadrilaterals	136	Act. 13.5 Ex. 13.4	187–189	156–157	No. 50a (pp. 130–131)						
Reflection												
<p><b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>						
						<p><b>HOD:</b> _____ <b>Date:</b> _____</p>						

## Solutions for All Mathematics Week 8

\*Select

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
36	Revision of properties of triangles and quadrilaterals	135	Check what...*	189–191	157–159	No. 50b (pp. 132–133)						
37	Solve geometric problems	136	Act. 15.6 Ex. 15.4	217–220	174–177		No. 1–2 (pp. 206–207)					
38	By construction, explore the sum of the interior angles of polygons	134	Act. 12.4–12.6 Ex. 12.4–12.5 *	173–177	144–147	No. 43–46 (pp. 114–121)	No. 1–2 (p. 195)					
39	Revision	134–140	Check what...	220–222	177–179							
40	Revision cont.	134–140	Unit 18*	259–266	208–217							

**Notes:** 1. Refer to Day 38: Select from activities and exercises.  
2. The *Sasol Inzalo* book has a revision and assessment chapter (pp. 267–282) which can be used for revision purposes in Week 8 and 9.

### Reflection

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

What will you change next time? Why?

HOD:

Date:



**Solutions for All Mathematics Week 9 Catch-up and revision (examination preparation) – Plan your week**

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

What will you change next time? Why?

HOD:

Date:

**Solutions for All Mathematics Week 10 Mid-year examination**

**End-of-term reflection**

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

- |  |   |
|--|---|
| <p>1. Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</p> <p>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?</p> | <p>3. What ONE change should you make to your teaching practice to help you teach more effectively next term?</p> <p>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 <b>on track</b>?</p> |
|--|---|

**HOD:**

**Date:**

## Mathematics Today

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

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

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

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

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

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

## Mathematics Today Week 1

\*Select

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
1												
2												
3	<b>The Theorem of Pythagoras:</b> Revise the theorem (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	138				No. 58a–b (pp. 156–159)	No. 1–3 (pp. 235–239)					
4	Solve problems involving unknown lengths	138	11.1	119–121	55		No. 1–4 (pp. 241–243) No. 1–3 (pp. 243–245)					
5	Solve problems involving unknown lengths and surds; Identify right-angled triangles	138	11.2–11.3	121–125	55		No. 1–3 (pp. 239–240)					

### Reflection

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

What will you change next time? Why?

HOD:

Date:

## Mathematics Today Week 2

\*Select

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
6	Solve problems with 2-D shapes using the Theorem of Pythagoras; Revision	138	11.4–11.5 Rev. test*	125–128	56	No. 59a–b (pp. 160–163)						
7	Revision (use <i>Sasol Inzalo</i> book)	138					No. 1–4 (pp. 246–247) Worksheet (p. 248)					
8	<b>Area and perimeter of 2-D shapes:</b> Revision of SI units; Area and perimeter	139–140	14.1 (no. 1–5)	157–160	68	No. 60 (pp. 164–165)	No. 1–3 (p. 257) No. 1–5 (pp. 249–252)					
9	Area and perimeter	139–140	14.1 (no. 6–12)	160–161	68–69	No. 61 (pp. 166–167)	No. 1–4 (pp. 253–254) No. a–d (p. 263) No. 1–3 (pp. 258–259) No. 1–2 (p. 260) No. 1–2 (p. 261–262)					
10	Circumference and area of circles	139–140	14.2	162–163	69	No. 62 (pp. 168–169)	No. 1–5 (pp. 255–256)					
Reflection												
<p><b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>						
						<p><b>HOD:</b> _____ <b>Date:</b> _____</p>						

### Mathematics Today Week 3

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
11	Doubling dimensions: the relationship between area and perimeter	139–140	14.3	163–164	69	No. 63 (pp. 170–171)	No. 1–4 (pp. 264–265)					
12	Revision	139–140	Rev. test	165	69–70	No. 64 (pp. 172–173)	Worksheet (p. 266)					
13	<b>Constructions and the geometry of straight lines:</b> Construct geometric figures, including bisecting angles of a triangle; Construct angles: 45°, 30°, 60°	134	10.1 (no. 1–3)	108–109	48–49	No. 39 (pp. 100–101)	No. 1–8 (pp. 182–183)					
14	Construct angles of 45°, 30°, 60° and their multiples without using a protractor	134	10.1 (no. 4) 10.2	109–110	49–50	No. 40a (pp. 102–103)	No. 1–2 (p. 183) Step 1–3 (pp. 180–181)					
15	Construct perpendicular lines (use <i>Sasol Inzalo</i> book)	134					No. 1–2 (pp. 175–177) No. 1–3 (pp. 177–178) No. 1–2 (pp. 178–180)					

**Note:** Refer to Day 12: 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?

What will you change next time? Why?

HOD:

Date:

**Mathematics Today Week 4**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
16	Revise the relationship between angles formed by intersecting and perpendicular lines and solve geometric problems	137	13.1	147–149	62	No. 53–54 (pp. 142–145)	No. 1–7 (pp. 219–223) No. 1–10 (pp. 224–225)					
17	Revise the relationship between angles formed by parallel lines cut by a transversal (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	137				No. 55a–b (pp. 146–149)	No. 1–2 No. 1–9 (pp. 226–229)					
18	Parallel lines cut by a transversal	137	13.2	149–151	62	No. 56 (pp. 150–151)						
19	Solve geometric problems involving parallel lines	137	13.3	151	62–63		No. 1–2 (pp. 230–231)					
20	Solve geometric problems	137	13.4	152–153	63		No. 1–3 (pp. 232–233)					

**Reflection**

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

What will you change next time? Why?

