**GRADE 9** 

# **Mathematics**

Teacher Toolkit: CAPS Planner and Tracker

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2019 TERM 1

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# A. ABOUT THE CURRICULUM AND ASSESSMENT PLANNER AND TRACKER

1. Your quick guide to using this planner and tracker



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.





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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.



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## 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.



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## 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 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 to refer to the curriculum document directly should you wish to do so.

## 4. Links to Learning and Teaching Support Materials (LTSMs)

The tracker coordinates the CAPS requirements with the content set out in the approved Learner's Books and Teacher's Guides. There is a tracker for each of the Learner's Books on the list of approved books on the national catalogue. You must therefore refer to the tracker for the book that is used by learners at your school. If you have copies of other Learner's Books, you can of course refer to these too, for ideas for teaching the same content in different ways – but you must be sure to cover the content systematically. For

each set of LTSMs, links are given to the relevant pages in both the Learner's Book and Teacher's Guide to make it easier for you to access the correct resources.

In a few instances, when necessary, we recommend that you use only selected activities from the Learner's Book. This is when the recommended exercises have more work than can be done in the time allocated to the lesson. The activity is marked **\*Select** in these cases. In other instances the Learner's Books do not have adequate activities for learners to consolidate work done on a topic, in which case we recommend that you use the relevant activities in the DBE workbooks, the *Sasol Inzalo* Foundation Mathematics book or additional work from other sources. The activity is marked **#Supplement** in these cases.

Each tracker is based on the latest print editions of the eight approved Learner's Books. It is important to note that page numbers may differ slightly from other print runs of the same Learner's Book. If the page numbers in your edition are not exactly the same as those given in the tracker, you should use the activity/exercise numbers given in the tracker to guide you to the correct pages. These should only differ by a page or two from those given in the tracker.

## 5. Links to the DBE workbooks and to the Sasol Inzalo Mathematics Book 1

The tracker gives links to the DBE workbooks relevant to the content prescribed for each day. The worksheets in the DBE workbooks are referred to by worksheet number and page. These workbooks should be used in conjunction with the Learner's Book activities as mentioned above. You should review them before each lesson, and decide how best to use them – for teaching, revision, extension or for consolidation, in class or for homework. Please note that the DBE pages referred to are for the 2017 edition of the workbook. The pages change very little from year to year, but if you are using a different edition of the workbook, you should check that the pages are still relevant for the content to which they are linked in the tracker.

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 there.

## 6. Managing time allocated in the tracker

The tracker for this term contains details of work to be covered over 10 full weeks in 50 lessons, including time for revision and assessment. As the length of the term is

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not the same every year, you might have to make some adjustments to accommodate terms that are a few days longer or shorter. It is important that you take note of this at the start of the term.

The CAPS prescribes four and a half hours of Mathematics per week in Grade 9. In the tracker, this time is organised into four one-hour lessons and one half-hour lesson. 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 and to ensure 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 39 hours is given to the CAPS topics for the term. An extra six hours is given for assessments and revision. Two to three hours of revision time is left at the end of the term for each textbook tracker. If this time is not taken during the term time for informal assessments, then revision for the learners must be sourced. Most Learner's Books provide an abundance of extra revision activities for this purpose.

#### 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. 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.

#### 8. Links to assessment

The tracker indicates where in the series of lessons the CAPS assessment activities are to be done and when feedback should be given. The CAPS states that "tests, examinations, projects, assignments and investigations are recommended for Mathematics" (p. 155). The overview of the term indicating where the formal assessments will be done is provided in the Assessment Term Plan table for easy reference. The actual task and

the date for the assignments vary slightly from Learner's Book to Learner's Book, but are always in line with the CAPS specifications. Some Learner's Books offer more than one assessment activity other than a test. In this case, the tracker identifies which one should be used for the formal Term 1 Assignment. You should use the Learner's Book assignment with due diligence making sure that you personalise it and supplement it using other Learner's Books or ANA past papers and exemplars if necessary in order to be sure that it fulfils the CAPS requirements for the term assignment.

We recommend that your learners write the required term test in Week 9. An exemplar test with a marking memorandum and analysis of cognitive levels has been included for you to use, regardless of the Learner's Book you are using. You should use this test in conjunction with your provincial assessment programme. Most of the Learner's Books provide term tests. These may be used for revision or for informal assessments, but cannot be used for the formal assessment task as learners can prepare for them in advance. If the LTSM you are using has provided a test in the Teacher's Guide, you could use this instead of the exemplar provided here, and you can of course also set your own test. The Assessment Term Plan shows where tests are provided in each of the LTSMs. 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.

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

### 9. Resources

Occasionally, the tracker suggests resources that you could use for certain lessons, but of you should not restrict yourself to these but should use any suitable resources to enrich your Mathematics teaching.

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# **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 head of department for quality assurance. To deliver the lessons successfully **you must do the necessary preparation yourself**. Bear in mind that your lessons will not succeed if you have not prepared properly for them. This entails a number of key steps, such as those noted below.

- 1. **Review the term focus:** Start by looking at the CAPS and *orientating* yourself to the CAPS content focus for the term. It is important that you are clear about the content focus as this will frame everything you do in your Mathematics lessons during the term.
- 2. **Prepare resources:** The resources needed for each lesson are listed at the start of each CAPS topic or for each lesson, depending on the textbook. 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 everyday.
  - 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 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 leaners can settle down and begin working promptly.
- 3. **Prepare the content:** Think carefully about what it is that you will teach your learners in this lesson. Think about the prior knowledge of the content that learners should have learnt in earlier grades that will be built on in this lesson. You should refer to the CAPS content and skills clarification column for further guidance while you prepare. Consider any common misconceptions, and how you will address these. Do you have any learners with learning barriers in the class? How will you accommodate them?

- **Prepare a short introduction** to the topic so that you can explain it in simple terms to your learners. The textbook and teacher guide will assist you. Think also about how learners will develop an understanding of the main concepts of the lesson topic. You need to think about how to explain new mathematics content and skills to your learners.
- Make sure you have prepared for the teaching of the concepts before you teach. Prepare yourself to assist learners with any questions they might have during the lesson. Look at the activities in the learner 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 guides offer suggestions for remediation and enrichment activities that you might want to use.)
- **Consider the needs** of any learners with barriers to learning in your class, and how best you can support them. The DBE has published some excellent materials to support you in working with learners with learning barriers. Two such publications are:
  - Directorate Inclusive Education, Department of Basic Education (2011) Guidelines for Responding to Learner Diversity in the Classroom Through Curriculum and Assessment Policy Statements. Pretoria.
     www.education.gov.za, www.thutong.doe.gov.za/InclusiveEducation.
  - Directorate Inclusive Education, Department of Basic Education (2010) Guidelines for Inclusive Teaching and Learning. Education White Paper
     6. Special needs education: Building an inclusive education and training system. Pretoria. <u>www.education.gov.za</u>, 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 a 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

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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 book or teacher 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 textbook or DBE workbook. These activities allow them to practise 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 leaners about which numbers of each exercise they should do.

Depending on your learners and the activities, you could go over one or two of the classwork activities orally with the whole class before allowing the learners to work independently. Allow the learners opportunities to do these activities alone, in pairs, and in groups, so that they experience working alone as well as with their peers. Remember not to give your learners more work than you are able to control and mark. 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 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 Books and ask the learners to complete them at home, or ask them to do part or all of a DBE worksheet. Homework enables the learners to consolidate the mathematics that you have taught them in class. It also promotes learner writing and development of mathematical knowledge, and the development of regular study habits. Encourage your learners to show their parent(s) or their guardian(s) the work they have done.

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

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# C. ASSESSMENT TERM PLAN

<u>Note:</u> All assessments should be done under controlled conditions. Teachers must supervise and there should be no talking among the learners.

## 1. Formal assessment

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Table 1 below shows the minimum requirement for formal assessment in Grade 9 given by the CAPS (p. 155) and as amended by Circular S1 of 2017.

Table 1: N	NUMBER	OF ASSESSMENT	TASKS AND	WEIGHTING
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SBA	FORMS OF ASSESSMENT	Minir	num re per	equirer term	nents	Number of tasks	Weighting
		Term 1	Term 2	Term 3	Term 4	per year	
	Test	1	1	1		3	40%
	Examination		1			1	
	Assignment	1		1	1	3	
	Investigation		1	1		2	
	Project				1	1	
	Total	2 3 3 2		10*			
End-of-year examination						1	60%

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

Table 2 gives an overview of how the minimum requirements of the formal assessment programme fit into the weekly planned lessons in the tracker and where examples can be found in the LTSMs. Remember, examples of tests 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.

LTSMs	ASSIGNMENT	End-of-term test				
Premier Mathematics	Week 6 – Lesson 27 Term 1 Formal Assessment: Assignment no. 1-12, 15 LB pp. 58-60 Memorandum: TG pp. 27-28	Week 9 – Lesson 43 Exemplar test (60 minutes) Alternative test Term 1 formal assessment: Test TG p. 46 Memorandum: TG p. 47				
Spot On Mathematics	Week 6 – Lesson 27 Revision no. 9-23 LB pp. 57-58 Memorandum: TG pp. 69-70	Week 9 – Lesson 43 Exemplar test (60 minutes)				
Platinum Mathematics	Week 6 – Lesson 27 Formal assessment exemplar:	<b>Week 9 – Lesson 43</b> Exemplar test (60 minutes)				
	Assignment LB pp. 52-53 Memorandum: TG pp. 26-28	Alternative test Formal assessment exemplar test LB pp. 82-83 (only for revision) Memorandum: TG p. 42				
Oxford Headstart Mathematics	Week 6 – Lesson 27 Assignment 2 (Powers of 2: Calculate a target) and revision ex. LB pp. 165-167 Memorandum: pp. 119-120	<b>Week 9 – Lesson 43</b> Exemplar test (60 minutes)				
	Alternative assignment Assignment 3: Consecutive numbers LB p. 166 Memorandum: TG p. 120	<b>Alternative test</b> Term 1 test 1 TG p. 183 Memorandum: TG p. 184				
Oxford Successful Mathematics	Week 6 – Lesson 27 Assignment (use Consolidation) LB pp. 115-116 Memorandum: TG pp. 94-98	<b>Week 9 – Lesson 43</b> Exemplar test (60 minutes)				
	Alternative assignment Assignment: Option 1: Numbers and fractions LB p. 427 Memorandum: TG p. 313	Alternative test Control test 1 TG pp. 315-316 Memorandum: TG pp. 317-318				

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LTSMs	ASSIGNMENT	End-of-term test
Clever: Keeping Maths Simple	Week 6 – Lesson 27 Assignment 1: Numbers, operations and relationships LB p. 108 Memorandum: TG p. 113	<b>Week 9 – Lesson 43</b> Exemplar test (60 minutes)
	Alternative assignments Assignment 2: Patterns, functions and algebra LB p. 109 Memorandum: TG p. 114	Alternative test Control test LG pp. 110-111 (only for revision) Memorandum: TG pp. 115-116
Solutions for All Mathematics	Week 6 – Lesson 27 Assignment (use 'Check what you know') LB pp. 86-87 Memorandum: TG pp. 61-63	Week 9 – Lesson 44 Exemplar test (60 minutes) Alternative test Term 1 control test TG pp. 412-413 Memorandum: TG pp. 414-416
Mathematics Today	<b>Week 6 – Lesson 27</b> Formal assessment: Assignment LB pp. 59-60 TG p. 20	Week 9 – Lesson 43 Exemplar test (60 minutes) Alternative test Formal assessment: Term 1 test TG pp. 45-46 Memorandum: TG p. 47
Sasol Inzalo Mathematics Book 1	Week 6 – Lesson 27 Note: Assignment must be sourced from another set of LTSMs	<b>Week 9 – Lesson 43</b> Exemplar test (60 minutes)
		<ul> <li>Topics in exemplar test</li> <li>Whole numbers</li> <li>Integers</li> <li>Common fractions</li> <li>Decimal fractions</li> <li>Exponents</li> <li>Numeric and geometric patterns</li> <li>Functions and relationships</li> <li>Algebraic expressions</li> </ul>

## 2. Informal assessment

In addition to the prescribed formal assessment, you should include some informal assessments to help you and the learners gain insight into how they are progressing.

Much informal assessment is integrated into teaching and learning – in class discussions, responses to questions, and as classwork is done and homework reviewed. It is also a good idea, however, to set some informal written assessment tasks that simulate more formal assessment activities, such as examination or test questions, as they allow learners to develop important examination techniques such as keeping to time limits and first answering what they know best.

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

- *Premier Mathematics* provides revision exercises of the units at the end of the term with full solutions provided in the Teacher's Guide.
- Spot On Mathematics provides a revision activity at the end of each module with full solutions in the Teacher's Guide.
- *Platinum Mathematics* provides comprehensive revision exercises at the end of each topic in the Learner's Book (with full solutions in the Teacher's Guide) as well as basic target and advanced target worksheets at the back of the Teacher's Guide. An extension and remediation worksheet book is also given.
- Oxford Headstart Mathematics gives revision exercises at the end of each chapter with solutions in the Teacher's Guide. Extension and remedial activities are also suggested throughout the Teacher's Guide.
- Oxford Successful Mathematics has a consolidation exercise at the end of each chapter in the Learner's Book (with full solutions in the Teacher's Guide).
- *Clever: Keeping Maths Simple* does not have revision exercises but there is more than enough material in many of the exercises available for revision purposes.
- Solutions for All Mathematics has a revision exercise ('Check what you know') at the end of each unit. The final unit of each term comprises revision of all the units done during the term. Comprehensive solutions are provided in the Teacher's Guide. Enrichment is provided occasionally and is indicated with 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 trackers do not specify when such informal assessments should be done as you will use your professional judgement in this regard. Although marks do not have to be recorded for informal assessment, you might like to keep a record of these in order to monitor your learners' progress.

# D. TRACKERS FOR EACH SET OF APPROVED LTSMs

## **Premier Mathematics**

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

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

- 1. Day/lesson number.
- 2. CAPS content linked to Learner's Book content.
- 3. CAPS page numbers at the start of each CAPS topic.
- 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 link to related content (exercise and page numbers are referenced).
- 9. Date completed (complete this daily).

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

## Weekly reflection

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

- Was your preparation for the lesson adequate? For instance, did you have all the necessary resources, had you thought through the content so that you understood it fully and so could teach it effectively?
- Did the purpose of the lesson succeed? For instance, did the learners reach a good understanding of the key concepts for the day? Could they use the language expected from them? Could they write what was expected from them?
- Did the learners cope with the work set for the day? For instance, did they finish the classwork? Was their classwork done adequately? Did you assign the homework?
- Are your learners' books up to date?
- Does what the learners have done in their books correlate with the tracked comments in the tracker?

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

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

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

	PREMIER	R MATHI	EMATICS	Week ′	1			
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo	Class
		pp.	ex.	pp.	pp.	workbook		
								Date completed
1	<b>Whole numbers:</b> Properties of numbers; Describing the real number system; Calculations using whole numbers	119	1-2	1-3	1-2	No. 1a-1b (pp. 3-5)	No. 1-9 (pp. 1-6) No. 1-6 (pp. 7-9) No. 1-5 (pp. 9-10)	
2	Calculation techniques; Multiples and factors	119	3-4	4-8	2-3	No. 2 (pp. 6-7)	No. 1-4 (p. 11) No. 1-11 (pp. 12-13) No. 1-6 (pp. 14-15) No. 1-4 (pp. 16-17)	
3	Solving problems in contexts involving ratio and rate; Direct and indirect proportion	120	5-6	8-10	3-4	No. 3-5 (pp. 8-13)	No. 1-9 (pp. 18-20)	
4	Solving problems in financial contexts: Simple interest, hire purchase and compound interest	121	7-8	11-14	4-5	No. 6-7 (pp. 14-17)	No. 1-2 (pp. 22-23) No. 1-6 (pp. 23-24) No. 1-5 (pp. 25-26)	
5	Solving problems in financial contexts: Profit, loss, discount, VAT, exchange rates, commissions, rentals; Budgets	121	9-10	14-17	5	No. 8-9 (pp. 18-21)	No. 1-6 (pp. 20-22) No. 1-3 (p. 26)	
		Refl	ection					
the le exten	<b>a about and make a note of:</b> What went well? What did not go well? W earners find difficult or easy to understand or do? What will you do to sup ad learners? Did you complete all the work set for the week? If not, how ack on track?	pport or	What will y	vou change	next time	? Why?		
			HOD:				Date	e:

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	PREMIE	R MATH	EMATICS	Week 2	2					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class	
		pp.	ex.	pp.	pp.	WOIKDOOK		Date	comp	1
6	Integers: Calculations involving all four operations with integers	121	1 (no. 1-5)	18-20	6-7		No. 1 (pp. 27-29) No. 1-6 (pp. 30-32) No. 1-2 (p. 32)			_
7	Calculations involving all four operations with integers	121	1 (no. 6-10)	18-20	6-7		No. 1-2 (p. 36) No. 1-2 (pp. 36-37)			
8	Calculations involving squares, cubes, square roots and cube roots of integers	121	2	20-21	7-8	No. 10a (pp. 22-23)	No. 1-3 (pp. 37-38)			
9	Properties of integers	121	3	21-23	8	No. 10b (pp. 24-25)	No. 1-12 (pp. 33-35)			
10	Solving problems involving multiple operations with integers	121	4	23-24	8-9					
	about and make a note of: What went well? What did not go well? W	/hat did	ection What will y	ou change	next time	e? Why?				
exter	earners find difficult or easy to understand or do? What will you do to su ad learners? Did you complete all the work set for the week? If not, how ack on track?									
			HOD:				Date	e:		 

Grade 9 Mathematics

	PREMIEI	R MATHI	EMATICS	Week	3						
		#Supp	olement								
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE workbook	Sasol Inzalo	(	Class		
		pp.	ex.	pp.	pp.	WORKDOOK					
								Date o	Date completed		
11	Common fractions: Calculations using fractions	122	1 (no. 1-3)	25-26	9	No. 11 (pp. 26-27 No. 13a (pp. 30-31)	No. 1-10 (pp. 39-43) No. 1-5 (pp. 45-47) No. 1-3 (pp. 48-50) No. 1-8 (pp. 51-54)				
12	Calculations involving squares, cubes, square roots and cube roots of common fractions; Calculation techniques	122	1 (no. 4) 2	26	10	No. 12 (pp. 28-29)	No. 1-4 (pp. 54-55)				
13	Solving problems in contexts involving common fractions, mixed numbers and percentages	122	3	27	10-11	No. 13b-14 (pp. 32-35)	No. 1-2 (pp. 44-45)				
14	Equivalent forms	122	4#	28	11	No. 16 (pp. 40-41)	No. 1-5 (pp. 55-56)				
15	Revision	122	Rev. (no. 9#)	77	44	No. 15a-15b (pp. 36-39)					
		Refl	ection								
the le exten	a <b>about and make a note of:</b> What went well? What did not go well? Wearners find difficult or easy to understand or do? What will you do to su ad learners? Did you complete all the work set for the week? If not, how ack on track?	upport or	What will y	vou change	e next time	? Why?					
			HOD:				Dat	te:			

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**PREMIER MATHEMATICS** Week 4 CAPS concepts and skills CAPS LB LB TG DBE Sasol Inzalo Class Day workbook pp. ex. pp. pp. Date completed Decimal fractions: Calculations with decimal fractions, including 123 1 29 12 No. 1-7 16 No. squares, cubes, square roots and cube roots 19a-20b (pp. 61-64) (pp. 46-53) Calculation techniques: Estimation and rounding off 123 2 30 13 17 No. 17 (pp. 42-43) Solving problems in contexts involving decimal fractions 18 123 3 30-31 13 No. 1-5 (pp. 64-65) No. 1-10 (pp. 66-67) 19 Equivalent forms 123 4 32 14 No. 1-7 (pp. 57-61) 20 Revision of decimal fractions (use DBE workbook or Sasol Inzalo 123 No. 18 No. 1-3 book) (pp. 44-45) (pp. 68-69) No. 1-5 (p. 70) Reflection Think about and make a note of: What went well? What did not go well? What did What will you change next time? Why? the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?

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**PREMIER MATHEMATICS** Week 5 CAPS concepts and skills CAPS ΤG DBE Sasol Inzalo Class LB LB Day workbook pp. pp. pp. ex. Date completed 124-125 33-35 15-16 No. 1-2 21 **Exponents:** Comparing and representing numbers in 1 2 (pp. 71-73) exponential form; Calculations using the laws of exponents No. 1-4 (p. 74) Calculations using the laws of exponents (use DBE workbook or No. 22-23 No. 1-8 22 124-125 Sasol Inzalo book) (pp. 56-59) (pp. 74-77) 23 Calculations using numbers in exponential form: Using the laws of 124-125 No. 24-25 No. 1-7 exponents (use DBE workbook or Sasol Inzalo book) (pp. 60-63) (pp. 77-79) 24 Representing numbers in scientific notation 125-126 3 35-37 17 No. 21 No. 1-4 (pp. 54-55) (pp. 82-83) No. 1-2 (p. 84) 25 Solving equations using numbers in exponential form 124-125 4 37-38 18 No. 1-2 (pp. 80-81) Reflection Think about and make a note of: What went well? What did not go well? What did What will you change next time? Why? the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track? HOD: Date:

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	PREMIER	R MATHE	EMATICS	Week	6					
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo	С	ass	-
		pp.	ex.	pp.	pp.	workbook				
								Date co	mplet	ted
26	Solving problems in contexts involving numbers in exponential form, including scientific notation; Revision (use <i>DBE workbook</i> )	124-126	5	38-39	18	No. 26a-26b (pp. 64-67)				
27	Formal assessment: Assignment		Ass. No. 1-12 & 15	58-60	27-28					
28	<b>Numeric and geometric patterns:</b> Investigating and extending numeric patterns where there is a constant difference between terms	126-128	1	40-41	19	No. 27 (pp. 68-69)	No. 1-4 (pp. 91-92)			
29	Investigating and extending numeric patterns where there is a constant ratio between terms	126-128	2	41-42	19-20		No. 1-6 (pp. 93-95)			
30	Investigating and extending numeric patterns where there is neither a constant difference nor a constant ratio	126-128	3	42-43	20					
		Refle	ection							
the le exten	<b>about and make a note of:</b> What went well? What did not go well? W arners find difficult or easy to understand or do? What will you do to su d learners? Did you complete all the work set for the week? If not, how ack on track?	pport or	What will y	ou change	e next time	¢ ₩ny ℓ				
			HOD:				Dat	:e:		

PREMIER MATHEMATICS Week 7 CAPS concepts and skills CAPS ΤG DBE Sasol Inzalo Class LB LB Day workbook pp. pp. pp. ex. Date completed Describing and justifying the general rules in algebraic language 126-128 44-46 20-22 No. 1-4 31 4 (pp. 96-98) 32 Investigating and extending geometric patterns; 126-129 5 47-50 22 No. 28 No. 1-7 Describing and justifying the general rules in algebraic language (pp. 85-90) (pp. 70-71) Go over assignment done in previous week (30 minutes); 129 1 51-52 No. 1-5 33 23 Functions and relationships: Determining input and output values (pp. 99-102) using flow diagrams (30 minutes) 34 Determining input and output values using tables 129 2 52-55 24-25 129 3 55-56 25 Determining input and output values using formulae 35 Reflection Think about and make a note of: What went well? What did not go well? What did What will you change next time? Why? the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track? HOD: Date:

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	PREMIE			Week	8					
Day	CAPS concepts and skills	^S∈ CAPS	elect LB	LB	TG	DBE	Sasol Inzalo		Class	
Day		pp.	ex.	pp.	pp.	workbook	54301 112410			<b>—</b>
								Date	compl	eted
36	Equivalent forms of the same relationship or rule	129	4	56-57	25-26		No. 1-4 (pp. 103-106)			
37	General revision	129	Ass.*	58-60	27-28		No. 1-7 (pp. 107-114)			
38	<b>Algebraic expressions:</b> Algebraic language; Adding and subtracting like terms	130-131	1-2	61-64	29-31	No. 29 (pp. 72-73)	No. 1-3 (pp. 115-118) No. 1-2 (p. 118) No. 1-5 (pp. 119-120) No. 1-9 (pp. 120-124)			
39	Multiplying monomials by polynomials	130-131	3	64-65	31-32	No. 30a-30b (pp. 74-77)	No. 1-7 (pp. 124-126) No. 1-10 (pp. 127-131) No. 1-9 (pp. 131-134)			
40	Dividing polynomials by monomials; Determining the squares, cubes, square roots and cube roots of algebraic expressions	130-131	4-5	65-66	32-33	No. 33 (pp. 84-85)	No. 1-15 (pp. 135-139)			
		Refle	ection	1	1	1	1	<u>     </u>	1 1	
the le	<b>c about and make a note of:</b> What went well? What did not go well? earners find difficult or easy to understand or do? What will you do to s and learners? Did you complete all the work set for the week? If not, how back on track?	support or	What will y	you change	e next time	? Why?				
			HOD:				Dat	e:		

	PREMI	ER MATHE	MATICS	Week	9						
Day	CAPS concepts and skills	CAPS	LB ex.	LB	TG pp.	DBE workbook	Sasol Inzalo		Class	5	
		pp.	ex.	pp.	pp.	WOIRDOOK					
41	Determining the numerical value of algebraic expressions by substitution	130-131	6	66-67	33-34	No. 34 (pp. 86-87)	No. 1-5 (p. 142)	Dat	e comj		
42	Determining the product of two binomials; Determining the square of a binomial	130-131	7-8	67-68	34-35	No. 31a-31b (pp. 78-81)	No. 1-4 (pp. 134-135) No. 1-7 (pp. 139-141)				
43	Formal assessment: Test										
44	<b>Algebraic equations:</b> Setting up equations to describe problem situations	132-133	1-2	69-71	36-39		No. 1-5 (p. 148) No. 1-2 (p. 149) No. 1-3 (p. 150) No. 1-7 (pp. 151-152)				
45	Solving equations by inspection	132-133	3	71	39		No. 1-2 (pp. 143-145)				
		Refle	ection								
the le exten	a <b>about and make a note of:</b> What went well? What did not go well? earners find difficult or easy to understand or do? What will you do to ad learners? Did you complete all the work set for the week? If not, ho ack on track?	support or	What will y	you change	e next time	? Why?					
			HOD:				Dat	e:			

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	PREMIER	? MATHE	MATICS	Week 1	0						
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE workbook	Sasol Inzalo		Clas	S	
		pp.	ex.	pp.	pp.	WORKDOOK					L
								Dat	e com	plete	d
46	Solving equations using additive and multiplicative inverses; Solving equations using laws of exponents	132-133	4-5	71-73	39-41		No. 1-8 (pp. 146-147) No. 1-2 (pp. 153-154) No. 1-2 (p. 155)				
47	Solving equations where the product of two factors = 0; Solving equations involving fractions	132-133	6-7	73-75	41-43	No. 37a (pp. 94-95)					
48	Go over test done in previous week; Solving equations involving fractions (use <i>DBE workbook</i> )	132-133				No. 37b (pp. 96-97)					
49	Revision of Algebraic Equations	132-133	Rev. (no. 1-13 excl. 9)	76-77	44		No. 1-2 (p. 156)				
50	Revision of Algebraic Equations cont.	132-133	Rev. (no. 14-21)	77-78	45						
		End-of-ter	m reflectio	n							
1. V h t v t	A about and make a note of: Vas the learners' performance during the term what you had expected a oped for? Which learners need particular support with Mathematics in erm? What strategy can you put in place for them to catch up with the o Vhich learners would benefit from extension activities? What can you do nem? Vith which specific topics did the learners struggle the most? How can you our teaching to improve their understanding of this section of the curric ne future?	the next class? o to help you adjust	4. Did yc are the	effectively r	the conter	nt as prescribe work on thes	our teaching practic ed by the CAPS for t e topics in future? \	the ter	m? If no	ot, wha	
HOD	:						Date:				

Grade 9 Mathematics

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## Spot on Mathematics

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

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

- 1. Day/lesson number.
- 2. CAPS content linked to Learner's Book content.
- 3. CAPS page numbers at the start of each CAPS topic.
- 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 link to related content (exercise and page numbers referenced).
- 9. Date completed (complete this daily).

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

## Weekly reflection

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

- Was your preparation for the lesson adequate? For instance, did you have all the necessary resources, had you thought through the content so that you understood it fully and so could teach it effectively?
- Did the purpose of the lesson succeed? For instance, did the learners reach a good understanding of the key concepts for the day? Could they use the language expected from them? Could they write what was expected from them?
- Did the learners cope with the work set for the day? For instance, did they finish the classwork? Was their classwork done adequately? Did you assign the homework?
- Are your learners' books up to date?
- Does what the learners have done in their books correlate with the tracked comments in the tracker?

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

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

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

Teacher Toolkit: CAPS Planner and Tracker 2019 Term 1 21

	SPOT OI	N MATHI	EMATICS	Week	1						
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE workbook	Sasol Inzalo		C	lass	
		pp.	ex.	pp.	pp.	WORKDOOK					leted
1	Whole numbers: Properties of numbers: Describing the real number system; Solving problems using whole numbers; Calculation techniques	119	1.1 (no. 1-4)	1-7, 17	39-41	No. 1a-1b (pp. 3-5)	No. 1-9 (pp. 1-6) No. 1-6 (pp. 7-9) No. 1-5 (pp. 9-10) No. 1-4 (p. 11) No. 1-11 (pp. 12-13)	Da			eted
2	Solving problems involving ratio and rate, direct and indirect proportion	119	1.5	37-39	54-56	No. 3-5 (pp. 8-13)	No. 1-9 (pp. 18-20)				
3	Solving problems in financial contexts: Exchange rates; Calculation techniques – rounding off and compensating, long division, estimation; Budgets, profit, loss, commission, VAT	120-121	1.1 (no. 5-16)	7-14, 18-19	41-42	No. 6-7 (pp. 14-17)	No. 1-6 (pp. 14-15) No. 1-6 (pp. 20-22) No. 1-3 (p. 26)				
4	Solving problems in financial contexts: Simple and compound interest; Discounts, percentage profit and loss	121	1.6	40-43	57-60	No. 8-9 (pp. 18-21)	No. 1-2 (pp. 22-23) No. 1-6 (pp. 23-24) No. 1-5 (pp. 25-26)				
5	Multiples and factors	119	1.1 (no. 17-29)	14-16 19-20	42-43	No. 2 (pp. 6-7)	No. 1-4 (pp. 16-17)				
		Refle	ection								
the le exten	a <b>about and make a note of:</b> What went well? What did not go well? W arners find difficult or easy to understand or do? What will you do to su d learners? Did you complete all the work set for the week? If not, how ack on track?	ipport or	What will y	ou change	next time	? Why?					
			HOD:				Date	e:			

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	SPOT OI		E <b>MATICS</b> plement	Week	2				
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Cla	ass
		P		66.	66.		-	Date co	mpleted
6	<b>Integers:</b> Properties of integers; Calculations involving all four operations with integers	121	1.2 (no. 1-6)	21-25	44-45		No. 1 (pp. 27-29) No. 1-12 (pp. 33-35) No. 1-6 (p. 32) No. 1-2 (p. 32) No. 1-2 (p. 36)		
7	Calculations involving squares, cubes, square roots and cube roots of integers (use DBE workbook)	121				No. 10b (pp. 24-25)			
8	Calculations involving squares, cubes, square roots and cube roots of integers cont.	121	1.2 (no. 3, 4, 6, 7)	23-25	45		No. 1-3 (pp. 37-38)		
9	Calculations; Solving problems in contexts involving multiple operations with integers	121	1.2 (no. 8-14)	25-26	45-46		No. 1-2 (pp. 36-37)		
10	Revision of whole numbers and integers	121	Rev. (no. 3-4#)	56-58	68-70	No. 10a (pp. 22-23)			
		Refle	ection		1	,	11		
the le exten	a <b>about and make a note of:</b> What went well? What did not go well? Wearners find difficult or easy to understand or do? What will you do to su ad learners? Did you complete all the work set for the week? If not, how ack on track?	pport or	What will y	ou change	next time	? Why?			
			HOD:				Date	<b>:</b>	

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	SPOT OI		EMATICS	Week	3					
		#Supp	olement							
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class	
		pp.	CA.	pp.	pp.	WOIRDOOR				
								Date	comp	leted
11	<b>Common fractions:</b> Calculations using fractions	122	1.3 (no. 3-4#)	27-29 32-33	47-49	No. 11 (pp. 26-27) No. 13a (pp. 30-31)	No. 1-10 (pp. 39-43) No. 1-5 (pp. 45-47) No. 1-3 (pp. 48-50) No. 1-8 (pp. 51-54)			
12	Calculations involving squares, cubes, square roots and cube roots of common fractions; Calculation techniques	122	1.3 (no. 5-8)	30 31 33	49-50	No. 12 (pp. 28-29)	No. 1-4 (pp. 54-55)			
13	Solving problems in contexts involving common fractions, mixed numbers and percentages	122	1.3 (no. 9-11)	31-33	51	No. 13b-14 (pp. 32-35)	No. 1-2 (pp. 44-45)			
14	Equivalent forms	122	1.3 (no. 1, 2#)	31-33	48	No. 16 (pp. 40-41)	No. 1-5 (pp. 55-56)			
15	Revision of common fractions	122	Rev. (no. 5-8)	56-57	68-69	No. 15a-15b (pp. 36-39)				
		Refle	ection							
the le	<b>c about and make a note of:</b> What went well? What did not go well? Wearners find difficult or easy to understand or do? What will you do to sund learners? Did you complete all the work set for the week? If not, how back on track?	upport or	What will y	ou change	e next time	? Why?				
			HOD:				Dat	te:		

Grade 9 Mathematics

	SPOT OI		EMATICS	Week	4				
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class
16	<b>Decimal fractions:</b> Calculations with decimal fractions, including squares, cubes, square roots and cube roots	123	1.4 (no. 1-3#)	34-36		No. 19a-20b (pp. 46-53)	No. 1-7 (pp. 62-64)	Date	completed
17	Calculation techniques: Estimation and rounding off (use DBE workbook)	123				No. 17 (pp. 42-43)			
18	Solving problems in contexts involving decimal fractions	123	1.4 (no. 4-9)	35-36	53		No. 1-5 (pp. 64-65) No. 1-10 (pp. 66-67)		
19	Equivalent forms	123	Rev. (no. 1-2)	56	68		No. 1-7 (pp. 57-61)		
20	Revision of decimal fractions (use DBE workbook or Sasol Inzalo book)	123				No. 18 (pp. 44-45)	No. 1-3 (p. 68-69) No. 1-5 (p. 70)		
the le exten	a <b>about and make a note of:</b> What went well? What did not go well? Wearners find difficult or easy to understand or do? What will you do to su ad learners? Did you complete all the work set for the week? If not, how ack on track?	Vhat did upport or	ection What will y	ou change	e next time	? Why?			
			HOD:				Dat	e:	

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SPOT ON MATHEMATICS Week 5 CAPS concepts and skills CAPS LB TG DBE Sasol Inzalo Class LB Day workbook pp. pp. pp. ex. Date completed **Exponents:** Calculations using the laws of exponents 124-125 1.7 44-45 61-62 No. 22-23 No. 1-2 21 (pp. 71-73) 48-49 (no. 1-6) (pp. 56-59) No. 1-4 (p. 74) Calculations using the laws of exponents 124-125 1.7 46-49 No. 24-25 No. 1-8 22 63-64 (including exponential equations) (no. 7-10) (pp. 74-77) (pp. 60-63) No. 1-2 (pp. 80-81) 23 Calculations using numbers in exponential form; 124-125 1.7 50 64 No. 1-7 Solving problems in contexts involving numbers in exponential form (no. 11-14) (pp. 77-79) 24 Representing numbers in scientific notation 125-126 1.8 51-53 65-66 No. 21 No. 1-4 (no. 1-5) (pp. 54-55) (pp. 82-83) Solving problems in contexts involving scientific notation 25 125-126 1.8 54 66 No. 1-2 (p. 84) (no. 6-9) Reflection Think about and make a note of: What went well? What did not go well? What did What will you change next time? Why? the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track? HOD: Date:

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SPOT ON MATHEMATICS Week 6 CAPS concepts and skills CAPS ΤG DBE Sasol Inzalo Class LB LB Day workbook pp. pp. pp. ex. Date completed Revision of exponents (use DBE workbook) 124-126 No. 26 26a- 26b (pp. 64-67) 57-58 69-70 27 Formal assessment: Assignment Rev. (no. 9-23) 28 Numeric and geometric patterns: 126-129 2.1 59-64 71-73 No. 27 No. 1-7 Investigating and extending numeric and geometric patterns; (no. 1-3) (pp. 68-69) (pp. 85-90) Describing and justifying the general rules in algebraic language 29 Investigating and extending numeric and geometric patterns; 126-129 2.1 65-68 73 No. 1-6 Describing and justifying the general rules (no. 4-7) (pp. 93-95) 30 Investigating and extending numeric patterns; 126-128 2.1 69 73 No. 1-4 Describing and justifying the general rules (no. 8-10) (pp. 91-92) No. 1-4 (pp. 96-98) Reflection Think about and make a note of: What went well? What did not go well? What did What will you change next time? Why? the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track? HOD: Date:

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SPOT ON MATHEMATICS Week 7 CAPS concepts and skills CAPS LB TG DBE Sasol Inzalo Class LB Day workbook ex. pp. pp. pp. Date completed Revision of numeric patterns (use DBE workbook) 126-128 No. 27 31 (pp. 68-69) 32 Revision of numeric and geometric patterns (use *DBE workbook*) 126-129 No. 28 (pp. 70-71) Go over assignment done in previous week; 129 2.2 70-73 74 No. 1-5 33 **Functions and relationships:** Determining input and output values (no. 1-2) (pp. 99-102) using various representations 34 Determining input and output values using various representations 129 2.2 70-73 74 No. 1-4 (no. 3-4) (pp. 103-106) General revision including determining input and output values 129 95-96 No. 1-7 35 Rev. 2 81 using various representations (no. 1-7) (pp. 107-114) Reflection Think about and make a note of: What went well? What did not go well? What did What will you change next time? Why? the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track? HOD: Date:

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	SPOT O		E <b>MATICS</b> plement	Week	8				
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class
								Date	completed
36	General revision including determining input and output values using various representations cont.	129	Rev.2 (no. 17-20)	97-98	83-84				
37	Algebraic expressions: Algebraic language; Adding and subtracting like terms; Multiplying monomials by polynomials	130-131	2.3 (no. 1-4)	74-82	75-76	No. 29 (pp. 72-73)	No. 1-3 (pp. 115-118) No. 1-2 (p. 118) No. 1-5 (pp. 119-120) No. 1-9 (pp. 120-124) No. 1-10 (pp. 127-131) No. 1-7 (pp. 124-126)		
38	Determining the product of two binomials; Determining the square of a binomial	130-131	2.3 (no. 5-6#)	82	76	No. 31a-31b (pp. 78-81)	No. 1-9 (pp. 131-134) No. 1-7 (pp. 139-141)		
39	Dividing polyomials by monomials; Determining the squares, cubes, square roots and cube roots of algebraic expressions; Determining the numerical value of algebraic expressions by substitution	130-131	2.3 (no. 7-10#)	82	76-77	No. 33-34 (pp. 84-87)	No. 1-4 (pp. 134-135) No. 1-15 (pp. 135-139) No. 1-5 (p. 142)		
40	Simplifying algebraic expressions	130-131	2.3 (no. 11-13)	82-83	77				
	1	Refl	ection		I	I		I	
the le exten	<b>a about and make a note of:</b> What went well? What did not go well? earners find difficult or easy to understand or do? What will you do to s ad learners? Did you complete all the work set for the week? If not, how ack on track?	support or	What will y	ou change	e next time	? Why?			
			HOD:				Dat	e:	