**HOD:**

**Date:**

### Mathematics Today Week 5

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
21	<b>Formal assessment: Test</b> (Select and supplement questions from <i>Mid-year Examination</i> )				73–75 Memo 76–77							
22	Solve geometric problems; Revise	137	13.5 Rev. test	154–155	63–64							
23	<b>Constructions and geometry of 2-D shapes:</b> By construction, investigate the angles in a triangle	134	10.3	110–111	50	No. 40b (pp. 104–105)	No. 1–3 (p. 184)					
24	By construction, investigate the angles in a triangle	134	10.4	111–112	50–51		No. 1–2 No. 1–5 (pp. 185–187)					
25	Classifying triangles: Revise properties and definitions of triangles (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	135				No. 47–48b (pp. 122–127)	No. 1–4 (pp. 197–200)					

**Note:** Refer to Day 22: 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?

What will you change next time? Why?

HOD:

Date:



**Mathematics Today Week 6**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
26	Revise properties and definitions of triangles		12.1	130–132	57		No. 1–3 (pp. 201–202)					
27	By construction, explore the minimum conditions for two triangles to be congruent	134	10.5 (no. 1–2)	113–114	51	No. 41a (pp. 106–107)	– (pp. 187–191)					
28	By construction, explore the minimum conditions for two triangles to be congruent cont.	134	10.5 (no. 3–6)	114	51–52	No. 41b (pp. 108–109)	No. 1–2 (p. 207) No. 1–6 (pp. 208–209)					
29	Conditions for congruent triangles; Solve geometric problems involving congruent triangles	136	12.3	137–139	58–59	No. 52a–b (pp. 138–141)	No. 1–4 (pp. 209–211)					
30	<b>Formal assessment: Investigation</b> <i>Investigate right angles in structures</i>		Inv.	166–167	71							

**Reflection**

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

What will you change next time? Why?

HOD:

Date:

### Mathematics Today Week 7

Mathematics Today Week 7												
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
31	Through investigation, establish the minimum conditions for similar triangles	136	12.4	140–141	58–59	No. 51a (pp. 134–135)	No. 1–3 (pp. 211–212) No. 1–3 (pp. 213–214)					
32	Solve geometric problems involving similar triangles	136	12.5	141–142	59	No. 51b (pp. 136–137)	No. 1–6 (pp. 215–217)					
33	Solve geometric problems	136	12.6	143–144	59–60	No. 45–46 (pp. 118–121)	No. 1–2 (pp. 217–218)					
34	Revision	136	Rev. Test	117	53–54	No. 57a–b (pp. 152–155)						
35	By construction, investigate the sides, angles and diagonals in quadrilaterals	134	10.6 (no. 1–3)	115–116	52	No. 42a (pp. 110–111)	No. 1–5 (p. 192) No. 1–4 (pp. 192–193)					
Reflection												
<p><b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?</p>					<p>What will you change next time? Why?</p>							
					<p><b>HOD:</b> _____ <b>Date:</b> _____</p>							

## Mathematics Today Week 8

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class				
								Date completed				
36	By construction, investigate the sides, angles and diagonals in quadrilaterals and the interior angles of polygons	134	10.6 (no. 4–6)	116	53	No. 42b–44 (pp. 112–117)	No. 1–4 (p. 194) No. 1–6 (pp. 193–194) No. 1–2 (p. 195)					
37	Revise and write clear definitions of quadrilaterals	135		133–135#	57	No. 49–50b (pp. 128–133)	Worksheet (p. 196) No. 1–8 (pp. 203–206)					
38	Properties of diagonals of quadrilaterals	135	12.2	133–136	57–58							
39	Solve problems involving properties of quadrilaterals	136	Rev. test	145	60		No. 1–2 (pp. 206–207)					
40	Revision (use <i>Formal assessment: Term 2 Test</i> )	134–140			65–66 Memo 67							

**Note:** The *Sasol Inzalo* book has a revision and assessment chapter (pp. 267–282) which can be used for revision purposes for Week 8 and 9.

### Reflection

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

What will you change next time? Why?

HOD:

Date:

**Mathematics Today Week 9 Catch-up and revision (examination preparation) – Plan your week**

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

What will you change next time? Why?

HOD:

Date:

**Mathematics Today Week 10 Mid-year examination**

**End-of-term reflection**

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

- |  |   |
|--|---|
| <p>1. Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</p> <p>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?</p> | <p>3. What ONE change should you make to your teaching practice to help you teach more effectively next term?</p> <p>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 <b>on track</b>?</p> |
|--|---|

**HOD:**

**Date:**

## Sasol Inzalo Mathematics

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This section maps out how you should use the *Sasol Inzalo Mathematics Learner's Book 1* 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.
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3. CAPS page numbers at the start of each CAPS topic.
4. Learner's Book 1 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 1 (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 so could teach it effectively?

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

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

- *What went well?*
- *What did not go well?*
- *What did the learners find difficult or easy to understand or do?*
- *What will you do to support or extend learners?*
- *Did you complete all the work set for the week?*
- *If not, how will you get back on track?*
- *What will you change 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 Mathematics Week 1

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
							Date completed				
1											
2											
3	<b>The Theorem of Pythagoras:</b> Investigating the sides of a right-angled triangle: Investigating squares on the sides of right-angled triangles	138	1–3	237–239	235–239	No. 58a (pp. 156–157)					
4	Checking for right-angled triangles: Are these right angles?	138	1–3#	239–240	239–240						
5	Finding missing sides: Finding the missing hypotenuse; Finding any missing side in a right-angled triangle; Pythagorean triples	138	1–4 1–3	241–243 243–245	241–243 243–245	No. 58b (pp. 158–159)					
Reflection											
<p><b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>					
						<p><b>HOD:</b> _____ <b>Date:</b> _____</p>					

## Sasol Inzalo Mathematics Week 2

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
							Date completed				
6	More practice using Pythagoras' theorem; Pythagoras' theorem and other types of triangles	138	1–4	246–247	246–247						
7	Revision	138	Worksheet#	248	248	No. 59a–59b (pp. 160–163)					
8	<b>Area and perimeter of 2-D shapes:</b> Area and perimeter of squares and rectangles: Revising concepts	139–140	1–5	251–252	249–252	No. 60 (pp. 164–165)					
9	Area and perimeter of composite figures: Breaking up figures and putting them back together again	139–140	1–4	253–254	253–254	No. 61 (pp. 166–167)					
10	Area and perimeter of circles: Revising concepts from previous grades; Circle calculations	139–140	1–5	255–256	255–256	No. 64 (pp. 172–173)					
Reflection											
<p><b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?</p>					<p>What will you change next time? Why?</p>						
					HOD:		Date:				



**Sasol Inzalo Mathematics Week 3**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
							Date completed				
11	Converting between units: Converting between units used for perimeter and area; Area of other quadrilaterals: Parallelograms; Rhombi; Kites; Trapeziums	139–140	1–3 1–3 1–2 1–2	257 258–259 260 261 262 263	257 258–259 260 261 262 263	No. 62–63 (pp. 168–171)					
12	Areas of composite shapes; Doubling dimensions of a 2-D shape; Revision	139–140	a–d 1–4 Worksheet	263 264–265 266	263 264–265 266						
13	<b>Constructions and the geometry of straight lines:</b> Constructing perpendicular lines: Revising perpendicular lines; Lines that form when circles intersect; Practice using circles to construct perpendicular lines	134	1–2 1–3 Case 1–2	177 177–178 178–179 179–180	175–177 177–178 178–179 179–180	No. 39–40a (pp. 100–103)					
14	Bisecting angles: Using circles to bisect angles; Practice bisecting angles	134	Step 1–3	180–181 181	180–181 181						
15	Constructing special angles without a protractor: Constructing a 45° angle; Constructing 60° and 30° angles; Constructing the multiples of special angles	134	1–8 1–2	182–183 183	183–183 183	No. 40b (pp. 104–105)					

**Note:** Refer to Day 13: 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?

What will you change next time? Why?

**HOD:**

**Date:**

**Sasol Inzalo Mathematics Week 4**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
							Date completed				
16	Angle relationships	137	1–7	221–223	219–223	No. 53 (pp. 142–143)					
17	Lines and angles	137	1–10	224–225	224–225	No. 5 (pp. 144–145)					
18	Angles formed by parallel lines	137	1–9	226–229	226–229	No. 55a–55b (146–149)					
19	Identify and name angles	137	1–2	230–231	230–231	No. 56 (pp. 150–151)					
20	Solving problems	137	1–3	232–233	232–234						
Reflection											
<p><b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>					
						<p>HOD: _____ Date: _____</p>					

## Sasol Inzalo Mathematics Week 5

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
							Date completed				
21	<b>Formal assessment: Test</b>										
22	<b>Constructions and geometry of 2-D shapes:</b> Angle bisectors in triangles	134	1–3#	184	184	No. 41a–41b (pp. 106–109)					
23	Interior and exterior angles in triangles: What are interior and exterior angles? Identifying exterior angles and interior opposite angles; Investigate the exterior and interior angles in a triangle	134	1–2 1–5	185–187	185–187						
24	Revision: Classification of triangles	135	1–4	199–200	197–200	No. 47 (pp. 122–123)					
25	Finding unknown angles in triangles: Finding unknown lengths and angles	136	1–3#	201–202	201–202	No. 48a–48b (pp. 124–127)					

**Note:** Refer to Day 22: 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?

What will you change next time? Why?