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SPOT ON MATHEMATICS Week 9 #Supplement CAPS concepts and skills DBE Day CAPS LB LB TG Sasol Inzalo Class workbook pp. ex. pp. pp. Date completed Revision of algebraic expressions (use DBE workbook) 130-131 No. 41 30a-30b (pp. 74-77) Revision of algebraic expressions 130-131 Rev.2 96-97 82 42 (no. 8-11) 43 Formal assessment: Test Algebraic equations: Solving equations by inspection and by using 44 132-133 2.4 84-86, 78 No. 1-2 91 (pp. 143-145) multiplicative and additive inverses; (no. 1a-Using substitution to check for solutions 1b, 3-6, No. 1-8 (pp. 146-147) 8) 2.4 Solving equations involving fractions 132-133 86-87, 78 No. 37a 45 91 (no. 1c-(pp. 94-95) 1e, 2#) Reflection Think about and make a note of: What went well? What did not go well? What did What will you change next time? Why? the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track? HOD: Date:

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	SPOT	ON MATHE	MATICS	Week ′	10								
Day	CAPS concepts and skills	CAPS pp.	LB	LB	TG	DBE	Sasol Inzalo		Class	S			
			ex.	pp.	pp.	workbook							
								Date	com	pleted			
46	Solving equations involving fractions (use DBE workbook); Using substitution to generate a table of ordered pairs; Solving equations where the product of two factors = 0	132-133	2.4 (no. 10, 15, 1f, 1h)	88, 93	78-79	No. 37b (pp. 96-97)							
47	Solving equations using the rule of exponents; Setting up equations to describe problem situations	132-133	2.4 (no. 1i-1j, 7, 11-14, 16)	89-90, 92-93	78-79		No. 1-5 (p. 148) No. 1-2 (p. 149) No. 1-3 (p. 150) No. 1-7 (pp. 151-152)						
48	Go over test done in previous week; Revision of equations	132-133	Rev.2 (no. 12-16)	97	82-83		No. 1-2 (pp. 153-154) No. 1-2 (p. 155) No. 1-2 (p. 156)						
49	Revision												
50	Revision												
		End-of-ter	m reflection	1									
1. W fc W	a <b>about and make a note of:</b> /as the learners' performance during the term what you had expected or? Which learners need particular support with Mathematics in the r /hat strategy can you put in place for them to catch up with the class /harners would benefit from extension activities? What can you do to l	next term? ? Which			next term?		our teaching practic		р уоц	LEACI			
2. With which specific topics did the learners struggle the most? How can you adjust your teaching to improve their understanding of this section of the curriculum in the future?				4. Did you cover all the content as prescribed by the CAPS for the term? If not, what are the implications for your work on these topics in future? What plan will you make to get back <b>on track</b> ?									
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# **Platinum Mathematics**

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

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

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

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

#### Weekly reflection

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

- Was your preparation for the lesson adequate? For instance, did you have all the necessary resources, had you thought through the content so that you understood it fully and so could teach it effectively?
- Did the purpose of the lesson succeed? For instance, did the learners reach a good understanding of the key concepts for the day? Could they use the language expected from them? Could they write what was expected from them?
- Did the learners cope with the work set for the day? For instance, did they finish the classwork? Was their classwork done adequately? Did you assign the homework?
- Are your learners' books up to date?
- Does what the learners have done in their books correlate with the tracked comments in the tracker?

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

What went well?

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- What did not go well?
- What did the learners find difficult or easy to understand or do?
- What will you do 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 head of department and your peers.

	PI	LATINUN	I MATHEI	MATICS	Week 1					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Cl	ass
		66.						D	mpleted	
1	Whole numbers: Properties of numbers: Describing the real number system	119	1.1	2-6	3-4	No. 1a-1b (pp. 3-5)	No. 1-9 (pp. 1-6)			
2	Calculations using whole numbers; Calculation techniques	119	1.2	7-10	4-5		No. 1-6 (pp. 7-9) No. 1-5 (pp. 9-10) No. 1-4 (p. 11) No. 1-11 (pp. 12-13) No. 1-6 (pp. 14-15)			
3	Multiples and factors; Solving problems in contexts involving ratio and rate	119-120	1.3 1.4 (no. 1-5)	11-12	5-6	No. 2 (pp. 6-7) No. 3 (pp. 8-9)	No. 1-4 (pp. 16-17) No. 1-9 (pp. 18-20)			
4	Solving problems in contexts involving speed, direct and indirect proportion; In financial contexts: Discounts, VAT, loans, profit, loss, budgets, accounts, rentals, commission, simple and compound interest	120-121	1.4 (no. 6-15)	13-16	6-7	No. 4-5 (pp. 10-13) No. 6-7 (pp. 14-17)	No. 1-6 (pp. 20-22) No. 1-2 (pp. 22-23) No. 1-6 (pp. 23-24) No. 1-5 (pp. 25-26) No. 1-3 (p. 26)			
5	Revision	119-121	Rev.	17	7	No. 8-9 (pp. 18-21)				
Note	<ul> <li>1. Refer to Day 1: Real number system poster; Prime number</li> <li>2. Refer to Day 2: List of words needed for number operation</li> <li>3. Refer to Day 3: Chart with definitions of multiples and factorial</li> </ul>	ons.			rules; Con	tainers (for pric	e per kg); Juice carton.			
the le exten	a <b>nout and make a note of:</b> What went well? What did not arners find difficult or easy to understand or do? What will yc d learners? Did you complete all the work set for the week? I ack on track?	ou do to sup	port or	What will yc	ou change r	ext time? Why	?			
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	Р	LATINUM	ΙΜΑΤΗΕ	MATICS	Week 2					
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo		Cla	SS
		pp.	ex.	pp.	pp.	workbook				
								Da	ate co	npleted
6	<b>Integers:</b> Calculations involving all four operations with integers	121	2.1	18-19	8-9	No. 10a (pp. 22-23)	No. 1 (pp. 27-29) No. 1-6 (pp. 30-32) No. 1-2 (p. 32)			
7	Calculations involving all four operations with integers; Properties of integers	121	2.2-2.4	20-23	9-11	No. 10b (pp. 24-25)	No. 1-12 (pp. 33-35) No. 1-2 (p. 36) No. 1-2 (pp. 36-37)			
8	Calculations involving squares, cubes and powers	121	2.5	24-25	11-12		No. 1-3 (pp. 37-38)			
9	Calculations involving square roots and cube roots	121	2.6	25-26	12					
10	Revision of integers	121	Rev.	27	12		No. 1-2 (pp. 36-37)			
	arners find difficult or easy to understand or do? What will yo									
exten	d learners? Did you complete all the work set for the week? ack on track?									
exten	d learners? Did you complete all the work set for the week?									
exten	d learners? Did you complete all the work set for the week?									
exten	d learners? Did you complete all the work set for the week?									

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	PI	ATINUN	1 MATHE	MATICS	Week 3					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class	
								Da	te comp	leted
11	<b>Common fractions:</b> Equivalent forms; Calculations using fractions	122	3.1-3.2	28-32	13-15	No. 11 (pp. 26-27) No. 13a (pp. 30-31)	No. 1-10 (pp. 39-43) No. 1-5 (pp. 46-47) No. 1-3 (pp. 48-50) No. 1-8 (pp. 51-54) No. 1-5 (pp. 55-56)			
12	Calculations involving squares, cubes, square roots and cube roots of common fractions (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	122				No. 12 (pp. 28-29)	No. 1-4 (pp. 54-55)			
13	Solving algebraic equations with fractions as coefficients	122	3.3	32-33	15	No. 13b-14 (pp. 32-35)				
14	Solving problems in contexts involving common fractions, mixed numbers and percentages; Revision of common fractions	122	3.4 Rev. (no. 1-3)	34-35	16	No. 16 (pp. 40-41)	No. 1-2 (pp. 44-45)			
15	Revision of common fractions	122	Rev. (no. 4-9)	34-35	16	No.15a-15b (pp. 36-39)				
Note	Refer to Day 11: Revision worksheet of Grade 8 fractions sho	ould be pro	vided.			· · · · ·		· · ·		
			Reflec	tion						
the le exter	<b>a about and make a note of:</b> What went well? What did not gearners find difficult or easy to understand or do? What will you dearners? Did you complete all the work set for the week? In ack on track?	u do to sup	port or	What will yc	u change n	ext time? Why	?			

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	PL	ATINUM	I MATHE	MATICS	Week 4	l.				
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo			lass
16	<b>Decimal fractions:</b> Equivalent forms; Calculations and calculation techniques with decimal fractions, including squares, cubes, square roots and cube roots	123	4.1-4.2	36-37	17-20	No. 19a-20b (pp. 46-53)	No. 1-7 (pp. 57-61) No. 1-7 (pp. 61-64)	D	ate c	ompleted
17	Simplifying algebraic expressions with decimal fractions as coefficients; Solving algebraic equations with decimal fractions as coefficients	123	4.3-4.4	38-39	19	No. 17 (pp. 42-43)				
18	Solving problems in contexts involving decimal fractions	123	4.5	40	19-20		No. 1-5 (pp. 64-65) No. 1-10 (pp. 66-67)			
19 20	Revision of decimal fractions Revision of decimal fractions cont. (use DBE workbook or Sasol Inzalo book)	123 123	Rev.	41	20	No. 18 (pp. 44-45)	No. 1-3 (p. 68-69) No. 1-5 (p. 70)			
exten	arners find difficult or easy to understand or do? What will yo d learners? Did you complete all the work set for the week? If ack on track?									
			ŀ	HOD:			Da	te:		

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Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo	<u> </u>	ass
ay		pp.	ex.	pp.	pp.	workbook	58501 112810		a55
								ate co	mplete
21	<b>Exponents:</b> Calculations using the laws of exponents	124-125	5.1-5.2	42-43	21-22	No. 22-23 (pp. 56-59)	No. 1-2 (pp. 71-73) No. 1-4 (p. 74)		
22	Calculations using the laws of exponents	124-125	5.3-5.5	43-46	22-23	No. 24-25 (pp. 60-63)	No. 1-8 (pp. 74-77)		
23	Solving equations using numbers in exponential form; Solving problems in contexts involving numbers in exponential form	124-125	5.6	47	23	No. 26a-26b (pp. 64-67)	No. 1-7 (pp. 77-79)		
24	Representing numbers in scientific notation; Solving problems in contexts involving scientific notation	125-126	5.7-5.8 (no. 1)	48-50	24	No. 21 (pp. 54-55)	No. 1-4 (pp. 82-83)		
25	Solving problems in contexts involving scientific notation	125-126	5.8 (no. 2-6)	50	24		No. 1-2 (p. 84)		
ie le	<b>about and make a note of:</b> What went well? What did not arners find difficult or easy to understand or do? What will you determine all the work set for the work?	ou do to sup	port or		u change r	next time? Why?	2	 	
ne le xten		ou do to sup	at did V port or		u change r	next time? Why?	,		

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P	LATINUM	MATHE	MATICS	Week 6					
CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo			ass mpleted
Revision of exponents	124-126	Rev.	51	25					
Formal assessment: Assignment		Ass.	52-53	26-28					
<b>Numeric and geometric patterns:</b> Investigating and extending numeric patterns; Justifying and describing the general rules using words	126-128	6.1-6.2	54-56	29-30	No. 27 (pp. 68-69)	No. 1-4 (pp. 91-92)			
Investigating and extending numeric patterns using tables and rules	126-128	6.3-6.4	56-57	30-31		No. 1-6 (pp. 93-95)			
Investigating and extending geometric tables using tables and rules; Justifying and describing the general rules using algebra	126-129	6.5-6.6	58-59	31	No. 28 (pp. 70-71)	No. 1-4 (pp. 96-98)			
	CAPS concepts and skills          Revision of exponents         Formal assessment: Assignment         Numeric and geometric patterns: Investigating and extending numeric patterns;         Justifying and describing the general rules using words         Investigating and extending numeric patterns using tables and rules         Investigating and extending geometric tables using tables and rules;	CAPS concepts and skillsCAPS pp.Revision of exponents124-126Formal assessment: Assignment124-126Numeric and geometric patterns: Investigating and extending numeric patterns; Justifying and describing the general rules using words126-128Investigating and extending numeric patterns using tables and rules126-128Investigating and extending geometric tables using tables and rules;126-129	CAPS concepts and skillsCAPS pp.LB ex.Revision of exponents124-126Rev.Formal assessment: Assignment124-126Rev.Formal assessment: AssignmentAss.Numeric and geometric patterns: Investigating and extending numeric patterns; Justifying and describing the general rules using words126-1286.1-6.2Investigating and extending numeric patterns using tables and rules126-1286.3-6.46.3-6.4Investigating and extending geometric tables using tables and rules;126-1296.5-6.6	CAPS concepts and skillsCAPS pp.LB ex.LB pp.Revision of exponents124-126Rev.51Formal assessment: Assignment124-126Rev.51Numeric and geometric patterns: Investigating and extending numeric patterns; Justifying and describing the general rules using words126-1286.1-6.254-56Investigating and extending numeric patterns using tables and rules126-1286.3-6.456-57Investigating and extending geometric tables using tables and rules;126-1296.5-6.658-59	CAPS concepts and skillsCAPS pp.LB ex.LB pp.TG pp.Revision of exponents124-126Rev.5125Formal assessment: Assignment124-126Rev.5125Numeric and geometric patterns: Investigating and extending numeric patterns; Justifying and describing the general rules using words126-1286.1-6.254-5629-30Investigating and extending numeric patterns using tables and rules126-1286.3-6.456-5730-31Investigating and extending geometric tables using tables and rules;126-1296.5-6.658-5931	pp.ex.pp.pp.pp.pp.pp.workbookRevision of exponents124-126Rev.5125Formal assessment: AssignmentAss.52-5326-28Numeric and geometric patterns: Investigating and extending numeric patterns; Justifying and describing the general rules using words126-1286.1-6.254-5629-30No. 27 (pp. 68-69)Investigating and extending numeric patterns using tables and rules126-1286.3-6.456-5730-31Investigating and extending geometric tables using tables and rules;126-1296.5-6.658-5931No. 28 (pp. 70-71)	CAPS concepts and skillsCAPS pp.LB ex.LB pp.TG pp.DBE workbookSasol InzaloRevision of exponents124-126Rev.5125Formal assessment: AssignmentAss.52-5326-28Numeric and geometric patterns: Investigating and extending numeric patterns; Justifying and describing the general rules using words126-1286.1-6.254-5629-30No. 27 (pp. 68-69)No. 1-4 (pp. 91-92)Investigating and extending numeric patterns using tables and rules126-1286.3-6.456-5730-31No. 1-6 (pp. 93-95)Investigating and extending geometric tables using tables and rules;126-1296.5-6.658-5931No. 28 (pp. 70-71)No. 1-4 (pp. 96-98)	CAPS concepts and skillsCAPS pp.LB pp.LB pp.TG pp.DBE workbookSasol InzaloRevision of exponents124-126Rev.5125DRevision of exponents124-126Rev.5125 </td <td><math display="block"> \begin{array}{c c c c c c c c c c c c c c c c c c c </math></td>	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $

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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:

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Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo		Cl	ass	
		pp.	ex.	pp.	pp.	workbook			+0.00	mple	+od
31	Describing and justifying the general rules in algebraic language	126-128	6.7	60	32			Da		mpie	
32	Revision of numeric and geometric patterns	126-129	Rev.	61	32		No. 1-7 (pp. 85-90)				
33	Go over assignment done in previous week (30 minutes); Functions and relationships: Determining input and output values using flow diagrams (30 minutes)	129	7.1	62-63	33		No. 1-5 (pp. 99-102)				
34	Determining input and output values using tables	129	7.2	64-65	34						
35	Determining input and output values using formulae	129	7.3	66-67	34						
the le exten	a <b>about and make a note of:</b> What went well? What did no earners find difficult or easy to understand or do? What will a learners? Did you complete all the work set for the week' ack on track?	t go well? Wh you do to supp	Reflec at did port or	tion		next time? Why	?				
the le exten	earners find difficult or easy to understand or do? What will	t go well? Wh you do to supp	Reflec at did port or	tion		next time? Why	?				

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		PLATINUM	MATHE	MATICS	Week 8	3			
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class
								Date	e complete
36	Determining rules from tables and using substitution	129	7.4	67-68	35		No. 1-4 (pp. 103-106)		
37	Revision of functions and relationships	129	Rev.	69	35		No. 1-7 (pp. 107-114)		
38	<b>Algebraic expressions:</b> Algebraic language; Adding and subtracting like terms	130-131	8.1	70-72	36-37	No. 29 (pp. 72-73)	No. 1-3 (pp. 115-118) No. 1-2 (p. 118) No. 1-5 (pp. 119-120) No. 1-9 (pp. 120-124)		
39	Multiplying and dividing polyomials by monomials; Determining the squares, cubes, square roots and cube roots of algebraic expressions	130-131	8.2	72-73	37	No. 30a-30b (pp. 74-77) No. 33 (pp. 84-85)	No. 1-7 (pp. 124-126) No. 1-10 (pp. 127-131) No. 1-9 (pp. 131-134) No. 1-15 (pp. 135-139)		
40	Determining the product of two binomials; Determining the square of a binomial	130-131	8.3	73-74	37	No. 31a-31b (pp. 78-81)	No. 1-4 (pp. 134-135) No. 1-7 (pp. 139-141)		
exten	earners find difficult or easy to understand or do? What will id learners? Did you complete all the work set for the week ack on track?								
			-	HOD:			Dat	te:	

Grade 9 Mathematics

)ay	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo		Clas	s
2		pp.	ex.	pp.	pp.	workbook			Τ	
								Date	e con	pleted
41	Determining the numerical value of an algebraic expression using substitution (use <i>DBE workbook</i> or <i>Sasol</i> <i>Inzalo</i> book)	130-131				No. 34 (pp. 86-87)	No. 1-5 (p. 142)			
42	Revision of algebraic expressions	130-131	Rev.	75	38					
43	Formal assessment: Test									
44	<b>Algebraic equations:</b> Solving equations by using additive and multiplicative inverses	132-133	9.1	76-77	39-40	No. 37a (pp. 94-95)	No. 1-8 (pp. 146-147)			
45	Solving equations using laws of exponents	132-133	9.2	78	40		No. 1-2 (pp. 153-154) No. 1-2 (p. 155)			
ne le kten	a <b>about and make a note of:</b> What went well? What did not garners find difficult or easy to understand or do? What will yo d learners? Did you complete all the work set for the week? I ack on track?	u do to sup	port or		ou change r	ext time? Why	?			
ne le kten	arners find difficult or easy to understand or do? What will yo d learners? Did you complete all the work set for the week? I	u do to sup	at did port or		ou change r	ext time? Why	?			

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PLATINUM MATHEMATICS Week 10 CAPS concepts and skills CAPS DBE Sasol Inzalo Class LB LB TG Day workbook pp. ex. pp. pp. Date completed 132-133 No. 1-5 (p. 148) 46 Setting up and solving equations to describe 9.3 79-80 40 problem situations No. 1-2 (p. 149) No. 1-3 (p. 150) No. 1-7 (pp. 151-152) Revision of algebraic equations 132-133 81 40-41 No. 1-2 (p. 156) 47 Rev. 48 Go over test done in previous week; 132-133 No. 37b Revision of solving equations involving fractions (pp. 96-97) (use DBE workbook) 49 General revision 82 42 Test (no. 1-9) General revision 83 42 50 Test (no. 10-15) End-of-term reflection Think about and make a note of: What ONE change should you make to your teaching practice to help you teach 3. 1. Was the learners' performance during the term what you had expected and hoped more effectively next term? for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them? 2. With which specific topics did the learners struggle the most? How can you adjust Did you cover all the content as prescribed by the CAPS for the term? If not, what 4. your teaching to improve their understanding of this section of the curriculum in are the implications for your work on these topics in future? What plan will you the future? make to get back on track? HOD: Date:

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# **Oxford Headstart Mathematics**

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

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

- 1. Day/lesson number.
- 2. CAPS content linked to Learner's Book content.
- 3. CAPS page numbers at the start of each CAPS topic.
- 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 link to related content (exercise and page numbers are referenced).
- 9. Date completed (complete this daily).

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

#### Weekly reflection

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

- Was your preparation for the lesson adequate? For instance, did you have all the necessary resources, had you thought through the content so that you understood it fully and so could teach it effectively?
- Did the purpose of the lesson succeed? For instance, did the learners reach a good understanding of the key concepts for the day? Could they use the language expected from them? Could they write what was expected from them?
- Did the learners cope with the work set for the day? For instance, did they finish the classwork? Was their classwork done adequately? Did you assign the homework?
- Are your learners' books up to date?
- Does what the learners have done in their books correlate with the tracked comments in the tracker?

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

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

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

	OXFORD HEAD		<b>MATHEN</b> elect	IATICS	Week 1					
Day	CAPS concepts and skills	CAPS	LB ex.	LB	TG	DBE workbook	Sasol Inzalo		Class	;
		pp.	ex.	pp.	pp.	WORKDOOK				
1	Whole numbers: Properties of numbers: The properties of zero and one; Describing the real number system	119	1-4	7-13	25-29	No. 1a-1b (pp. 3-5)	No. 1-9 (pp. 1-6)		te comp	Dieted
2	Calculation techniques and calculations using whole numbers	119	1-6	14-23	30-35		No. 1-6 (pp. 7-9) No. 1-5 (pp. 9-10) No. 1-4 (p. 11) No. 1-11 (pp. 12-13) No. 1-6 (pp. 14-15)			
3	Multiples and factors: Using prime factorisation to find the HCF and the LCM	119	1-6	24-28	36-40	No. 2 (pp. 6-7)	No. 1-4 (pp. 16-17)			
4	Solving problems in contexts involving ratio and rate, direct and indirect proportion	120	1-8*	29-49	41-51	No. 3-5 (pp. 8-13)	No. 1-9 (pp. 18-20)			
5	Percentages (increase and decrease); Solving problems in financial contexts: VAT, profit, loss and discounts, interest rates, simple and compound interest, loans, hire purchase, commission and rentals, exchange rates and budgets	121	1-17*	50-73	52-64	No. 6-7 (pp. 14-17) No. 8-9 (pp. 18-21)	No. 1-6 (pp. 20-22) No. 1-2 (pp. 22-23) No. 1-6 (pp. 23-24) No. 1-5 (pp. 25-26) No. 1-3 (p. 26)			
		Refle	ection	1	1	1	, , , , , , , , , , , , , , , , , , ,			
the le exten	<b>about and make a note of:</b> What went well? What did not go well? W arners find difficult or easy to understand or do? What will you do to su d learners? Did you complete all the work set for the week? If not, how ack on track?	pport or	What will	you change	e next time	? Why?				
			HOD:				Date	e:		

**OXFORD HEADSTART MATHEMATICS** Week 2 CAPS concepts and skills CAPS TG DBE Sasol Inzalo Class LB LB Day workbook ex. pp. pp. pp. Date completed Integers: Calculations involving all four operations with integers; 121 1-3 75-79 65-68 No. 10a No. 1 (pp. 27-29) 6 No. 1-12 Properties of integers (pp. 22-23) (pp. 33-35) No. 1-2 (pp. 36-37) Calculations involving addition and subtraction of integers 7 121 1-5 80-85 69-73 No. 10b No. 1-6 (pp. 24-25) (pp. 30-32) 8 Calculations involving multiplication and division of integers; 121 6-9 85-89 73-75 No. 1-2 (p. 32) Order of operations No. 1-2 (p. 36) 9 Calculations involving squares and square roots, cubes and cube 121 10-13 89-95 76-78 No. 1-3 roots of integers (pp. 37-38) 10 Revision of integers 121 Rev. 96 78 Reflection Think about and make a note of: What went well? What did not go well? What did What will you change next time? Why? the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track? HOD: Date:

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	OXFORD HEAD		<b>MATHEN</b> elect	1ATICS	Week 3						
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		С	lass	
		66.		66.	66.			D	ate co	mplete	d
11	<b>Common fractions:</b> Revision: Equivalent fractions, mixed and improper fractions	122	1-4	97-103	79-83	No. 11 (pp. 26-27)	No. 1-10 (pp. 39-43) No. 1-2 (pp. 44-45)				
12	Calculations involving squares, cubes, square roots and cube roots of common fractions	122	5-11*	103-108	83-86	No. 12 (pp. 28-29)	No. 1-4 (pp. 54-55)				
13	Equivalent forms; Calculation techniques	122	1-3	109-115	86-89	No. 15a-15b (pp. 36-39)	No. 1-5 (pp. 55-56)				
14	Calculations with fractions: Addition and subtraction	122	1-6*	116-123	89-92	No. 16 (pp. 40-41)	No. 1-5 (pp. 45-47)				
15	Calculations with fractions: Multiplication and division; Solving problems in contexts with common fractions	122	7-10	123-128	93-94	No. 13a-14 (pp. 30-35)	No. 1-3 (pp. 48-50) No. 1-8 (pp. 51-54)				
		Refle	ection	1		, ,					
the le exten	a <b>about and make a note of:</b> What went well? What did not go well? W parners find difficult or easy to understand or do? What will you do to su id learners? Did you complete all the work set for the week? If not, how ack on track?	ipport or	What will	you change	next time	? Why?					
			HOD:				Dat	e:			

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	OXFORD HEAI	DSTART	MATHEN	MATICS	Week 4						
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE workbook	Sasol Inzalo		Cl	ass	
		pp.	ex.	pp.	pp.	WORKDOOK			ate co	mala	tod
16	<b>Decimal fractions:</b> Revision of decimal fractions; Calculation techniques;	123	1-4	131-135	96-99						leu
17	Calculations with decimal fractions involving all four operations	123	1-4	136-140	100-103	No. 17 (pp. 42-43)					
18	Equivalent forms; Calculations with squares, cubes, square roots and cube roots of decimal fractions	123	1-2	141-143	103-105	No. 19a-20b (pp. 46-53)	No. 1-7 (pp. 57-61) No. 1-7 (pp. 61-64)				
19	Revision, including solving problems in contexts with decimal fractions	123	Rev.	144	105		No. 1-5 (pp. 64-65) No. 1-10 (pp. 66-67)				
20	Revision of decimal fractions (use DBE workbook or Sasol Inzalo book)	123				No. 18 (pp. 44-45)	No. 1-3 (p. 68-69) No. 1-5 (p. 70)				
		Refle	ection								
the le exten	a <b>about and make a note of:</b> What went well? What did not go well? V earners find difficult or easy to understand or do? What will you do to su id learners? Did you complete all the work set for the week? If not, how ack on track?	upport or	What will	you change	e next time	? Why?					
			HOD:				Dat	e:			

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	OXFORD H	EADSTART I #Supp	<b>MATHEN</b> lement	NATICS	Week 5					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Cla	ass
		PP.	CA.	PP.	66.	WORKBOOK		Di	ate co	mpleted
21	<b>Exponents:</b> Comparing and representing numbers in exponential form	124-125	1-3	146-150	107-110		No. 1-2 (pp. 71-73) No. 1-4 (p. 74)			
22	Representing numbers in scientific notation	124-126	1-4	151-155	110-112	No. 21 (pp. 54-55)	No. 1-4 (pp. 82-83) No. 1-2 (p. 84)			
23	Calculations using numbers in exponential form: Using the laws of exponents	124-125	1-2#	156-158	113-115	No. 22-23 (pp. 56-59)	No. 1-8 (pp. 74-77)			
24	Calculations using numbers in exponential form: Using the laws of exponents	124-125	3-4#	159-160	116	No. 24-25 (pp. 60-63)	No. 1-7 (pp. 77-79)			
25	Calculations using laws; Solving equations using numbers in exponential form	124-125	5-6 1	161-163	116-119		No. 1-2 (pp. 80-81)			
		Refle	ection							
the le exten	a <b>about and make a note of:</b> What went well? What did not go we earners find difficult or easy to understand or do? What will you do id learners? Did you complete all the work set for the week? If not, ack on track?	to support or	What will	you change	next time?	? Why?				
			HOD:				Dat	e:		

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**OXFORD HEADSTART MATHEMATICS** Week 6 CAPS concepts and skills CAPS TG DBE Sasol Inzalo Class LB LB Day workbook pp. pp. ex. pp. Date completed Solving problems in contexts involving numbers in exponential form 119 No. 26 124-126 lnv. 164-165 26a-26b (informal investigation); Revision (use DBE workbook) (pp. 64-67) 27 Formal assessment: Assignment Ass. 2 & 165-167 119-120 Rev. 28 Numeric and geometric patterns: Investigating and extending 126-129 1-2 169-173 121-124 No. 27 No. 1-4 numeric and geometric patterns where there is a constant difference (pp. 68, 69) (pp. 91-92) between terms Investigating and extending numeric and geometric patterns where 126-129 3-4 173-175 125-126 No. 28 No. 1-6 29 there is a constant ratio between terms (pp. 70-71) (pp. 93-95) 30 Investigating and extending numeric patterns where there is neither 126-128 5 176-178 126-128 a constant difference nor a constant ratio Reflection Think about and make a note of: What went well? What did not go well? What did What will you change next time? Why? the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track? HOD: Date:

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OXFORD HEADSTART MATHEMATICS Week 7 CAPS concepts and skills CAPS TG DBE Sasol Inzalo Class LB LB Day workbook ex. pp. pp. pp. Date completed Describing and justifying the general rules 126-128 1 179-183 128-131 No. 1-4 31 (pp. 96-98) 32 Describing and justifying the general rules; 126-128 2-3 183-186 131-133 No. 1-7 (pp. 85-90) Determining terms and positions in patterns Go over assignment done in previous week (30 minutes); 129 1 190-192 135-138 No. 1-5 33 **Functions and relationships:** Determining input and output values (pp. 99-102) using various representations (30 minutes) 34 Determining input and output values using various representations 129 2 192-195 138-139 129 Equivalent forms of the same relationship or rule 1 196-198 140-142 No. 1-4 35 (pp. 103-106) Reflection Think about and make a note of: What went well? What did not go well? What did What will you change next time? Why? the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track? HOD: Date:

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	OXFORD HEA		<b>MATHEN</b> lect	<b>IATICS</b>	Week 8				
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE workbook	Sasol Inzalo		Class
		pp.	ex.	pp.	pp.	WORKDOOK			
								Dat	te completed
36	Equivalent forms of the same relationship or rule	129	1	196-198	140-142				
37	Equivalent forms; Determining the relationship or rule	129	2	199-202	142-144		No. 1-7 (pp. 107-114)		
38	<b>Algebraic expressions:</b> Algebraic language; Simplifying algebraic expressions	130-131	1-3	206-209	147-150	No. 29 (pp. 72-73)	No. 1-3 (pp. 115-118) No. 1-2 (p. 118) No. 1-5 (pp. 119-120) No. 1-9 (pp. 120-124)		
39	Using algebraic language; Adding, subtracting and multiplying algebraic expressions	130-131	4-6* 1-3	210-215	151-155	No. 30a-30b (pp. 74-77)			
40	Multiplying monomials by polynomials; Dividing polynomials by monomials	130-131	4-6	215-218	155-157	No. 33 (pp. 84-85)	No. 1-7 (pp. 124-126) No. 1-10 (pp. 127-131) No. 1-9 (pp. 131-134) No. 1-15 (pp. 135-139)		
		Refle	ection		1	1		<u> </u>	
the le exten	a <b>about and make a note of:</b> What went well? What did not go well? arners find difficult or easy to understand or do? What will you do to s d learners? Did you complete all the work set for the week? If not, how ack on track?	support or	What will	you change	e next time	? Why?			
			HOD:				Dat	e:	

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	OXFORD HE		<b>NATHEN</b> lect	MATICS	Week 9			_		_
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class	
								Da	te comp	oleted
41	Determining the product of two binomials; Determining the square of a binomial	130-131	1-5	219-224	157-160	No. 31a-31b (pp. 78-81)	No. 1-7 (pp. 139-141)			
42	Determining the squares, cubes, square roots and cube roots of monomials; Substitution	130-131	6-8	225-229	161-163	No. 34 (pp. 86-87)	No. 1-4 (pp. 134-135) No. 1-5 (p. 142)			
43	Formal assessment: Test									
44	<b>Algebraic equations:</b> Solving equations by inspection; Solving equations using additive and multiplicative inverses	132-133	1-4*	232-236	165-170		No. 1-2 (pp. 143-145) No. 1-8 (pp. 146-147)			
45	Solving equations using additive and multiplicative inverses	132-133	1-3*	237-241	170-174		No. 1-2 (pp. 153-154) No. 1-2 (p. 155)			
		Refle	ction							
the le exten	a <b>about and make a note of:</b> What went well? What did not go well? arners find difficult or easy to understand or do? What will you do to d learners? Did you complete all the work set for the week? If not, he ack on track?	support or	What will	you change	e next time?	? Why?				

Grade 9 Mathematics

	OXFORD HI	EADSTART N *Se	<b>ATHEM</b>	ATICS \	Week 10	)			
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class
			U.V.	pp.	P			Date	e completed
46	Solving equations involving fractions	132-133	1-2	242-244	174-176	No. 37a-37b (pp. 94-97)			
47	Setting up equations to describe problem situations	132-133	1-4*	245-249	177-181		No. 1-5 (p. 148) No. 1-2 (p. 149) No. 1-3 (p. 150) No. 1-7 (pp. 151-152)		
48	Go over test done in previous week; Revision of algebraic equations	132-133	Rev.	250	181-182		No. 1-2 (pp. 153-154) No. 1-2 (p. 155)		
49	General revision (use Test 1 in TG)		Test (no. 1-6)		183-184				
50	General revision (use Test 1 in TG)		Test (no. 7-10)		183-184				
		End-of-ter	m reflection	า					
1. W ho te W	a <b>about and make a note of:</b> Vas the learners' performance during the term what you had expedioped for? Which learners need particular support with Mathematicerm? What strategy can you put in place for them to catch up with vhich learners would benefit from extension activities? What can you put?	cs in the next the class?		ONE chang effectively r		rou make to yo	our teaching practic	e to he	lp you teach
yc	Vith which specific topics did the learners struggle the most? How our teaching to improve their understanding of this section of the ne future?		are the		ons for your	r work on thes	d by the CAPS for t e topics in future? V		
HOD	:						Date:		

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## **Oxford Successful Mathematics**

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

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

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

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

#### Weekly reflection

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

- Was your preparation for the lesson adequate? For instance, did you have all the necessary resources, had you thought through the content so that you understood it fully and so could teach it effectively?
- Did the purpose of the lesson succeed? For instance, did the learners reach a good understanding of the key concepts for the day? Could they use the language expected from them? Could they write what was expected from them?
- Did the learners cope with the work set for the day? For instance, did they finish the classwork? Was their classwork done adequately? Did you assign the homework?
- Are your learners' books up to date?
- Does what the learners have done in their books correlate with the tracked comments in the tracker?

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

What went well?

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- What did not go well?
- What did the learners find difficult or easy to understand or do?
- What will you do 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 head of department and your peers.

	OXFORD SUCC		<b>MATHEN</b> elect	<b>NATICS</b>	Week 1				
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE workbook	Sasol Inzalo		Class
		pp.	ex.	pp.	pp.	WORKDOOK			
								Dat	e completed
1	<b>Whole numbers:</b> Properties of numbers: Describing the real number system	119	1-5	11-18	28-33	No. 1a-1b (pp. 3-5)	No. 1-9 (pp. 1-6)		
2	Calculations with whole numbers; Calculation techniques	119	1	19-21	33-35		No. 1-6 (pp. 7-9) No. 1-5 (pp. 9-10) No. 1-4 (p. 11) No. 1-11 (pp. 12-13) No. 1-6 (pp. 14-15)		
3	Multiples and factors: Using prime factorisation to find the HCF and the LCM	119	1-2	22-25	36-38	No. 2 (pp. 6-7)	No. 1-4 (pp. 16-17)		
4	Solving problems in contexts involving ratio and rate, direct and indirect proportion	120	1-2* 1-3*	26-30 31-34	38-40 41-42	No. 3-5 (pp. 8-13)	No. 1-9 (pp. 18-20)		
5	Solving problems in financial contexts: Profit, loss, discount, VAT, simple interest, budgets, hire purchase; Compound, exchange rates, commissions, rentals	121	1-3* 1-4*	41-47 48-53	46-49 50-54	No. 6-7 (pp. 14-17) No. 8-9 (pp. 18-21)	No. 1-6 (pp. 20-22) No. 1-2 (pp. 22-23) No. 1-6 (pp. 23-24) No. 1-5 (pp. 25-26) No. 1-3 (p. 26)		
Note	: 1. Refer to Day 1: Number and comparison cards; Grid paper; Cardbo 2. Refer to Day 5: Financial information from newspapers, flyers, etc. (1	ard. ГG p. 29).							
		-	ection						
the le exten	<b>about and make a note of:</b> What went well? What did not go well? W arners find difficult or easy to understand or do? What will you do to su d learners? Did you complete all the work set for the week? If not, how ack on track?	pport or	What will y	you change	next time	? Why?			
			HOD:				Date	ə:	

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	OXFORD SUCC	ESSFUL	MATHEN	1ATICS	Week 2						
Day	CAPS concepts and skills	CAPS	LB ex.	LB	TG	DBE workbook	Sasol Inzalo		Cla	ss	
		pp.	ex.	pp.	pp.	WOIKDOOK			ate cor		
6	<b>Integers:</b> Calculations involving all four operations with integers	121	1-4	35-37	43-45	No. 10a (pp. 22-23)	No. 1 (pp. 27-29) No. 1-6 (pp. 30-32) No. 1-2 (p. 32)				lea
7	Properties of integers	121	5	37-39	45	No. 10b (pp. 24-25)	No. 1-12 (pp. 33-35)				
8	Calculations involving squares, cubes, square roots and cube roots of integers; Solving problems involving multiple operations with integers	121	6-7	40	46		No. 1-2 (p. 36) No. 1-2 (pp. 36-37) No. 1-3 (pp. 37-38)				
9	Revision (consolidation) of whole numbers and integers	121	Cons. (no. 1-4)	61-62	57-58						
10	Revision (consolidation) of whole numbers and integers	121	Cons. (no. 5-8)	61-62	57-58						
		Refl	ection					ľ			
the le exter	a <b>about and make a note of:</b> What went well? What did not go well? W parners find difficult or easy to understand or do? What will you do to su id learners? Did you complete all the work set for the week? If not, how ack on track?	upport or	What will y	ou change	e next time	? Why?					
			HOD:				Date	e:			