**HOD:**

**Date:**

**Sasol Inzalo Mathematics Week 6**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
							Date completed				
26	Constructing congruent triangles: Minimum conditions for congruency	134	1–4	187–191	187–191						
27	Congruent triangles: Definition and notation of congruent triangles; Minimum conditions for congruent triangles	136	1–2 1–6	207 208–209	207 208–209	No. 52a (pp. 138–139)					
28	Proving that triangles are congruent	136	1–4	209–211	209–211	No. 52b (pp. 140–141)					
29	Similar triangles: Properties of similar triangles; Working with properties of similar triangles; Investigate minimum conditions for similar triangles	136	1–3 1–2 Inv.	211–212 213–214 214	211–212 213–214 214	No. 51a–b (pp. 134–137)					
30	<b>Formal assessment: Investigation</b>										
<b>Reflection</b>											
<p><b>Think about and make a note of:</b> What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?</p>					<p>What will you change next time? Why?</p>						
					<p><b>HOD:</b> _____ <b>Date:</b> _____</p>						

**Sasol Inzalo Mathematics Week 7**

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
							Date completed				
31	Solving problems with similar triangles; Extension questions	136	1-6	215-217	215-217						
32	Extension questions	136	1-2	217-218	217-218	No. 57a (pp. 152-153)					
33	Diagonals of quadrilaterals: Drawing diagonals; Diagonals of a rhombus; Go over investigation done in previous week	134	1-5 1-4	192 192-193	192 192-193	No. 57b (pp. 154-155)					
34	Diagonals of a kite; Diagonals of parallelograms, rectangles and squares	134	1-6 1-4	193-194 194	193-194 194	No. 42a-b (pp. 110-113)					
35	Angles in polygons: Using diagonals to investigate the sum of angles in polygons	134	1-2	195	195	No. 43 (pp. 114-115)					

**Reflection**

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

What will you change next time? Why?

**HOD:**

**Date:**

## Sasol Inzalo Mathematics Week 8

#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Class				
							Date completed				
36	Revision	135	Worksheet#	196	196	No. 44–46 (pp. 116–121)					
37	Properties of quadrilaterals	135	1–8	203–206	203–206	No. 49 (pp. 128–129)					
38	Unknown sides and angles in quadrilaterals	136	1–2#	206–207	206–207	No. 50a–b (pp. 130–133)					
39	Revision	134–140									
40	Revision	134–140									

**Note:** The *Sasol Inzalo* book has a revision and assessment chapter (pp. 267–282) which can be used for revision purposes in Week 8 and 9.

### Reflection

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

What will you change next time? Why?

**HOD:**

**Date:**

**Sasol Inzalo Mathematics Week 9 Catch-up and revision (examination preparation) – Plan your week**

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

What will you change next time? Why?

**HOD:**

**Date:**

**Sasol Inzalo Mathematics Week 10 Mid-year examination**

**End-of-term reflection**

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

- |  |   |
|--|---|
| <p>1. Was the learners' performance during the term what you had expected and hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</p> <p>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?</p> | <p>3. What ONE change should you make to your teaching practice to help you teach more effectively next term?</p> <p>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 <b>on track</b>?</p> |
|--|---|

**HOD:**

**Date:**



## E. ASSESSMENT RESOURCES

<b>ASSESSMENT RECORD SHEET GRADE 9 MATHEMATICS</b> <b>Formal and Informal Assessments: Term 2</b>										
	Investigation	Test 2					Mid-year examination	Total	%	Rating (1-7)
Date of assessment										
Total marks for assessment										
Learner name										

**Grade 9 Mathematics Mid-year Examination***Time: 2 hours**Total: 100 marks***INSTRUCTIONS TO LEARNERS:**

1. Answer the questions on lined paper given to you.
2. Show all your working, where necessary
3. Scientific, non-programmable calculators may be used.
4. Diagrams are not drawn to scale

**QUESTION 1:**

- 1.1 Given three numbers:  $\sqrt{81}$ ;  $\sqrt{25 + 9}$ ;  $-\sqrt{-7}$
- 1.1.1 which of these numbers is natural? (1)
  - 1.1.2 which are rational? (1)
  - 1.1.3 which, if any, are non-real? (1)
- 1.2 Write 1 215 as a product of its prime factors. (2)
- 1.3 The temperature on a cold winter's day in Toronto, Canada, is  $-17^\circ\text{C}$ . On that same day, the temperature in Durban, KwaZulu-Natal, is  $27^\circ\text{C}$ . What is the difference between the temperatures? (2)
- 1.4 Convert  $\frac{6}{11}$  to a decimal fraction. (No calculator) (2)

**[9]****QUESTION 2: (Answers to two decimal places)**

- 2.1 A dress is marked down 40% at a sale. Phumeza pays R360 for the dress at the sale. What was the original price of the dress? (3)
- 2.2 Shane invests R16 480 at a rate of 6,2% compound interest per annum. How much interest will he receive if the money is invested for 8 years? (4)
- 2.3 R1 450 is invested at a rate of  $r\%$  per annum simple interest for 6 years. The investment grows to R2 005. Calculate the value of  $r$ . (4)

**[11]****QUESTION 3:**

- 3.1 Given the expression:  $3x^5y^5 + 7x^4y^3 - 2xy + 3x^8$
- 3.1.1 What is the degree of this polynomial in  $x$  and  $y$ ? (1)
  - 3.1.2 What is the coefficient of  $xy$ ? (1)
- 3.2 Simplify the following expressions fully:
- 3.2.1  $3(x + 2)x - x(x - 4)$  (2)
  - 3.2.2  $\frac{6x^4 - 8x^3 - 2x^2 + 4}{2x^2}$  (3)
  - 3.2.3  $-3(7x - 1)^0 - (-2x^0)^{-2}$  (3)
  - 3.2.4  $\frac{144x^5y^6z^3}{84x^{-5}y^0z^3}$  (3)
  - 3.2.5  $\frac{6}{x^7} - 7x^{-7}$  (2)
- 3.3 The distance between Cape Town and Johannesburg is 1 399,5 km.
- 3.3.1 Convert this distance to mm. Write your answer in scientific notation. (2)
  - 3.3.2 If it takes Samantha 13 hours at a constant speed to travel by car from Cape Town to Johannesburg, how fast (in km/h) does she go? (Round off answer to one decimal place.) (2)

**[19]**

**QUESTION 4:**

Solve the following equations:

4.1  $x - 3(x - 1)^2 = -3(x - 4)(x + 3)$

4.2  $\frac{1-x}{4x} = \frac{x}{4} - \frac{x-2}{3x}$

4.3  $3(6^x) = 108$

(4)

(4)

(2)

**[10]****QUESTION 5:****Problem:** 14 theatre tickets cost R1 800 in total. Some cost R120 each while others cost R150 each. How many tickets were purchased at R120 each?**Solution:** Let  $x$  be the number of R120 tickets which were bought.*Fill in the missing values:*Then there would be \_\_\_\_\_ tickets costing R150. (in terms of  $x$ )Now write down an equation in terms of  $x$ :

\_\_\_\_\_ = R1 800.

Solve the equation.

**[5]****QUESTION 6:**The following pattern is given:  $-100; -97; -94; -91; \dots$ 

6.1 What is the fifth term of the pattern?

6.2 Determine the general rule for the pattern (the  $n$ -th term).

6.3 Using the rule, find which term is equal to 209.

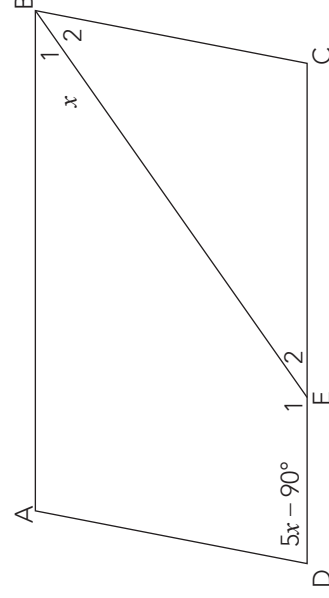
(1)

(3)

(3)

**[7]****QUESTION 7:**

7.1 Draw a parallelogram with diagonals, marking off all equal and parallel lines and equal angles. (3)

7.2 Parallelogram ABCD is given below.  $\hat{B}_1 = x$  and  $\hat{D} = 5x - 90^\circ$ .  $BC = EC$ .7.2.1 Name (with reasons) two other angles each equal to  $x$ .7.2.2 Express  $\hat{C}$  in terms of  $x$ .7.2.3 Solve for  $x$ .

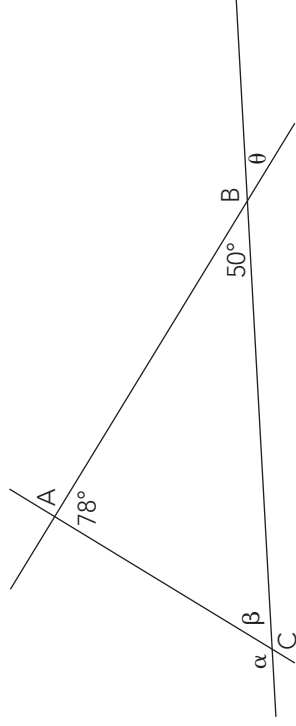
(2)

(2)

(3)

**[10]**

**QUESTION 8:**



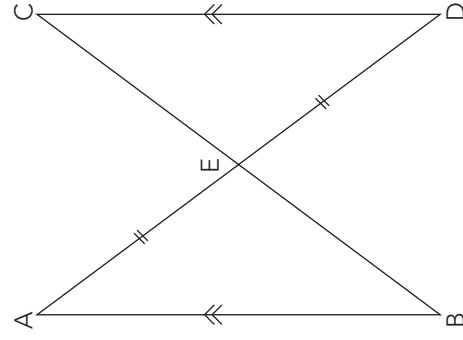
Three straight lines AC, AB and BC intersect as shown above. Calculate the values of  $\alpha$ ,  $\beta$  and  $\theta$  (giving reasons).

[4]

**QUESTION 9:**

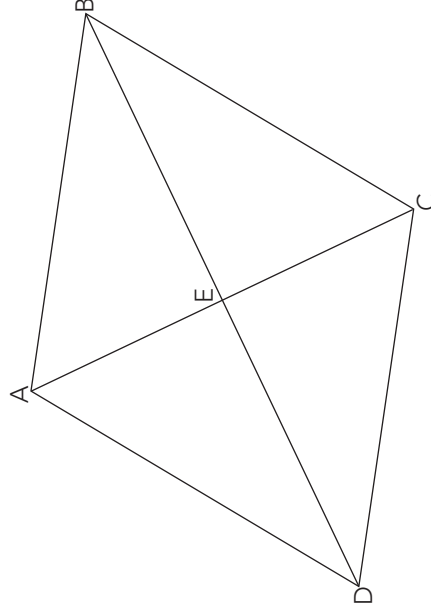
- 9.1 Write down the four cases of congruency. (use abbreviations)
- 9.2 In the diagram below,  $AB \parallel DC$  and  $AE = EC$ . Prove that  $\triangle ABE \equiv \triangle DEC$ .