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	OXFORD SUCC	ESSFUL	MATHEM	IATICS	Week 3	1			
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class Date comple	eted
11	<b>Common fractions:</b> Calculation techniques; Equivalent fractions	122	1-2	64-68	59-61	No. 11 (pp. 26-27)	No. 1-10 (pp. 39-43) No. 1-5 (pp. 45-47) No. 1-3 (pp. 48-50) No. 1-8 (pp. 51-54) No. 1-5 (pp. 55-56)		
12	Calculations with common fractions involving all four operations	122	3	70-71	62-63	No. 13a-14 (pp. 30-35)			
13	Calculations involving squares, cubes, square roots and cube roots of common fractions	122	4	71-73	63-64	No. 12 (pp. 28-29)	No. 1-4 (pp. 54-55)		
14	Solving problems in contexts involving common fractions, mixed numbers and percentages	122	1 (no. 1-9)	74-76	64-67	No. 15a-15b (pp. 36-39)	No. 1-2 (pp. 44-45)		
15	Solving problems in contexts involving common fractions, mixed numbers and percentages	122	1 (no. 10-15)	77	64-67	No. 16 (pp. 40-41)			
the le	<b>a about and make a note of:</b> What went well? What did not go well? Wearners find difficult or easy to understand or do? What will you do to su ad learners? Did you complete all the work set for the week? If not, how ack on track?	Vhat did upport or	ection	ou change	next time	? Why?			
			HOD:				Dat	:e:	

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	OXFORD SUCC		<b>MATHEN</b> elect	NATICS	Week 4						
Day	CAPS concepts and skills	CAPS	LB ex.	LB	TG	DBE workbook	Sasol Inzalo		С	lass	
		pp.	ex.	pp.	pp.	WORKDOOK			ate cr	omplet	ted
16	<b>Decimal fractions:</b> Place value, equivalent forms, calculation techniques; Calculations involving squares, cubes, square roots and cube roots of decimal fractions	123	1-3	78-81	68-70	No. 19a-20b* (pp. 46-53)*					
17	Calculations with decimal fractions involving all four operations	123	4-5	81-84	70-72	No. 17 (pp. 42-43)	No. 1-7 (pp. 61-64)				
18	Solving problems in contexts involving decimal fractions	123	1	85-86	72-73	No. 18 (pp. 44-45)	No. 1-5 (pp. 64-65) No. 1-10 (pp. 66-67)				
19	Equivalent forms	123	1-2	87-89	74-75		No. 1-7 (pp. 57-61)				
20	Revision of decimal fractions (consolidation)	123	Cons.	91	75-76		No. 1-3 (p. 68-69) No. 1-5 (p. 70)				
		Refle	ection	1	1	,		11			
the le exten	a <b>about and make a note of:</b> What went well? What did not go well? W marners find difficult or easy to understand or do? What will you do to su and learners? Did you complete all the work set for the week? If not, how ack on track?	pport or	What will y	you change	e next time	? Why?					
			HOD:				Dat	e:			

	OXFORD SUC		<b>MATHEN</b> lect	MATICS	Week 5				
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class
		PP.	сл.	PP.	66.	WORKBOOK		Date	completed
21	<b>Exponents:</b> Comparing and representing numbers in exponential form	124-125	1-3	93-95	77-80		No. 1-2 (pp. 71-73) No. 1-4 (p. 74)		
22	Calculations using numbers in exponential form: Using the laws of exponents	124-125	1	96-98	79	No. 22-23 (pp. 56-59)	No. 1-8 (pp. 74-77)		
23	Calculations using numbers in exponential form: Using the laws of exponents and algebra	124-125	2-3	98-103	80-85	No. 24-25 (pp. 60-63)	No. 1-7 (pp. 77-79)		
24	Calculations: Using the laws of exponents, substitution, with and without calculators; Solving exponential equations	124-125	1-3* 4 (all)	104-107	86-90		No. 1-2 (pp. 80-81)		
25	Representing numbers in scientific notation	125-126	1-4*	108-112		No. 21 (pp. 54-55)	No. 1-4 (pp. 82-83) No. 1-2 (p. 84)		
		Refle	ction						
the le exten	a <b>ron and make a note of:</b> What went well? What did not go well? harners find difficult or easy to understand or do? What will you do to s d learners? Did you complete all the work set for the week? If not, how ack on track?	upport or	What will	you change	next time	? Why?			
			HOD:				Dat	e:	

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	OXFORD SUCC		<b>MATHEI</b> elect	MATICS	Week 6					
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE workbook	Sasol Inzalo		Class	
		pp.	ex.	pp.	pp.	WORKDOOK				
								Date	e complet	ed
26	Solving problems in contexts involving numbers in exponential form, including scientific notation	124-126	5	112-113	94-95	No. 26a-26b (pp. 64-67)				
27	Formal assessment: Assignment		Ass.*	115-116	94-98					
28	Numeric and geometric patterns: Investigating and extending numeric and geometric patterns	126-129	1	118-119	99-102	No. 27 (pp. 68-69)	No. 1-4 (pp. 91-92)			
29	Investigating and extending numeric and geometric patterns	126-129	2	119-122	102-104		No. 1-6 (pp. 93-95)			
30	Describing and justifying the general rules in words	126-128	1	123-124	105-106					
		Refle	ection							
	Id learners? Did you complete all the work set for the week? If not, how ack on track?	will you	HOD:				Dat	e:		

	OXFORD SUCC	ESSFUL	MATHEN	<b>NATICS</b>	Week 7						
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE workbook	Sasol Inzalo		Clas	s	
		pp.	ex.	pp.	pp.	WORKDOOK					_
								Da	te com	pleted	
31	Describing and justifying the general rules in algebraic language	126-128	2	124-127	107-109		No. 1-4 (pp. 96-98)				
32	Revision of numeric and geometric patterns	126-129	Cons. (no. 1-3)	138	114-115	No. 28 (pp. 70-71)	No. 1-7 (pp. 85-90)				
33	Go over assignment done in previous week; <b>Functions and relationships:</b> Determining input and output values using various representations	129	1 (no. 1-2)	128-131	109-111		No. 1-5 (pp. 99-102)				
34	Determining input and output values using various representations	129	1 (no. 3-5)	128-131	109-111						
35	Equivalent forms of the same relationship or rule	129	1	132-136	111-114		No. 1-4 (pp. 103-106)				
		Refle	ection								
exten	arners find difficult or easy to understand or do? What will you do to su d learners? Did you complete all the work set for the week? If not, how ack on track?	ipport or will you		vou change							
			HOD:				Dat	e:			

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	OXFORD SUCC		<b>MATHEN</b> elect	1ATICS	Week 8					
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo		Clas	s
		pp.	ex.	pp.	pp.	workbook				
								Da	ate com	pleted
36	Equivalent forms of the same relationship or rule	129	1	132-136	111-114					
37	Revision of functions and relationships	129	Cons. (no. 4-6)	138-139	115		No. 1-7 (pp. 107-114)			
38	<b>Algebraic expressions:</b> Algebraic language; Definition of polynomial	130-131	Rev. (no. 1) 1*	140-145	118-121	No. 29 (pp. 72-73)	No. 1-3 (pp. 115-118) No. 1-2 (p. 118) No. 1-5 (pp. 119-120) No. 1-9 (pp. 120-124)			
39	Adding and subtracting like terms; Multiplying monomials by polynomials; Dividing polyomials by monomials	130-131	1	146-149	121-123	No. 30a-30b (pp. 74-77)	No. 1-7 (pp. 124-126) No. 1-10 (pp. 127-131) No. 1-9 (pp. 131-134) No. 1-15 (pp. 135-139)			
40	Simplifying; Determining the squares, cubes, square roots and cube roots of algebraic expressions	130-131	2 (no. 1-2)	149-151	124-125					
		Refle	ection	<u> </u>		<u> </u>				<u> </u>
the le exten	and the set of the set	upport or	What will y	rou change	next time	? Why?				
			HOD:				Dat	e:		

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	OXFORD SUCC	ESSFUL	MATHEN	<b>IATICS</b>	Week 9					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Clas	s
								Da	ite com	pleted
41	Determining the numerical value of algebraic expressions by substitution; Dividing and multiplying	130-131	2 (no. 3) 3	152	124-125	No. 33-34 (pp. 84-87)	No. 1-5 (p. 142)			
42	Determining the product of two binomials; Determining the square of a binomial	130-131	4	153-155	125-127	No. 31a-31b (pp. 78-81)	No. 1-4 (pp. 134-135) No. 1-7 (pp. 139-141)			
43	Formal assessment: Test									
44	<b>Algebraic equations:</b> Setting up equations to solve problem situations	132-133	1	156-158	127-128		No. 1-5 (p. 148) No. 1-2 (p. 149) No. 1-3 (p. 150) No. 1-7 (pp. 151-152)			
45	Solving equations by inspection and by using additive and multiplicative inverses	132-133	2	158-160	129-130		No. 1-2 (pp. 143-145) No. 1-8 (pp. 146-147)			
		Refle	ection							
the le exten	a <b>about and make a note of:</b> What went well? What did not go well? Wearners find difficult or easy to understand or do? What will you do to su a learners? Did you complete all the work set for the week? If not, how ack on track?	upport or	What will y	you change	next time?	'Why?				
			HOD:				Dat	e:		

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**OXFORD SUCCESSFUL MATHEMATICS** Week 10 CAPS concepts and skills DBE Sasol Inzalo Class CAPS LB LB TG Day workbook pp. ex. pp. pp. Date completed Solving equations using laws of exponents; 131-133 No. 1-2 46 132-133 3-4 161-162 (pp. 153-154) Determining the numerical value of an expression by substitution No. 1-2 (p. 155) 47 Solving equations using fractions (use DBE workbook) 132-133 No. 37a-37b (pp. 94-97) 48 Go over test done in previous week; 132-133 Cons. 165 134 Revision of algebraic equations (no. 11-12) General revision (use test in TG) Test 315-318 49 (Q 1-3) General revision (use test in TG) Test 315-318 50 (O. 4-5) End-of-term reflection Think about and make a note of: 3. What ONE change should you make to your teaching practice to help you teach 1. Was the learners' performance during the term what you had expected and more effectively next term? hoped for? Which learners need particular support with Mathematics in the next term? What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them? 2. With which specific topics did the learners struggle the most? How can you adjust Did you cover all the content as prescribed by the CAPS for the term? If not, what 4. your teaching to improve their understanding of this section of the curriculum in are the implications for your work on these topics in future? What plan will you the future? make to get back on track? HOD: Date:

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### **Clever: Keeping Maths Simple**

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

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

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

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

#### Weekly reflection

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

- Was your preparation for the lesson adequate? For instance, did you have all the necessary resources, had you thought through the content so that you understood it fully and so could teach it effectively?
- Did the purpose of the lesson succeed? For instance, did the learners reach a good understanding of the key concepts for the day? Could they use the language expected from them? Could they write what was expected from them?
- Did the learners cope with the work set for the day? For instance, did they finish the classwork? Was their classwork done adequately? Did you assign the homework?
- Are your learners' books up to date?
- Does what the learners have done in their books correlate with the tracked comments in the tracker?

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

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

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

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	Pp.       Date completed         Whole numbers: Properties of number: Describing the real number system (calculation s and calculation techniques using whole numbers       119       1-2       1-7       1-9       No. 1-16 (pp. 7-9) No. 1-5 (pp. 7-9) No. 1-6 (pp. 14-15) No. 1-4 (pp. 16-17)       No. 1-4 (pp. 16-17)       No. 1-4 (pp. 16-17)       No. 1-4 (pp. 16-17) No. 1-4 (pp. 16-17)         Solving problems in contexts involving ratio and rate; Direct and indirect proportion       120       4       9-15       13-19       No. 3-5 (pp. 18-20) (pp. 18-20) No. 1-4 (pp. 18-17) No. 1-4 (pp. 16-17)       Image: Point of the standard compound interest, commission         Solving problems in financial contexts: Profit, loss, discount, VAT, budgets, accounts, loans, hire purchase, exchange rates, simple and compound interest, commission       121       5       15-20       20-21       No. 8-9 (pp. 18-20) No. 1-3 (pp. 22-23) No. 1-3 (pp. 25-26)       Image: Point of the standard contexts         Solving problems in financial contexts       121       5       5       20       20-21       No. 8-9 (pp. 18-21) No. 1-3 (pp. 26)       Image: Point of the standard contexts (pp. 23-24) No. 1-3 (pp. 26)       Image: Po								
Day	CAPS concepts and skills						Sasol Inzalo	Clas	SS
								Date com	npleted
1	system; Calculations and calculation techniques using	119	1-2	1-7	1-9		No. 1-6 (pp. 7-9) No. 1-5		
2	Multiples and factors	119	3	7-9	9-13		No. 1-11 (pp. 12-13) No. 1-6 (pp. 14-15) No. 1-4		
3		120	4	9-15	13-19				
4	budgets, accounts, loans, hire purchase, exchange rates, simple and	121		15-20	20-21		(pp. 22-23) No. 1-6 (pp. 23-24) No. 1-5		
5	Solving problems in financial contexts	121		20	20-21		(pp. 20-22)		
Note	2. Refer to Day 3: Resources: Chart showing triangle of speed, distanc	e and time	·. ·		I	]			_1 _ 1
		Refl	ection						
the le exten	a <b>rners find difficult or easy to understand or do? What did not go well? W</b> arners find difficult or easy to understand or do? What will you do to su d learners? Did you complete all the work set for the week? If not, how ack on track?	pport or	What will y	ou change	next time	? Why?			
			HOD:				Date	e:	

	CLEVER: KEE	PING M	ATHS SIN	1PLE W	/eek 2						
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE workbook	Sasol Inzalo		Clas	s	
		pp.	ex.	pp.	pp.	WORKDOOK					_
		101		21.25	22.27		NI 1 ( 07.00)	D	ate com	pleted	
6	<b>Integers:</b> Calculations involving all four operations with integers	121	What you 1 (no. 1-4)	21-25	22-27		No. 1 (pp. 27-29) No. 1-6 (pp. 30-32) No. 1-2 (p. 32)				
7	Calculations involving all four operations with integers; Calculations involving squares, cubes, square roots and cube roots of integers	121	1 (no. 5-8)	24-25	26-27	No. 10a (pp. 22-23)	No. 1-2 (p. 36) No. 1-2 (pp. 36-37) No. 1-3 (pp. 37-38)				
8	Properties of integers		2	25-27	27-29	No. 10b (pp. 24-25)	No. 1-12 (pp. 33-35)				
9	Solving problems involving multiple operations with integers	121	3 (no. 1-4)	27-29	29-31						
10	Solving problems involving multiple operations with integers	121	3 (no. 5-6)	29-30	29-31						
		Refle	ection								
the le	a <b>about and make a note of:</b> What went well? What did not go well? We arners find difficult or easy to understand or do? What will you do to su id learners? Did you complete all the work set for the week? If not, how ack on track?	pport or	What will y	ou change	e next time	? Why?					
			HOD:				Dat	e:			_

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	CLEVER: KEE		<b>ATHS SIN</b> plement	IPLE W	/eek 3					
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo	(	Class	
		pp.	ex.	pp.	pp.	workbook				
								Date c	omplet	ted
11	<b>Common fractions:</b> Calculation techniques: Equivalent fractions; Calculations using common fractions	122	What you 1 (no. 1)	31-36	32-37	No. 11 (pp. 26-27) No. 13a (pp. 30-31)	No. 1-10 (pp. 39-43) No. 1-5 (pp. 45-47) No. 1-3 (pp. 48-50) No. 1-8 (pp. 51-54)			
12	Calculations involving squares, cubes, square roots and cube roots of common fractions	122	1 (no. 2#)	36-37	37	No. 12 (pp. 28-29)	No. 1-4 (pp. 54-55)			
13	Solving problems in contexts involving common fractions, mixed numbers and percentages	122	2	37-39	37-40		No. 1-2 (pp. 44-45)			
14	Equivalent forms	122	3	39-40	40-42	No. 15a-15b (pp. 36-39)	No. 1-5 (pp. 55-56)			
15	Revision (use DBE workbook)	122				No. 13b-14, 16 (pp. 32-35, 40-41)				
		Refl	ection							
the le exter	<b>a about and make a note of:</b> What went well? What did not go well? Wearners find difficult or easy to understand or do? What will you do to sund learners? Did you complete all the work set for the week? If not, how ack on track?	upport or	What will y	vou change	e next time	? Why?				
			HOD:				Dat	e:		

Grade 9 Mathematics

	CLEVER: KEE		<b>ATHS SIN</b> plement	IPLE W	/eek 4				
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo		Class
		pp.	ex.	pp.	pp.	workbook			
					LB       TG       DBE       Sasol Inzalo       Classical         pp.       morkbook       Sasol Inzalo       Image: Classical inzalo       Image: Classical inzalo         41-48       44-52       No. 1-7       Image: Classical inzalo       Image: Classical inzalo         41-48       44-52       No. 1-7       Image: Classical inzalo       Image: Classical inzalo         47-48       52       No. 1-7       Image: Classical inzalo       Image: Classical inzalo         47-48       52       No. 1-7       Image: Classical inzalo       Image: Classical inzalo         48-51       53-55       No. 1-10       Image: Classical inzalo       Image: Classical inzalo         48-51       53-55       No. 1-5       Image: Classical inzalo       Image: Classical inzalo         48-51       53-55       No. 1-10       Image: Classical inzalo       Image: Classical inzalo         48-51       53-55       Image: Classical inzalo       Image: Classical inzalo       Image: Classical inzalo         48-51       53-55       Image: Classical inzalo       Image: Classical inzalo       Image: Classical inzalo	completed			
16	<b>Decimal fractions:</b> Calculations with decimal fractions; Calculation techniques: Estimation and rounding off	123	What you 1 (no. 1-7)	41-48	44-52				
17	Calculations with squares, cubes, square roots and cube roots of decimal fractions	123	1 (no. 8#)	47-48	52	19a-20b			
18	Solving problems in contexts involving decimal fractions	123	2	48-51	53-55		(pp. 64-65) No. 1-10		
19	Equivalent forms; Revision of decimal fractions (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	123	3	51-53	55-58				
20	Revision of decimal fractions (use DBE workbook or Sasol Inzalo book)	123				1	(p. 68-69)		
		Refle	ection						
the le exten	a <b>about and make a note of:</b> What went well? What did not go well? We arners find difficult or easy to understand or do? What will you do to sund learners? Did you complete all the work set for the week? If not, how ack on track?	pport or	What will y	vou change	e next time	? Why?			
			HOD:				Dat	e:	

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	CLEVER: KE	EPING M	ATHS SIN	1PLE W	/eek 5					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.		DBE workbook	Sasol Inzalo	Class		Class
								D	ate c	ompleted
21	<b>Exponents:</b> Comparing and representing numbers in exponential form; Representing numbers in scientific notation	124-126	What you 1	54-58	59-64	No. 21 (pp. 54-55)	No. 1-2 (pp. 71-73) No. 1-4 (p. 74)			
22	Calculations using numbers in exponential form: Using the laws of exponents	124-125	2 (no. 1-5)	59-63, 66	64-67	No. 22-23 (pp. 56-59)	No. 1-8 (pp. 74-77)			
23	Calculations (including equations) using numbers in exponential form: Using the laws of exponents	124-125	2 (no. 6-8)	63-64	67-68	No. 24-25 (pp. 60-63)	No. 1-7 (pp. 77-79)			
24	Calculations (including scientific notation) using numbers in exponential form: Using the laws of exponents	124-126	2 (no. 9-12)	67	68-69		No. 1-4 (pp. 82-83) No. 1-2 (p. 84)			
25	Solving equations using numbers in exponential form	124-125	3	67-68	69-71		No. 1-2 (pp. 80-81)			
the le exten	<b>about and make a note of:</b> What went well? What did not go well? arners find difficult or easy to understand or do? What will you do to s d learners? Did you complete all the work set for the week? If not, ho ack on track?	support or	What will y	'ou cnange	a next time	¢ vvny ¢				
		HOD:			Date:					