(2)



(4)

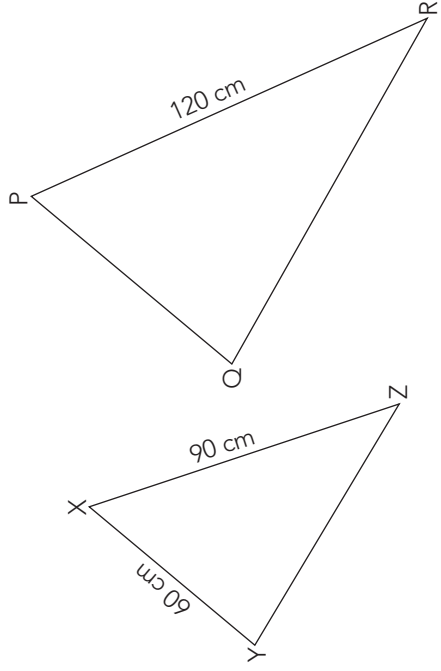
- 9.3 In the diagram below, if ABCD is a rhombus, show that  $\triangle ADE \equiv \triangle ABE$ .



(4)

[10]

**QUESTION 10:**



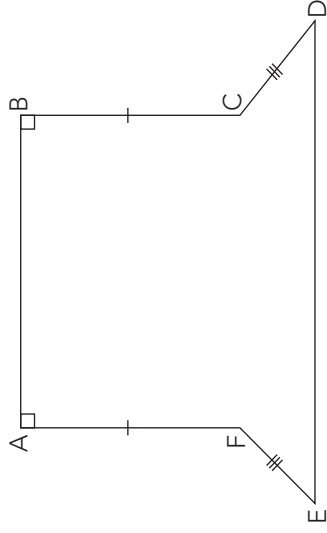
Given that  $\triangle XYZ$  is **similar** to  $\triangle PQR$ , determine the length of  $PQ$ .

[3]

**QUESTION 11:**

11.1 The shape  $ABCDEF$  is given below.

$ED = 21$  units,  $AB = 15$  units,  $AF = BC = 12$  units and  $EF = CD = 5$  units.



11.1.1 Determine the perimeter of the above shape  $ABCDEF$ .

(2)

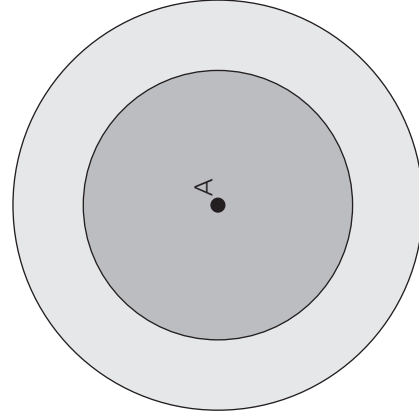
11.1.2 Determine the area of this shape.

(6)

11.2 Two circles, centre  $A$ , are shown.

The diameter of the smaller circle is  $8 \text{ cm}$ , while that of the larger is  $12 \text{ cm}$ .

Determine the area of the lighter shaded region.



(4)

[12]

**Grade 9 Mathematics Mid-year Examination:  
Memorandum and Cognitive Levels of Questions**

SOLUTIONS	MARKS	COGNITIVE LEVELS
<b>QUESTION 1:</b>		
1.1.1 $\sqrt{81} = 9$ is a natural number. ✓ <i>description</i>	(1)	K
1.1.2 $\sqrt{81}$ is a rational number. ✓ <i>description</i>	(1)	K
1.1.3 $-\sqrt{-7}$ is a non-real number. ✓ <i>description</i>	(1)	K
1.2 3) 1 215 3) 405 3) 135 3) 45 3) 15 5) 5 1 ✓ <i>working</i>		
1 215 = $3 \times 3 \times 3 \times 3 \times 3 \times 5 = 3^5 \times 5$ ✓ <i>answer</i>	(2)	RP
1.3 $27^\circ - (-17^\circ) = 27^\circ + 17^\circ = 44^\circ$ ✓✓ <i>simplification and answer</i>	(2)	K
1.4 $\frac{6}{11}$ $6 \div 11 = 0,545454\dots = 0,5\dot{4}$ ✓✓ <i>working out and answer (long or short division must be shown)</i>	(2)	RP

SOLUTIONS	MARKS	COGNITIVE LEVELS
<b>QUESTION 2:</b>		
2.1 The sale is a 40% markdown. So Phumeza pays 60% of the original price. ✓ equation		
$\frac{x}{360} = \frac{100}{60}$ ✓ <i>equation</i> $x = \frac{100}{60} \times 360$ $x = 600$ ✓ <i>answer</i>	(3)	RP
The original price of the dress is R600.		
2.2 $A = P(1 + i)^n$ $= 16\,480(1 + 0,062)^8$ ✓✓ <i>equation</i> $= 116\,480(1,062)^8$ $= R26\,665,72$ ✓ <i>answer</i>		
Shane will receive R26 665,72 – 16 480 = R10 185,72 interest. ✓	(4)	RP
2.3 $A = P(1 + I \times n)$ $2\,005 = 1\,450(1 + I \times 6)$ ✓ <i>equation</i> $\frac{2\,005}{1\,450} = 1 + I \times 6$ ✓ <i>simplification</i> $\frac{2\,005}{1\,450} - 1 = I \times 6$ $\frac{111}{290} \div 6 = I$ ✓ <i>simplification</i> $I = 0,063793$ $r = 6,38\%$ ✓ <i>answer</i>	(4)	CP

SOLUTIONS	MARKS	COGNITIVE LEVELS
<b>QUESTION 3:</b>		
3.1 $3x^5y^5 + 7x^6y^3 - 2xy + 3x^8$		
3.1.1 degree of this polynomial in $x$ and $y$ : 11 ✓ answer	(1)	K
3.1.2 coefficient of $xy$ : $-2$ ✓ answer	(1)	K
3.2.1 $3(x + 2)x - x(x - 4)$ $= 3x^2 + 6x - x^2 + 4x$ ✓ simplification $= 2x^2 + 10x$ ✓ answer	(2)	RP
3.2.2 $\frac{6x^4 - 8x^3 - 2x^2 + 4}{2x^2}$ $\frac{6x^4}{2x^2} - \frac{8x^3}{2x^2} - \frac{2x^2}{2x^2} + \frac{4}{2x^2}$ ✓✓ separate denominators $= 3x^2 - 4x - 1 + \frac{2}{2x^2}$ ✓ answer	(3)	CP
3.2.3 $-3(7x - 1)^0 - (-2x^4)$ $= -3(1) - \left(\frac{1}{-2x^4}\right)^2$ ✓✓ simplification $= -3(1) - \left(\frac{1}{4x^8}\right)$ ✓ answer	(3)	RP
3.2.4 $\frac{144x^{-5}y^6z^3}{84x^{-6}y^{10}z^3}$ $= \frac{12x^{-5+6}}{7y^{10-6}}$ ✓✓ simplification $= \frac{12x}{7y^4}$ ✓ answer	(3)	RP
3.2.5 $\frac{6}{x^7} - 7x^{-7}$ $= \frac{6}{x^7} - \frac{7}{x^7}$ ✓ simplification $= -\frac{1}{x^7}$ ✓ answer	(2)	RP
3.3.1 $1\,399,5 \text{ km} = 1\,399,5 \times 10\,000\,000$ $= 1\,399\,500\,000$ ✓ multiplication $= 1,3995 \times 10^9$ ✓ answer	(2)	K
3.3.2 Speed: $\frac{1\,399,5}{13} = 107,7 \text{ km/h}$ ✓ answer ✓ relationship/expression	(2)	RP

SOLUTIONS	MARKS	COGNITIVE LEVELS
<b>QUESTION 4:</b>		
4.1 $x - 3(x - 1)^2 = -3(x - 4)(x + 3)$ $x - 3(x - 1)(x - 1) = -3(x^2 - 4x + 3x - 12)$ $x - 3(x^2 - 2x + 1) = -3(x^2 - x - 12)$ ✓ simplification $x - 3x^2 + 6x - 3 = -3x^2 + 3x + 36$ $-3x^2 + 3x^2 + 7x - 3x = 36 + 3$ ✓ simplification $4x = 39$ ✓ simplification $x = \frac{39}{4} = 9\frac{3}{4}$ ✓ answer	(4)	RP
4.2 $\frac{1-x}{4x} = \frac{x}{4} - \frac{x-2}{3x}$ $\frac{3(1-x)}{12x} = \frac{3x}{12x} - \frac{4(x-2)}{12x}$ $x \neq 0$ ✓✓ LCD and numerators $\frac{3-3x}{12x} = \frac{3x-4x+8}{12x}$ $\therefore 3-3x = -x+8$ ✓ simplification $-3x+x = 8-3$ $-2x = 5$ $x = \frac{5}{2} = -2\frac{1}{2}$ ✓ answer	(4)	RP
4.3 $3(6^x) = 108$ $6^x = \frac{108}{3}$ ✓ division by 3 $6^x = 36$ $6^x = 6^2$ $\therefore x = 2$ ✓ answer	(2)	CP

SOLUTIONS	MARKS	COGNITIVE LEVELS
<p><b>QUESTION 5:</b></p> <p><b>Solution:</b></p> <p>Let <math>x</math> be the number of R120 tickets bought.</p> <p>Then there would be <math>14 - x</math> tickets costing R150. ✓ expression</p> <p><math>\therefore 120x + 150(14 - x) = 1\,800</math> ✓✓ equation</p> <p><math>120x + 2\,100 - 150x = 1\,800</math></p> <p><math>-30x = 1\,800 - 2\,100</math> ✓ simplification</p> <p><math>-30x = -300</math></p> <p><math>x = 10</math> ✓ answer</p> <p>Ten tickets were bought at R120 each.</p>	(5)	PS
<p><b>QUESTION 6:</b></p> <p>6.1 <math>T_5 = -88</math> ✓ answer</p> <p>6.2 <math>T_n = 3n - 103</math> ✓✓✓ expression</p> <p>6.3 <math>T_n = 209</math></p> <p><math>3n - 103 = 209</math> ✓ equation</p> <p><math>3n = 209 + 103</math></p> <p><math>3n = 312</math> ✓ simplification</p> <p><math>n = 104</math> ✓ answer</p> <p><math>\therefore T_{104} = 209</math></p>	(1) (3) (3)	K CP RP