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	CLEVER	: KEEPING M	ATHS SIM	1PLE W	/eek 6				
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class completed
26	Revision (use DBE workbook)	124-126				No. 26a-26b (pp. 64-67)		Date	
27	Formal assessment: Assignment		Ass.	108	113				
28	<b>Numeric and geometric patterns:</b> Investigating and extending numeric patterns; Describing and justifying the general rules	126-128	What you 1 (no. 1-2)	69-73	72-81		No. 1-4 (pp. 91-92)		
29	Investigating and extending numeric patterns; Describing and justifying the general rules	126-128	1 (no. 3-6)	74	78-81		No. 1-6 (pp. 93-95)		
30	Investigating and extending geometric patterns; Describing and justifying the general rules	126-129	2 (no. 1-2)	75-77	81-83				
the le exten	<b>about and make a note of:</b> What went well? What did not go arners find difficult or easy to understand or do? What will you o d learners? Did you complete all the work set for the week? If no ack on track?	do to support or	What will y						
			HOD:				Dat	e:	

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	Image: series of the series									
Day	CAPS concepts and skills						Sasol Inzalo		Class	
		pp.	ex.	pp.	pp.	WORKBOOK			e comp	اممدما
31		126-129		78-79	81-83			Dat		bieted
32		126-129								
33	Functions and relationships: Determining input and output values	129		80	84-88					
34	Determining input and output values using various representations	129		81-85	88-90					
35		129		84-85	88-90					
the le exter	earners find difficult or easy to understand or do? What will you do to su Id learners? Did you complete all the work set for the week? If not, how	pport or	What will y	vou change	e next time	? Why?				
			HOD:				Dat	e:		

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	CLEVER: KE	EPING M	ATHS SIN	1PLE W	/eek 8				
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class
								Date	e completed
36	General revision	129	Control test (Q 1)	110-111	115-116				
37	General revision	129	Control test (Q 2-4)	110-111	115-116		No. 1-7 (pp. 107-114)		
38	<b>Algebraic expressions:</b> Algebraic language; Adding and subtracting like terms	130-131	What you 1-2 (no. 1-2)	86-91	91-99	No. 29 (pp. 72-73)	No. 1-3 (pp. 115-118) No. 1-2 (p. 118) No. 1-5 (pp. 119-120) No. 1-9 (pp. 120-124)		
39	Adding and subtracting like terms; Determining the squares, cubes, square roots and cube roots of algebraic expressions	130-131	2 (no. 3-8)	91	99-100	No. 33 (pp. 84-85)	No. 1-4 (pp. 134-135)		
40	Multiplying and dividing polynomials by monomials; Determining the numerical value of algebraic expressions by substitution	130-131	3 (no. 1-5)	92-94	100	No. 30a-30b (pp. 74-77) No. 34 (pp. 86-87)	No. 1-7 (pp. 124-126) No. 1-10 (pp. 127-131) No. 1-9 (pp. 131-134) No. 1-5 (p. 142)		
		Refle	ection						
the le exten	and the set of the set	support or	What will y	vou change	e next time	? Why?			
			HOD:				Date	e:	

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	CLEVER: KEE	PING M	ATHS SIN	IPLE V	/eek 9							
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE workbook	Sasol Inzalo			Class	5	
		pp.	ex.	pp.	pp.	WORKDOOK						
								D	ate d	comp	pleted	d
41	Multiplying and dividing polyomials by monomials; Determining the product of two binomials and the squares of two binomials	130-131	3 (no. 6-10) 4 (no. 1-3)	94-98	101	No. 31a (pp. 78-79)						
42	Determining the product of two binomials and the squares of two binomials	130-131	4 (no. 4-10)	98-99	101-102	No. 31b (pp. 80-81)	No. 1-7 (pp. 139-141)					
43	Formal assessment: Test											
44	<b>Algebraic equations:</b> Setting up equations to describe problem situations	132-133	What you 1	100-102	103-108		No. 1-2 (pp. 143-145) No. 1-5 (p. 148) No. 1-2 (p. 149) No. 1-3 (p. 150) No. 1-7 (pp. 151-152)					
45	Solving equations using additive and multiplicative inverses; Determining the numerical value of an expression using substitution	132-133	2 (no. 1-3)	100-102, 105	109		No. 1-8 (pp. 146-147) No. 1-2 (pp. 153-154) No. 1-2 (p. 155)					
		Refle	ection									
the le	a <b>about and make a note of:</b> What went well? What did not go well? Wearners find difficult or easy to understand or do? What will you do to su ad learners? Did you complete all the work set for the week? If not, how ack on track?	pport or	What will y	/ou change	e next time	? Why?						
			HOD:				Dat	e:				

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	CLEVER: KEEI		<b>THS SIM</b> Dement	PLE W	eek 10					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Cla	55
								Da	ate con	pleted
46	Solving equations where the product of two factors = 0; Solving equations involving fractions	132-133	2 (no. 4-7#)	103-105	109-110	No. 37a (pp. 94-95)				
47	Solving equations involving fractions cont.	132-133	2 (no. 8-9)	106	110-111	No. 37b (pp. 96-97)				
48	Go over test done in previous week; Setting up and solving equations to describe problem situations	132-133	2 (no. 10-12)	106-107	111-112					
49	Revision of algebraic equations (use Sasol Inzalo book)	132-133								
50	General revision						No. 1-2 (p. 156)			
2. Vi ya	em? /ith which specific topics did the learners struggle the most? How can y our teaching to improve their understanding of this section of the curric e future?		are the	e implicatic		work on thes	d by the CAPS for t e topics in future? \			
HOD							Date:			

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#### Solutions for All Mathematics

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

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

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

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

#### Weekly reflection

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

- Was your preparation for the lesson adequate? For instance, did you have all the necessary resources, had you thought through the content so that you understood it fully and so could teach it effectively?
- Did the purpose of the lesson succeed? For instance, did the learners reach a good understanding of the key concepts for the day? Could they use the language expected from them? Could they write what was expected from them?
- Did the learners cope with the work set for the day? For instance, did they finish the classwork? Was their classwork done adequately? Did you assign the homework?
- Are your learners' books up to date?
- Does what the learners have done in their books correlate with the tracked comments in the tracker?

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

• What went well?

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- What did not go well?
- What did the learners find difficult or easy to understand or do?
- What will you do 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 head of department and your peers.

			elect							
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class	
		Pb.		66.	66.			Dat	te comp	leted
1	<b>Whole numbers:</b> Properties of numbers; Calculations using whole numbers; Describing the real number system	119	Getting started; Act.1.1- 1.8* Ex. 1.1-1.4	1-14	1-9	No. 1a-1b (pp. 3-5)	No. 1-9 (pp. 1-6) No. 1-6 (pp. 7-9) No. 1-5 (pp. 9-10)			
2	Multiples and factors: Using prime factorisation to find LCM and HCF	119	Act. 1.8 Ex. 1.5 Act. 1.9 Ex. 1.6	15-18	9-11	No. 2 (pp. 6-7)	No. 1-4 (p. 11) No. 1-11 (pp. 12-13) No. 1-6 (pp. 14-15) No. 1-4 (pp. 16-17)			
3	Solving problems in contexts involving ratio and rate; Direct and indirect proportion	120	Act. 1.10 Ex. 1.7 Act. 1.11 Ex. 1.8	18-21	11-13	No. 3-5 (pp. 8-13)	No. 1-9 (pp. 18-20)			
4	Solving problems in financial contexts: Simple and compound interest, interest rates, accounts and VAT, profit, loss, discount, budgets, rentals	121	Act. 1.12- 1.17	22-27	13-16	No. 6-7 (pp. 14-17)	No. 1-2 (pp. 22-23) No. 1-6 (pp. 23-24) No. 1-5 (pp. 25-26)			
5	Solving problems in financial contexts	121	Ex. 1.9	28	16-17	No. 8-9 (pp. 18-21)	No. 1-6 (pp. 20-22) No. 1-3 (p. 26)			
		Refl	ection							
he le exten	<b>c about and make a note of:</b> What went well? What did not go well? earners find difficult or easy to understand or do? What will you do to and learners? Did you complete all the work set for the week? If not, ho back on track?	support or	What will yo	ou change	e next time	? Why?				
			HOD:				Date			

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	SOLUTIONS FO	OR ALL I	МАТНЕМ	ATICS	Week 2				
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Date	Class completed
6	<b>Integers:</b> Calculations involving all four operations with integers; Calculations involving squares, cubes, square roots and cube roots of integers; Properties of integers	121	Getting started Ex. 2.1 Act. 2.1 Act. 2.2 Ex. 2.2	35-39	24-26	No. 10a (pp. 22-23)	No. 1 (pp. 27-29) No. 1-6 (pp. 30-32) No. 1-2 (p. 32) No. 1-12 (pp. 33-35)		
7	Calculations in Algebra involving integers	121	Act. 2.3 Ex. 2.3	39-41	26-27	No. 10b (pp. 24-25)	No. 1-2 (p. 36) No. 1-2 (pp. 36-37)		
8	Solving problems involving multiple operations with integers and algebraic expressions	121	Act. 2.4 Ex. 2.4	42-43	28		No. 1-3 (pp. 37-38)		
9	Revision (Check what you know)	121	Check what No. 1-10	44-45	28-30				
10	Revision (Check what you know)	121	Check what No. 11-17	45-46	28-30				
		Refl	ection		1	1			
the le exten	a <b>about and make a note of:</b> What went well? What did not go well? Wearners find difficult or easy to understand or do? What will you do to su d learners? Did you complete all the work set for the week? If not, how ack on track?	pport or	What will y	ou change	e next time	? Why?			
			HOD:				Date	e:	

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Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Clas	s
		66.	CA.	66.	PP.	Workbook				
								Da	te com	pleted
11	<b>Common fractions:</b> Equivalent fractions; Calculations using fractions	122	Getting started Act. 3.1 Ex. 3.1	47-50	31-36	No. 11 (pp. 26-27) No. 13a (pp. 30-31)	No. 1-10 (pp. 39-43) No. 1-5 (pp. 45-47) No. 1-3 (pp. 48-50) No. 1-8 (pp. 51-54)			
12	Calculations with fractions using all four operations; Calculations involving squares, cubes, square roots and cube roots of common fractions; Percentages; Equivalent forms	122	Act. 3.2 Ex. 3.2 Act. 3.3 Act. 3.4 Ex. 3.3 No. 1-12	50-55	36-37	No. 12 (pp. 28-29) No. 15a-15b (pp. 36-39)	No. 1-4 (pp. 54-55) No. 1-5 (pp. 55-56)			
13	Solving problems in contexts involving common fractions, mixed numbers and percentages	122	Ex. 3.3 No. 13-18 <i>Check</i> <i>what</i> No. 8-12	55-56, 60-61	37-38 40	No. 13b-14 (pp. 32-35)	No. 1-2 (pp. 44-45)			
14	Using fractions as coefficients in algebraic expressions and equations	122	Act. 3.5 Ex. 3.4	56-58	38	No. 16 (pp. 40-41)				
15	Revision (Check what you know)	122	Check what No. 1-7 13	59-61	39-40					
		Refl	ection							
he le exten	<b>about and make a note of:</b> What went well? What did not go well? W arners find difficult or easy to understand or do? What will you do to su d learners? Did you complete all the work set for the week? If not, how ack on track?	oport or	What will y	ou change	e next time	? Why?				
			HOD:				Dat	e:		

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	SOLUTIONS FO	OR ALL I	MATHEM	ATICS	Week 4					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Cla	s
								Da	ate con	pleted
16	<b>Decimal fractions:</b> Calculations with decimal fractions, including squares, cubes, square roots and cube roots	123	Getting started; Act. 4.1	62-64	41-44		No. 1-7 (pp. 61-64)			
17	Calculation techniques: Estimation and rounding off; Calculations (including squares, cubes, square roots and cube roots)	123	Ex. 4.1 Act. 4.2 Ex. 4.2	64-66	44-45	No. 19a-20b (pp. 46-53)				
18	Equivalent forms	123	Act. 4.3 Ex. 4.3 Act. 4.4	67-68	46-47		No. 1-7 (pp. 57-61)			
19	Revision of decimal fractions (including solving problems in contexts involving decimal fractions) (Check what you know)	123	Check what	70-71	47		No. 1-5 (pp. 64-65) No. 1-10 (pp. 66-67)			
20	Revision of decimal fractions (use DBE workbook or Sasol Inzalo book)	123				No. 17-18 (pp. 42-45)	No. 1-3 (p. 68-69) No. 1-5 (p. 70)			
		Refl	ection							
the le exten	a <b>bout and make a note of:</b> What went well? What did not go well? W arners find difficult or easy to understand or do? What will you do to su d learners? Did you complete all the work set for the week? If not, how ack on track?	pport or	What will y	vou change	e next time	? Why?				
			HOD:				Dat	e:		

	SOLUTIONS FO	OR ALL I	МАТНЕМ	ATICS	Week 5						
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE workbook	Sasol Inzalo		Cl	ass	
		pp.	ex.	pp.	pp.	WORKDOOK					
21	<b>Exponents:</b> Comparing and representing numbers in exponential form; Representing numbers in scientific notation	124-126	Getting started	72-73	48-52		No. 1-2 (pp. 71-73) No. 1-4 (p. 74)		ate co	mpiet	ea
22	Comparing and representing numbers in exponential form	124-125	Act. 5.1 Ex. 5.1	73-75	52-54						
23	Solving problems involving numbers in exponential form; Calculations using numbers in exponential form: Using the laws of exponents	124-125	Act. 5.2 Ex. 5.2 No. 1-4)	75-78	54-56	No. 22-23 (pp. 56-59)	No. 1-8 (pp. 74-77)				
24	Calculations using numbers in exponential form: Using the laws of exponents; Solving simple exponential equations (use <i>Sasol Inzalo</i> book)	124-125	Ex. 5.2 No. 5-6 Act. 5.3	79	54-56	No. 24-25 (pp. 60-63)	No. 1-7 (pp. 77-79) No. 1-2 (pp. 80-81)				
25	Representing numbers in scientific notation	125-126	Act. 5.4 Ex. 5.3 Act. 5.5	80-82	57-58	No. 21 (pp. 54-55)	No. 1-4 (pp. 82-83) No. 1-2 (p. 84)				
		Refle	ection								
the le exten	a <b>about and make a note of:</b> What went well? What did not go well? W arners find difficult or easy to understand or do? What will you do to su d learners? Did you complete all the work set for the week? If not, how ack on track?	upport or	What will y	vou change	e next time	? Why?					
			HOD:				Dat	e:			

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	SOLUTIONS FO		<b>MATHEM</b> elect	ATICS	Week 6					
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE workbook	Sasol Inzalo		Class	
		pp.	ex.	pp.	pp.	WORKDOOK				
								Dat	e compl	eted
26	Solving problems in contexts involving numbers in exponential form including scientific notation	124-126	Act. 5.6 Ex. 5.4*	82-86	59-61	No. 26a-26b (pp. 64-67)				
27	Formal assessment: Assignment		Check what you know	86-87	61-63					
28	Numeric and geometric patterns: Investigating and extending numeric and geometric patterns	126-129	Getting started	88-91	64-69	No. 27 (pp. 68-69)	No. 1-4 (pp. 91-92)			
29	Investigating and extending numeric patterns; Describing and justifying the general rules	126-128	Act. 6.1 Ex. 6.1 No. 1-3	91-94	69-73		No. 1-6 (pp. 93-95)			
30	Investigating and extending numeric patterns; Describing and justifying the general rules	126-128	Ex. 6.1 No. 4-6	94-95	69-73		No. 1-4 (pp. 96-98)			
		Refle	ection			<u> </u>		· /		
the le exten	a <b>bout and make a note of:</b> What went well? What did not go well? W arners find difficult or easy to understand or do? What will you do to su d learners? Did you complete all the work set for the week? If not, how ack on track?	ipport or	What will y	ou change	e next time	? Why?				
			HOD:				Dat	e:		

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	SOLUTIONS F		<b>MATHEM</b> elect	ATICS	Week 7				
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class
								Date	completed
31	Investigating and extending geometric patterns; Describing and justifying the general rules	126-129	Act. 6.2 Ex. 6.2 No. 1-2	96-99	73-76		No. 1-7 (pp. 85-90)		
32	Investigating and extending geometric patterns; Describing and justifying the general rules	126-129	Ex. 6.2 No. 3-5 Act. 6.3	99-101	75-77	No. 28 (pp. 70-71)			
33	Go over assignment done in previous week; <b>Functions and relationships:</b> Determining input and output values using various representations	129	Getting started Act. 7.1 No. 1	105-106	80-85		No. 1-5 (pp. 99-102)		
34	Determining input and output values using various representations	129	Act. 7.1 No. 2-4	106-107	83-85				
35	Determining input and output values; Equivalent functions	129	Act. 7.2 Ex. 7.1*	107-110	85-91		No. 1-4 (pp. 103-106)		
		Refle	ection						
the le exten	a <b>about and make a note of:</b> What went well? What did not go well? Warners find difficult or easy to understand or do? What will you do to su d learners? Did you complete all the work set for the week? If not, how ack on track?	ipport or	What will y	vou change	next time	? Why?			
			HOD:				Dat	e:	

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	SOLUTIONS F		<b>MATHEM</b> elect	ATICS	Week 8					
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE workbook	Sasol Inzalo		Class	5
		pp.	ex.	pp.	pp.	WOIKDOOK			+	
36	Determining and using formulae	129	Act. 7.3 Act. 7.4*	110-112	91-94				te com	Sleted
37	Working with various representations; Revision of functions and relationships	129	Ex. 7.2 Check what	113, 114	93-95		No. 1-7 (pp. 107-114)			
38	<b>Algebraic expressions:</b> Algebraic language; Adding and subtracting like terms	130-131	Getting started Ex. 8.1	115-117	96-100	No. 29 (pp. 72-73)	No. 1-3 (pp. 115-118) No. 1-2 (p. 118) No. 1-5 (pp. 119-120) No. 1-9 (pp. 120-124)			
39	Determining the squares, cubes, square roots and cube roots of algebraic expressions	130-131	Ex. 8.2 Act. 8.1	117-119	100-102		No. 1-4 (pp. 134-135)			
40	Multiplying polynomials by monomials; Multiplying binomials by binomials	130-131	Ex. 8.3 Ex. 8.4	119-121	102-103	No. 30a-30b (pp. 74-77)	No. 1-7 (pp. 124-126) No. 1-10 (pp. 127-131) No. 1-9 (pp. 131-134)			
		Refle	ection							
the le	a <b>about and make a note of:</b> What went well? What did not go well? Wearners find difficult or easy to understand or do? What will you do to s a learners? Did you complete all the work set for the week? If not, how ack on track?	nips       Check what       114       Image: (pp. 107-114)       Image: (pp. 107-124)       Image: (pp. 107-124)       Image: (pp. 107-124)       Image: (pp. 107-124)       Image: (pp. 107-131)       Ima								
			HOD:				Date	e:		

	SOLUTIONS F		<b>MATHEM</b>	ATICS	Week 9					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class	s
								Da	ite com	pleted
41	Determining the square of a binomial; More binomial multiplication	130-131	Act. 8.2 Ex. 8.5 Act. 8.3	121-123	103-104	No. 31a-31b (pp. 78-81)	No. 1-7 (pp. 139-141)			
42	Dividing polynomials by monomials by separating terms (not by factorisation)	130-131	Ex. 8.9 Act. 8.7	127-129	106-108	No. 33 (pp. 84-85)	No. 1-15 (pp. 135-139)			
43	Determining the numeric value of algebraic expressions by substitution	130-131	Act. 8.8 Ex. 8.10 Act. 8.9*	129-131	108-110	No. 34 (pp. 86-87)	No. 1-5 (p. 142)			
44	Formal assessment: Test									
45	<b>Algebraic equations:</b> Solving equations using additive and multiplicative inverses	132-133	Getting started Act. 9.1 Ex. 9.1	133-135	113-115		No. 1-8 (pp. 146-147)			
		Refle	ection		• •					
the le exten	a <b>about and make a note of:</b> What went well? What did not go well? V earners find difficult or easy to understand or do? What will you do to su d learners? Did you complete all the work set for the week? If not, how ack on track?	upport or	What will y	vou change	e next time	? Why?				
			HOD:				Dat	e:		

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	SOLUTIONS F		<b>1ATHEM</b> / elect	ATICS V	Veek 10				
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE workbook	Sasol Inzalo		Class
		pp.	ex.	pp.	pp.	WORKDOOK			te completed
46	Setting up equations to describe problem situations	132-133	Ex. 9.2	135-137	115		No. 1-5 (p. 148) No. 1-2 (p. 149) No. 1-3 (p. 150) No. 1-7 (pp. 151-152)	Da	
47	Solving equations using laws of exponents	132-133	Act. 9.2 Ex. 9.3	138-139	115-116		No. 1-2 (pp. 153-154) No. 1-2 (p. 155)		
48	Solving equations involving fractions	132-133	Ex. 9.4	139-140	116	No. 37a-37b (pp. 94-97)			
49	Go over test done in previous week; Using substitution in equations	132-133	Act. 9.3 Ex. 9.5- 9.7*	141-144	116-117				
50	Revision of algebraic equations	132-133	Check what	145	117		No. 1-2 (p. 156)		
		End-of-ter	m reflectio	n	1	1	1	1 1	
1. W h te W	a <b>about and make a note of:</b> Vas the learners' performance during the term what you had expected oped for? Which learners need particular support with Mathematics in erm? What strategy can you put in place for them to catch up with the Vhich learners would benefit from extension activities? What can you o mem?	n the next e class?		ONE chang effectively r		ou make to yo	our teaching practio	ce to h	elp you teach
yo	Vith which specific topics did the learners struggle the most? How car our teaching to improve their understanding of this section of the cur ne future?		are the		ons for your	work on thes	d by the CAPS for t e topics in future? \		
HOD	:		1				Date:		

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## Mathematics Today

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

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

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

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

#### Weekly reflection

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

- Was your preparation for the lesson adequate? For instance, did you have all the necessary resources, had you thought through the content so that you understood it fully and so could teach it effectively?
- Did the purpose of the lesson succeed? For instance, did the learners reach a good understanding of the key concepts for the day? Could they use the language expected from them? Could they write what was expected from them?
- Did the learners cope with the work set for the day? For instance, did they finish the classwork? Was their classwork done adequately? Did you assign the homework?
- Are your learners' books up to date?
- Does what the learners have done in their books correlate with the tracked comments in the tracker?