SOLUTIONS	MARKS	COGNITIVE LEVELS
<p><b>QUESTION 7:</b></p> <p>7.1 Diagram of a parallelogram with diagonals ✓ bisecting each other, as well as both pairs opp. ✓ angles equal and both pairs opp. sides equal and parallel. ✓ 3 marks for theory shown on diagram</p> <p>7.2 <math>\hat{B}_1 = \hat{E}_2 = x</math> (AB  DC; alt. <math>\angle</math>'s) ✓ answer EC = BC (given)</p> <p><math>\therefore \hat{B}_2 = \hat{E}_2 = x</math> (<math>\angle</math>'s opp. equal sides) ✓ answer</p> <p>7.3 <math>\hat{C} = 180^\circ - 2x</math> ✓ (sum of <math>\angle</math>'s of <math>\triangle CBE</math>) ✓ answer</p> <p>7.4 <math>5x - 90^\circ = 2x</math> ✓ (opp. <math>\angle</math>'s of parallelogram) ✓ equation and reason</p> <p><math>5x - 2x = 90^\circ</math></p> <p><math>3x = 90^\circ</math></p> <p><math>x = \frac{90^\circ}{3}</math></p> <p><math>x = 30^\circ</math> ✓ answer</p>	(3) (2) (2) (3)	K PS RP RP
<p><b>QUESTION 8:</b></p> <p><math>\beta = 180^\circ - (78^\circ + 50^\circ)</math> (sum of <math>\angle</math>'s of <math>\triangle ABC</math>)</p> <p><math>= 180^\circ - 128^\circ</math></p> <p><math>= 52^\circ</math> ✓✓ answer</p> <p><math>\alpha = 78^\circ + 50^\circ</math> (ext. <math>\angle</math> of <math>\triangle</math>)</p> <p><math>= 128^\circ</math> ✓ answer</p> <p><math>\theta = 50^\circ</math> ✓ answer (vert. opp. <math>\angle</math>'s)</p>	(2) (1) (1)	RP RP K



SOLUTIONS	MARKS	COGNITIVE LEVELS
<b>QUESTION 9:</b>		
9.1 SSS, SAS, SAA, RHS ✓✓ reasons (abbreviations are acceptable)	(2)	K
9.2 In $\triangle ABE, \triangle DEC$ :		
i) $\hat{A} = \hat{D}$ (AB  CD; alt. $\angle$ 's) ✓ angles equal		
ii) $\hat{B} = \hat{C}$ (alt. $\angle$ 's) ✓ angles equal		
iii) $AE = DE$ (given) ✓ sides equal	(4)	RP
$\therefore \triangle ABE \equiv \triangle DCE$ (S, A, A) ✓ reason		
9.3 In $\triangle ADE, \triangle ABE$ :		
i) $AE$ is common ✓ sides equal		
ii) $AD = AB$ (sides of rhombus) ✓ sides equal		
iii) $DE = EB$ (diags. of rhombus) ✓ sides equal		
$\therefore \triangle ADE \equiv \triangle ABE$ (S,S,S) ✓ reason	(4)	RP
<b>QUESTION 10:</b>		
$\triangle XYZ \parallel \triangle PQR$ (given)		
$\therefore \frac{PQ}{XY} = \frac{PR}{XZ}$ (sides in proportion) ✓ equation and reason		
$\frac{PQ}{60} = \frac{PR}{60}$ ✓ substitution		
$PQ = \frac{120}{90} \times 60 = 80 \text{ mm}$ ✓ answer	(3)	CP

SOLUTIONS	MARKS	COGNITIVE LEVELS
<b>QUESTION 11:</b>		
11.1 Perimeter: $21 + 5 + 12 + 15 + 12 + 5 = 70$ units ✓✓ answer	(2)	K
11.2 Draw $FG \perp ED$ . Join $F$ to $C$ . ✓ constructions $FG^2 + EG^2 = EF^2$ (Theorem of Pythagoras) ✓ theorem $FG^2 + 3^2 = 5^2$ $FG^2 = 25 - 9$ $FG^2 = 16$ $FG = 4$ units ✓ answer $\therefore$ Area of shape: Area rectangle $ABCF$ + Area trapezium $FCDE$ $= 15 \times 12 + \frac{1}{2}(15 + 21) \times 4$ ✓✓ expression $= 252$ units <sup>2</sup> ✓ answer	(6)	PS
11.3 Radius of larger circle: 6 cm Radius of smaller circle: 4 cm ✓ answer Area of lighter shaded part: $\pi 6^2 - \pi 4^2$ ✓✓ expression $= 36\pi - 16\pi$ $= 20\pi$ cm <sup>2</sup> ✓ answer	(4)	CP

## ANALYSIS OF COGNITIVE LEVELS OF MID-YEAR EXAMINATION

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

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 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%.

Cognitive levels	Mark out of 100	Percentage
Knowledge	18	18%
Routine procedures	50	50%
Complex procedures	19	19%
Problem solving	13	13%