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

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

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

	MATHE	MATICS	TODAY	Week 1							
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE workbook	Sasol Inzalo		C	ass	
		pp.	ex.	pp.	pp.	WORKDOOK					
1	Whole numbers: Properties of numbers; Describing the real number system; Calculations and calculation techniques using whole numbers	119	1.1-1.3	5-8	1-2	No. 1a-1b (pp. 3-5)	No. 1-9 (pp. 1-6) No. 1-6 (pp. 7-9) No. 1-5 (pp. 9-10)	Da		ompi	eted
2	Multiples and factors: Using prime factorisation to find the HCF and the LCM	119	1.4-1.6	9-10	2	No. 2 (pp. 6-7)	No. 1-4 (p. 11) No. 1-11 (pp. 12-13) No. 1-6 (pp. 14-15) No. 1-4 (pp. 16-17)				
3	Solving problems in contexts involving ratio and rate; Direct and indirect proportion	120	1.7-1.8	11-13	2-3	No. 3-5 (pp. 8-13)	No. 1-9 (pp. 18-20)				
4	Solving problems in financial contexts: Profit, loss, discount, VAT, budgets and accounts, simple interest, loans and hire purchase	121	1.9-1.10	14-16	3-4	No. 6-7 (pp. 14-17)	No. 1-2 (pp. 22-23) No. 1-6 (pp. 23-24) No. 1-5 (pp. 25-26)				
5	Solving problems in financial contexts: Compound interest, exchange rates, commissions and rentals	121	1.11-1.13	16-19	4	No. 8-9 (pp. 18-21)	No. 1-6 (pp. 20-22) No. 1-3 (p. 26)				
		Refl	ection								
the le	<b>a about and make a note of:</b> What went well? What did not go well? Wearners find difficult or easy to understand or do? What will you do to sund learners? Did you complete all the work set for the week? If not, how back on track?	pport or	What will y	vou change	next time	?? Why?					
			HOD:				Dat	e:			

	MATHE	MATICS	TODAY	Week 2							
Day	CAPS concepts and skills	CAPS	LB ex.	LB	TG	DBE workbook	Sasol Inzalo		Cli	ass	
		pp.	ex.	pp.	pp.	WORKDOOK			ate co		اما
6	<b>Integers:</b> Calculations involving all four operations with integers	121	2.1-2.2	21-23	6		No. 1 (pp. 27-29) No. 1-6 (pp. 30-32) No. 1-2 (p. 32)	Da			let
7	Calculations involving all four operations with integers; Calculations involving squares, cubes, square roots and cube roots of integers	121	2.3-2.4	23-24	6	No. 10a (pp. 22-23)	No. 1-2 (p. 36) No. 1-2 (pp. 36-37) No. 1-3 (pp. 37-38)				
8	Properties of integers	121	2.5	25	7	No. 10b (pp. 24-25)	No. 1-12 (pp. 33-35)				
9	Solving problems involving multiple operations with integers	121	2.6	26	7						
10	Revision of integers	121	Rev.	27	7-8						
<b>T</b> L 1. 1	<b>x about and make a note of:</b> What went well? What did not go well? W			ou change		214/1 2					
exter	earners find difficult or easy to understand or do? What will you do to su ad learners? Did you complete all the work set for the week? If not, how ack on track?										

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MATHEMATICS TODAY Week 3 CAPS concepts and skills CAPS LB TG DBE Sasol Inzalo Class LB Day workbook ex. pp. pp. pp. Date completed **Common fractions:** Calculations using fractions: 3.1 29 9 No. 11 No. 1-10 11 122 Addition and subtraction (pp. 39-43) (pp. 26-27) No. 1-5 (pp. 45-47) Calculations using fractions: Multiplication and division 122 3.2-3.3 30-31 9-10 No. 13a-14 No. 1-3 12 (pp. 48-50) (pp. 30-35) No. 1-8 (pp. 51-54) Calculations involving multiple operations; 122 3.4-3.5 32-33 10 No. 12 No. 1-4 13 Calculations involving squares, cubes, square roots and cube roots (pp. 28-29) (pp. 54-55) of common fractions 14 Solving problems in contexts involving fractions 122 3.6 34 10 No. No. 1-2 15a-15b (pp. 44-45) (pp. 36-39) 15 Equivalent forms 122 3.7 35 10 No. 16 No. 1-5 (pp. 40-41) (pp. 55-56) Reflection Think about and make a note of: What went well? What did not go well? What did What will you change next time? Why? the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track? HOD: Date:

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	MATH	EMATICS *Se	<b>TODAY</b> elect	Week 4					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class
16	<b>Decimal fractions:</b> Calculations with decimal fractions: Addition and subtraction; Calculation techniques: rounding off	123	4.1-4.2	38-39	12		No. 1-7 (pp. 57-61)	Date	completed
17	Calculations with decimal fractions: Multiplication and division	123	4.3-4.4	39-41	12	No. 17 (pp. 42-43)	No. 1-7 (pp. 61-64)		
18	Calculations involving multiple operations; Calculations with squares, cubes, square roots and cube roots	123	4.5-4.6*	41-42	12-13	No. 19a-20b (pp. 46-53)			
19	Equivalent forms; Solving problems in contexts involving decimal fractions	123	4.7-4.8	43-44	13		No. 1-7 (pp. 57-61) No. 1-5 (pp. 64-65) No. 1-10 (pp. 66-67)		
20	Revision of decimal fractions	123	Rev.	45	14	No. 18 (pp. 44-45)	No. 1-3 (p. 68-69) No. 1-5 (p. 70)		
		Refle	ection		1				<u> </u>
the le exten	a <b>about and make a note of:</b> What went well? What did not go well? earners find difficult or easy to understand or do? What will you do to a learners? Did you complete all the work set for the week? If not, ho ack on track?	support or	What will y	ou change	next time	? Why?			
			HOD:				Dat	e:	

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	MATHE		<b>TODAY</b> elect	Week 5					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class
								Date	e completed
21	<b>Exponents:</b> Comparing and representing numbers in exponential form; Calculations using numbers in exponential form: Using the laws of exponents	124-125	5.1-5.3	46-49	15	No. 22-23 (pp. 56-59)	No. 1-2 (pp. 71-73) No. 1-4 (p. 74)		
22	Calculations using numbers in exponential form: Using the laws of exponents	124-125	5.4-5.7	49-51	15-16	No. 24-25 (pp. 60-63)	No. 1-8 (pp. 74-77)		
23	Calculations using the laws of exponents; Solving equations using numbers in exponential form	124-125	5.8-5.10	51-53	16		No. 1-7 (pp. 77-79) No. 1-2 (pp. 80-81)		
24	Comparing and representing numbers in scientific notation	125-126	5.11- 5.14*	54-56	17	No. 21 (pp. 54-55)	No. 1-4 (pp. 82-83)		
25	Solving problems in contexts involving numbers in exponential form, including scientific notation	125-126	5.15	57	17		No. 1-2 (p. 84)		
		Refle	ection						
the le exten	a <b>ners find difficult or easy to understand or do? What will you do to su dearners? Did you complete all the work set for the week? If not, how ack on track?</b>	pport or	What will y	vou change	e next time	? Why?			
			HOD:				Dat	e:	

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		EMATICS									
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Cla	ISS	
		PP.	ex.	PP.	PP.	WOIRDOOR					<u> </u>
								Da	ate cor	nplet	ed
26	Revision	124-126	Rev.	58	18	No. 26a-26b (pp. 64-67)					
27	Formal assessment: Assignment		Ass.	59-60	20						
28	Numeric and geometric patterns: Investigating and extending numeric patterns where there is a constant difference between terms; Describing and justifying the general rules	126-128	6.1	61-64	21		No. 1-4 (pp. 91-92)				
29	Investigating and extending numeric patterns where there is a constant ratio between terms or other types; Describing and justifying the general rules	126-128	6.2	64-65	22	No. 27 (pp. 68-69)	No. 1-6 (pp. 93-95) No. 1-4 (pp. 96-98)				
30	Investigating and extending geometric patterns; Describing and justifying the general rules	126-129	6.3	66-68	23-24		No. 1-7 (pp. 85-90)				
		Refle	ection								
the le exten	<b>about and make a note of:</b> What went well? What did not go well? arners find difficult or easy to understand or do? What will you do to s d learners? Did you complete all the work set for the week? If not, how ack on track?	support or	What will	you change	next time	? Why?			Class ate comp		
			HOD:				Dat	e:			

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MATHEMATICS TODAY Week 7 CAPS concepts and skills CAPS LB LB TG DBE Sasol Inzalo Class Day workbook ex. pp. pp. pp. Date completed Investigating and extending geometric patterns; 126-129 69-70 24 31 6.4 Describing and justifying the general rules 32 Revision of numeric and geometric patterns 126-129 Rev. 71 24 No. 28 (pp. 70-71) Go over assignment done in previous week; 129 7.1 73-74 31-32 No. 1-5 33 **Functions and relationships:** Determining input and output values (no. 1-2) (pp. 99-102) using various representations 34 Determining input and output values using various representations; 129 7.1 74-76 31-32 Determining the rules for patterns and relationships (no. 3) 7.2 (no. 1) 35 Determining the rules for patterns and relationships 129 7.2 76 32 (no. 2) Reflection Think about and make a note of: What went well? What did not go well? What did What will you change next time? Why? the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track? HOD: Date:

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	МАТНЕ	pp.         pz.         pz.         pp.         pp.								
Day	CAPS concepts and skills						Sasol Inzalo		Clas	s
								Da	te com	pleted
36	Equivalent forms of the same relationship or rule	129		77-79	32-33					
37	Equivalent forms of the same relationship or rule	129		79-80	32-33					
38	<b>Algebraic expressions:</b> Algebraic language; Adding and subtracting like terms	130-131	8.1-8.4	82-86	36-37		(pp. 115-118) No. 1-2 (p. 118) No. 1-5 (pp. 119-120) No. 1-9			
39	Multiplying and dividing polyomials by monomials	130-131	8.5-8.6	86-87	37		(pp. 124-126) No. 1-10 (pp. 127-131) No. 1-9			
40	Simplifying algebraic expressions; Determining the squares, cubes, square roots and cube roots of algebraic expressions	130-131	8.7-8.8	88-89	37					
		Refle	ection							
the le exten	<b>a about and make a note of:</b> What went well? What did not go well? Wearners find difficult or easy to understand or do? What will you do to sud learners? Did you complete all the work set for the week? If not, how ack on track?	upport or	What will y	vou change	e next time	? Why?				
			HOD:				Dat	e:		

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	MATH	EMATICS	<b>TODAY</b> elect	Week 9						
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE workbook	Sasol Inzalo		Class	;
		pp.	ex.	pp.	pp.	WORKDOOK				
41	Determining the numerical value of algebraic expressions by substitution; Determining the product of two binomials	130-131	8.9-8.10	90-91	37-38	No. 34 (pp. 86-87)	No. 1-5 (p. 142)		te comp	Dieted
42	Determining the square of a binomial; Revision of algebraic expressions	130-131	8.11 Rev.*	92-94	38	No. 31a-31b (pp. 78-81)	No. 1-4 (pp. 134-135) No. 1-7 (pp. 139-141)			
43	Formal assessment: Test									
44	<b>Algebraic equations:</b> Setting up equations to describe problem situations	132-133	9.1	95-97	40		No. 1-5 (p. 148) No. 1-2 (p. 149)			
45	Setting up equations to describe problem situations	132-133	9.2-9.3*	98-100	40-41		No. 1-3 (p. 150) No. 1-7 (pp. 151-152)			
		Refle	ection		1	1		<u> </u>		
the le exten	a <b>about and make a note of:</b> What went well? What did not go well? Parners find difficult or easy to understand or do? What will you do to id learners? Did you complete all the work set for the week? If not, ho ack on track?	support or	What will y	you change	next time	? Why?				
			HOD:				Dat	e:		

Grade 9 Mathematics

	MAT	HEMATICS 1 *Se	<b>ODAY</b> lect	Week 10	)				
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class
								Date	completed
46	Solving equations by inspection and by using additive and multiplicative inverses	132-133	9.4-9.5	101-103	41-42		No. 1-2 (pp. 143-145) No. 1-8 (pp. 146-147)		
47	Solving more complicated equations; Solving equations using the laws of exponents	132-133	9.6*-9.7	104-105	42		No. 1-2 (pp. 153-154) No. 1-2 (p. 155)		
48	Go over test done in previous week; Solving equations involving fractions (use <i>DBE workbook</i> )	132-133				No. 37a-37b (pp. 94-97)			
49	Revision of algebraic equations	132-133	Rev.	106	43		No. 1-2 (p. 156)		
50	General revision (use Term Test in TG)		Test		45-47				
1. V h te W	<b>x about and make a note of:</b> Vas the learners' performance during the term what you had expect oped for? Which learners need particular support with Mathematic erm? What strategy can you put in place for them to catch up with which learners would benefit from extension activities? What can you hem?	cs in the next the class?		ONE chang effectively r			our teaching practic	e to help	) you teach
y	Vith which specific topics did the learners struggle the most? How o our teaching to improve their understanding of this section of the o ne future?		are the		ns for you	r work on thes	d by the CAPS for t e topics in future? V		
HOD	•						Date:		

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## Sasol Inzalo Mathematics Book 1

This section maps out how you should use the Sasol Inzalo Mathematics Book 1 Learner's Book and Teacher's Guide in a way that enables you to cover the curriculum sequentially, aligning with CAPS, for well-paced and meaningful teaching.

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

- 1. Day/lesson number.
- 2. CAPS content linked to Learner's Book content.
- 3. CAPS page numbers at the start of each CAPS topic.
- 4. Learner's Book exercises that cover the CAPS content for the day. Where an exercise has been recommended for more than one day, it has been divided into two parts.
- 5. Page reference in the Learner Book (LB page reference).
- 6. Page reference in your Teacher 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 (complete this daily).

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

#### Weekly reflection

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

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

- Did the purpose of the lesson succeed? For instance, did the learners reach a good understanding of the key concepts 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 jot down your reflection weekly, following the prompts in the tracker.

• What went well?

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

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

	SASOL INZALO I	MATHEN	IATICS BO	OK 1 We	ek 1				
Day	CAPS concepts and skills	CAPS pp.	LB no.	LB pp.	TG pp.	DBE		Class	_
1       WI         2       Mu         3       So         4       So         5       So         Think about the learned extend le		pp.	110.	Pb.	Pb.	WORKBOOK	Date	completed	4
1	Whole numbers: Properties of numbers: Different types of numbers; Calculations with whole numbers: Estimating, rounding off and compensating; Adding columns	119	1-9 1-6 1-5	3-6 7-9 9-10	1-6 7-9 9-10	No. 1a-1b (pp. 3-5)			
2	Multiplying in columns; Subtracting in columns; Long division; Multiples and factors: Lowest common multiples and prime factorisation	119	1-4 1-11 1-6 1-4	11 12-13 14-15 16-17	11 12-13 14-15 16-17	No. 2 (pp. 6-7)			
3	Solving problems about ratio rate and proportion	120	1-9	18-20	18-20	No. 3-5 (pp. 8-13)			
4	Solving problems in financial contexts: Discount, profit and loss; Hire purchase	121	1-6 1-2	20-22 22-23		No. 6-7 (pp. 14-17)			
5	Solving problems in financial contexts: Simple interest; Compound interest; Exchange rate and commission	121	1-6 1-5 1-3	23-24 25-26 26		No. 8-9 (pp. 18-21)			
		Refle	ction	1		1 1	<u>I</u>	<u> </u>	
the le exten	<b>about and make a note of:</b> What went well? What did not go well? W arners find difficult or easy to understand or do? What will you do to su d learners? Did you complete all the work set for the week? If not, how ack on track?	pport or	What will yo	u change next	time? Why?				
			HOD:				Date:		

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	SASOL INZALO I	MATHEM	ATICS BO	OK 1 We	ek 2				
Day	CAPS concepts and skills	CAPS pp.	LB no.	LB pp.	TG pp.	DBE workbook		Class	
							Date	comp	leted
6	<b>Integers:</b> Which numbers are smaller than zero? Why people decided to have negative numbers; Properties of integers; Calculations with integers	121	1 1-6	29 30-32	27-29 30-32				
7	Multiplication with integers; The distributive property; Division with integers; Mixed calculations with integers	121	1-2 1-12 1-2 1-2	32 33-35 36 36-37	32 33-35 36 36-37				
8	Powers, roots and word problems	121	1-3	37-38	37-38				
9	Revise properties of numbers (use DBE workbook)	121		35-38		No. 10a (pp. 22-23)			
10	Revise properties of numbers cont. (use DBE workbook)	121		39		No. 10b (pp. 24-25)			
he le exter	a <b>about and make a note of:</b> What went well? What did not go well? Wearners find difficult or easy to understand or do? What will you do to su delearners? Did you complete all the work set for the week? If not, how ack on track?	pport or	vvnat will yo	u change next <sup>.</sup>	time? Wny?				

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	SASOL INZALO I	МАТНЕМ	ATICS BO	OK 1 We	ek 3				
Day	CAPS concepts and skills	CAPS	LB no.	LB	TG	DBE workbook		Class	
		pp.	110.	pp.	pp.	WOIKDOOK	Date	complet	ed.
11	<b>Common fractions:</b> Equivalent fractions: The same number in different forms; Converting between mixed numbers and fractions	122	1-10 1-2	41-43 44-45	39-43 44-45				.eu
12	Adding and subtracting fractions; Multiplying and dividing fractions: Think about multiplication and division with fractions	122	1-5 1-3	45-47 48-50	45-47 48-50	No. 11 (pp. 26-27) No. 13a (pp. 30-31)			
13	Multiplying and dividing fractions	122	1-8	51-54	51-54	No. 13b-14 (pp. 32-35)			
14	Squares, cubes, square roots and cube roots	122	1-4	54-55	54-55	No. 12 (pp. 28-29)			
15	Equivalent forms: Fractions, decimals and percentage forms	122	1-5	55-56	55-56	No. 15a-15b (pp. 36-39)			
the le exten	<b>about and make a note of:</b> What went well? What did not go well? W arners find difficult or easy to understand or do? What will you do to su d learners? Did you complete all the work set for the week? If not, how ack on track?	pport or		u change next	time? Why?				
			HOD:				Date:		

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	SASOL INZALO	MATHEN	IATICS BO	OK1 We	ek 4				
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE workbook		Class	
		pp.	no.	pp.	pp.	WORKDOOK			
							Date	complet	ed
16	<b>Decimal fractions:</b> Equivalent forms: Common fractions, decimal fractions and percentages	123	1-7	59-61	57-61	No. 16 (pp. 40-41)			
17	Calculations with decimals	123	1-7	61-64	61-64	No. 17 (pp. 42-43)			
18	Solving all kinds of problems; More problems and calculations	123	1-5 1-10	64-65 66-67	64-65 66-67	No. 19a-20b (pp. 46-53)			
19	Decimals in algebraic expressions and equations	123	1-3	68-69	68-69				
20	Revision worksheet of decimal fractions	123	1-5	70	70	No. 18 (pp. 44-45)			
		Refle	ction						
			HOD:						

Grade 9 Mathematics

	SASOL INZALO							
Day	CAPS concepts and skills	CAPS pp.	LB no.	LB pp.	TG pp.	DBE workbook		Class
						-	Date	completed
21	<b>Exponents:</b> Revision: The exponential form of a number; Order of operations	124-125	1-2 1-4	73 74	71-73 74			
22	Laws of exponents	124-125	1-8	74-77	74-77	No. 22-23 (pp. 56-59)		
23	Negative exponents	124-125	1-7	77-79	77-79	No. 24-25 (pp. 60-63)		
24	Solving simple exponential equations	125-126	1-2	80-81	80-81			
25	Scientific notation: Writing very small and very large numbers	124-125	1-4	82-83	82-83	No. 21 (pp. 54-55)		
the le exter	<b>x about and make a note of:</b> What went well? What did not go well? Wearners find difficult or easy to understand or do? What will you do to sud learners? Did you complete all the work set for the week? If not, how back on track?	upport or		u change next t	ime? Why?			
the le exter	earners find difficult or easy to understand or do? What will you do to s ad learners? Did you complete all the work set for the week? If not, how	What did upport or		u change next t	ime? Why?			

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Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE		Class
Jay		pp.	no.	pp.	pp.	workbook		
							Date	completed
26	Calculations using scientific notation; Revision (use DBE workbook)	124-126	1-2	84	84	No. 26a-26b (pp. 64-67)		
27	Formal assessment: Assignment							
28	Numeric and geometric patterns: Geometric patterns: Investigating and extending	126-129	1-7	87-90	85-90	No. 27 (pp. 68-69)		
29	More patterns: Drawing and investigating	126-129	1-4	91-92	91-92			
30	Different kinds of patterns in sequences: Do the same thing repeatedly	126-128	1-6	93-95	93-95			
Note	: Refer to Day 27: The assignment must be sourced from another set of	f LTSMs.						
		Reflec	tion					
he le exten	a <b>bout and make a note of:</b> What went well? What did not go well? W arners find difficult or easy to understand or do? What will you do to su d learners? Did you complete all the work set for the week? If not, how ack on track?	Vhat did		u change next t	ime? Why?			
he le exten	arners find difficult or easy to understand or do? What will you do to su d learners? Did you complete all the work set for the week? If not, how	Vhat did		u change next 1	time? Why?			

Grade 9 Mathematics

SASOL INZALO MATHEMATICS BOOK 1 Week 7 CAPS concepts and skills CAPS LB DBE Class LB TG Day workbook pp. pp. pp. no. Date completed Formulae for sequences: Make two formulae for the same sequence 126-128 1-4 96-98 96-98 31 32 Revise numeric and geometric number patterns (use DBE workbook) 126-128 33 Go over assignment done in previous week (30 minutes); 129 1-5 101-102 99-102 **Functions and relationships:** Find output numbers for given input numbers (30 minutes) 34 Different ways to represent the same relationship 129 1-4 103-106 103-106 Different representations of the same relationship 35 129 1-4 107-111 107-111 Reflection What will you change next time? Why? 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? HOD: Date:

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	SASOL INZALO	MATHEM	IATICS BO	OK 1 We	ek 8			
Day	CAPS concepts and skills	CAPS pp.	LB no.	LB pp.	TG pp.	DBE workbook		Class
		PP.		PP.	PP.		Date	completed
36	Different representations of the same relationship cont.	129	1-4	107 112-114	107 112-114			
37	<b>Algebraic expressions:</b> Algebraic language: Words, diagrams and expressions; Some words we use in algebra; Equivalent algebraic expressions; Conventions for writing algebraic expressions	130-131	1-3 1-2 1-5 1-9	117-118 118 119-120 120-124	117-118 118 119-120 120-124	No. 29 (pp. 72-73)		
38	Properties of operations; Combining like terms in algebraic expressions	130-131	1-7 1-10	127-131	127-131			
39	Multiplication of algebraic expressions: Multiply polynomials by monomials	130-131	1-9	131-134	131-134	No. 30a-30b (pp. 74-77)		
40	Squares and cubes and roots of monomials	130-131	1-4	134-135	134-135			
			HOD:				Date:	

	SASOL INZAL	O MATHEM	ATICS BO	OK 1 Wee	ek 9			
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE workbook		Class
		pp.	no.	pp.	pp.	WORKDOOK		
							Date	completed
41	Dividing polynomials by integers and monomials	130-131			117-118	No. 33 (pp. 84-85)		
42	Products and squares of binomials; Substitution into algebraic expressions	130-131	1-7 1-5	139-141 142	139-141 142	No. 31a-31b (pp. 78-81) No. 34 (pp. 86-87)		
43	Formal assessment: Test							
44	Algebraic equations: Solving equations by inspection	132-133	1-2	145	143-145			
45	Solving equations using additive and multiplicative inverses	132-133	1-8	146-147	146-147			

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Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE		Class	
		pp.	no.	pp.	pp.	workbook			
							Date	comple	eted
46	Setting up equations: Constructing equations; Solving equations; Number patterns and equations	132-133	1-5 1-2 1-3	148 149 150	148 149 150				
47	Equations and situations; Solving equations by using the laws of exponents	132-133	1-7 1-2	151-152 153-154	151-152 153-154	No. 37a (pp. 94-95)			
48	Go over test done in previous week; Solving equations involving fractions (use <i>DBE workbook</i> )	132-133				No. 37b (pp. 96-97)			
49	Solving equations with a variable in the base	132-133	1-2	155	155				
50	Revision of algebraic equations (worksheet)	132-133	1-2	156	156				
V	or? Which learners need particular support with Mathematics in the ne /hat strategy can you put in place for them to catch up with the class? earners would benefit from extension activities? What can you do to he	Which		ectively next te					
V	/hat strategy can you put in place for them to catch up with the class?	Which							
V le 2. V y	/hat strategy can you put in place for them to catch up with the class?	Which Ip them? you adjust	4. Did you are the i	cover all the co	ontent as preso your work on	tribed by the CAPS			

#### Grade 9 Mathematics

# **E. ASSESSMENT RESOURCES**

Suggested Assessn	nent Record Shee	et: Term 1			
GRADE	9 MATHEMATICS				
Assignment 1	Test 1	FORMAL ASSESSMENT TERM 1 MARK			
	GRADE FORMAL AND II	GRADE 9 MATHEMATICS FORMAL AND INFORMAL ASSESSMI	FORMAL AND INFORMAL ASSESSMENT	GRADE 9 MATHEMATICS FORMAL AND INFORMAL ASSESSMENT	GRADE 9 MATHEMATICS FORMAL AND INFORMAL ASSESSMENT

Teacher Toolkit: CAPS Planner and Tracker 2019 Term 1 **109** 

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(1) (1) (1) (1) Ξ 3 (2)(2) $(\mathbf{Z})$ 4  $(\mathbf{Z})$  $\overline{\mathbb{C}}$ 8 2 A motorbike has a fuel capacity of 16 litres. The rider decides to go Mr Mudau deposits R6 900 into a savings account at an interest rate of 10% per annum, compounded annually. How much money The ratio of the length to the breadth of a rectangular box is 8:5. If the length is 50 cm, calculate the breadth of the box. If the biker uses  $\frac{3}{4}$  of the tank's fuel for  $\frac{4}{7}$  of the journey, how many litres of fuel will he need for the whole trip? State whether the expressions below are rational or irrational: 3.3.1 He stops for a lunch break after  $\frac{4}{7}$  of the journey. Write down one factor of 18 which is a prime number. on a trip which is 140 kilometres from where he is. How many litres is  $\frac{3}{4}$  of the tank's capacity? will be in his account at the end of two years? How many kilometres is this? Simplify the following expressions fully: INSTRUCTIONS TO LEARNERS: Write 4,67 as a common fraction. 3. No calculators allowed 2. Show all your working.  $\left(\frac{6}{11} + \frac{3}{5}\right) - \frac{6}{5} \div \frac{11}{3}$ 1. Time: 60 minutes. 1.1.2  $\sqrt{64+4}$ 1.1.1 -2,3564 QUESTION 1: **QUESTION 4:** QUESTION 2: QUESTION 3:  $\frac{5a}{7} - \frac{7a}{6}$ 3.3.2 3.3.3 .\_\_\_\_\_ 3.1 3.2 1.2 2.1 2.2 3.3

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Grade 9 Mathematics Test Term 1

Time: 60 minutes

Total: 50 marks

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(Z) (Z)	<b>[6]</b> (2) (2) <b>[6]</b>	(2)	(1) (1) (2)	Ξ	[ <b>4</b> ] (2) (3) (3)	2 [2]
<b>QUESTION 5:</b> Simplify (answers with positive exponents): 5.1 $(-5x^2)(-5x)^3$ 5.2 $\frac{(13x-2)^2}{(2x^4)^2}$ 5.3 $\sqrt{16}x^{-1}y^{-7}z^0$	<b>QUESTION 6:</b> Solve for the variable <i>p</i> : $6.1  6^{3p} = \frac{1}{216}$ $6.2  (7^2)^{3p-4} = 1$ $6.3  p = 2, 1 \times 1^{-3} \times 5, 3 \times 10^{-2}$ (answer in decimal notation)	QUESTION 7: 7.1 Give the general rule (the <i>n</i> -th term) of the number sequence: $\frac{3}{2}$ ; 2; $\frac{5}{2}$ ; 3; 7.2 A pattern of triangles is given below:	1       2       3         7.2.1       Write down the number of triangles in each pattern.         How many triangles form the 4 <sup>th</sup> and 5 <sup>th</sup> patterns of triangles?         7.2.2       Give the general rule (the <i>n</i> -th term) of the sequence.         7.2.3       How many triangles will make up the 25 <sup>th</sup> pattern?         7.2.4       Which term (pattern number) will have 127 triangles?	QUESTION 8: Use this flow diagram to fill in the values where the empty squares are given: $\underbrace{\begin{array}{c} -1 \\ (ii) \\ (ii) \\ (ii) \end{array}}_{2} \underbrace{\begin{array}{c} -1 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ $	<b>QUESTION 9:</b> Simplify: 9.1 $x^2(13x^2 - 1) + 11x^2$ 9.2 $-5(x + 4)(2x - 7) + 4(x + 3)^2$ 9.3 $\frac{7x^4 - 8x^3 - 2x}{2x}$	<b>QUESTION 10:</b> If $x + \frac{1}{x} = 3$ , find the value of $x^2 + \frac{1}{x^2}$

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## Grade 9 Mathematics Test Term 1: Memorandum

SOLUTIONS	MARKS	COGNITIVE LEVELS
QUESTION 1:		
1.1		
1.1.1 −2,3564 – a rational number 🗸 answer	(1)	К
1.1.2 $\sqrt{64+4} + \sqrt{68}$ – an irrational number $\checkmark$	(1)	К
answer	(1)	К
1.2 2 or 3 🗸 one mark for either answer		
QUESTION 2:		
$2.1  A = P(1 + i)^n$		
$= 6 900(1 + 0,1)^2 \checkmark$ substitution		
$= 6 900(1,1)^2$		
= 6 900(1,21)		
= R8 349 ✓ answer	(2)	СР
2.2 Let the breadth be x		
$\frac{x}{50} = \frac{5}{8} \checkmark equation$		
$x = \frac{5}{8} \times 50$		
= 31, 25 cm 🗸 answer		
	(2)	СР

SOLUTIONS	MARKS	COGNITIVE LEVELS
QUESTION 3:		
$3.1  \frac{5a}{7} + \frac{7a}{6}$		
$=\frac{30a-49a}{42}\checkmark \text{ simplification using LCD}$		
$=\frac{-19a}{42}$ $\checkmark$ answer or $=-\frac{19a}{42}$	(2)	RP
$3.2  \left(\frac{6}{11} + \frac{3}{5}\right) - \frac{6}{5} \div \frac{11}{3}$		
$=\frac{30+33}{42}-\frac{6}{5}\times\frac{3}{11}\checkmark$ simplification		
$=\frac{63}{55}-\frac{18}{55}$		
$=\frac{45}{55}=\frac{9}{11}$ $\checkmark$ answer	(2)	RP
3.3		
3.3.1 $\frac{4}{7} \times 140 = 80 \text{ km} \checkmark \text{answer}$	(1)	RP
3.3.2 $\frac{3}{4} \times 16 = 12 \ell$ <i>I</i> answer	(1)	RP
3.3.3 $\frac{x}{140} = \frac{12}{80}$ $\checkmark$ equation		TXI
$x = \frac{12}{80} \times 140 = 21 \ \ell \checkmark \text{ answer}$	(2)	PS
QUESTION 4:		
4,67		
Let $x = 0, \dot{6}\dot{7}$		
100x = 67,676767 ✓ procedure		
99x = 67		
$x = \frac{67}{99}$ $\checkmark$ answer		
$4, \dot{6}\dot{7} = 4\frac{\dot{67}}{99}$	(2)	СР

Grade 9 Mathematics

SOLUTIONS		MARKS	COGNITIVE LEVELS	
QUE	ESTION 5:			
5.1	$(-5x^2)(-5x)^3$			
	$=-5x^2 \times 5^3x^3 \checkmark$ simplification			
	$= 5^4 x^5$			
	$= 625x^5$ $\checkmark$ answer	(2)	RP	
5.2	$\frac{(13x^{-2})^2}{(26x^{-4})^2}$			
	$=\left(\frac{1}{2x^6}\right)^2$ $\checkmark$ simplification			
	$=\frac{1}{4x^{12}}$ $\checkmark$ answer	(2)	СР	
5.3	$\sqrt{16} x^{-1} y^{-7} z^{0}$			
	$=\frac{4}{xy}$ $\checkmark$ final answer with positive exponents	(2)	RP	
QUE	ESTION 6:			
6.1	$6^{3p} = \frac{1}{216}$			
	$6^{3p} = \frac{1}{6^3}$			
	$6^{3p} = 6^{-3} \checkmark$ simplification			
	3p = -3			
	p = -1 🗸 answer	(2)	RP	
6.2	$(7^2)^{3p-4} = 1$			
	$=7^{6p-8}=7^{\circ}$ $\checkmark$ simplification			
	= 6p - 8 = 0			
	$p = \frac{8}{6}$			
	$p = \frac{4}{3}$ 🗸 answer	(2)	СР	

SOLUTIONS		MARKS	COGNITIVE LEVELS
6.3	$p = 2,1 \times 1^{-3} \times 5,3 \times 10^{-2}$		
	$p = (2,1 \times 5,3) \times 5,3 \times 10^{-5}$ $\checkmark$ re-organising terms		
	$p = 11,13 \times 10^{-5}$		
	$p = 0,000 \ 111 \ 3 \checkmark answer$	(2)	СР
QUE	ESTION 7:		
7.1	$\frac{3}{2}$ ; 2; $\frac{5}{2}$ ; 3;		
	$T_n = \frac{1}{2}n + 1$ $\checkmark$ formula for general rule	(2)	PS
7.2	3; 7; 11; 15;		
	7.2.1 19; 23 🖌 answer	(1)	RP
	7.2.2 $T_n = 4n - 1$ $\checkmark$ formula for general rule	(1)	PS
	7.2.3 $T_{25} = 4(25) - 1 = 100 - 1 = 99$ $\checkmark$ answer	(1)	RP
	7.2.4 $T_n = 127$		
	$4n-1 = 127 \checkmark$ equation		
	4n = 128		
	$n = \frac{128}{4}$		RP
	n = 32 ✓ answer	(2)	

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SOLUTIO	NS	MARKS	COGNITIVE LEVELS
QUESTIO	N 8:		
(i) $x = -$	-1: <i>output</i> : $-1 \times 3 - \frac{1}{2} = -3 - \frac{1}{2} = -3\frac{1}{2}$	(1)	RP
(iii) $\mathbf{r} = 0$	0: <i>output</i> : $0 \times 3 - \frac{1}{2} = 0 - \frac{1}{2} = -\frac{1}{2}$	(1)	RP
(ii) $x = 0$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	(2)	RP
(iii) outpi	ut: $2\frac{1}{2} = x \times 3 - \frac{1}{2}$ $\checkmark$ equation		
	$2\frac{1}{2} + \frac{1}{2} = 3x$		
	3 = 3x		
	$x = 1$ input $\checkmark$ answer		
QUESTIO	N 9:		
9.1 $x^2(13)$	$3x^2 - 1) + 11x^2$		
= 13	$3x^4 - x^2 + 11x^2$ $\checkmark$ multiplication		
= 13	$3x^4 + 10x^2$ $\checkmark$ simplified expression	(2)	RP
9.2 –5( <i>x</i>	$(+ 4)(2x - 7) + 4(x + 3)^2$		
= -5	$5(2x^2 - 7x + 8x - 28) + 4(x + 3)(x + 3)$ multiplication		
= 10	$2x^{2} + 35x - 40x - 140 + 4(x^{2} + 6x + 9)$ multiplication		
= 10	$0x^2 + 35x - 40x - 140 + 4x^2 + 24x + 36$	(3)	RP
= -6	$x^2 + 19x - 176$ $\checkmark$ simplified expression		
9.3 <u>7.</u>	$\frac{x^4 - 8x^3 - 2x}{2x}$		
= -	$\frac{7x^4}{2x} - \frac{8x^3}{2x} - \frac{2x}{2x} \checkmark \text{ split into separate} $ fractions	(3)	RP
= -	$\frac{7x^4}{2} - 4x^2 - 1$ <b>V</b> simplified expression		

SOLUTIONS	MARKS	COGNITIVE LEVELS
QUESTION 10:		
$x + \frac{1}{x} = 3$		
$(x + \frac{1}{x})^2 = 3^2 \checkmark$ squaring both sides		
$(x+\frac{1}{x})(x+\frac{1}{x})=9$		
$x^2 + 1 + 1 + \frac{1}{x^2} = 9$		
$\therefore x^2 + \frac{1}{x^2} = 9 - 2$		
= 7 $\checkmark$ value of expression	(2)	PS

#### Analysis of Cognitive Levels of Test

The table below shows the weighting of marks across the cognitive levels in the exemplar test 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 55%, while the two higher levels add up to approximately 45%. In this exemplar test, the two lower levels together account for 62% of the marks, and the two higher levels for 38%.

ANALYSIS OF COGNITIVE LEVELS OF THE TEST					
Cognitive levels	Mark out of 50	Percentage	Percentage of marks at each level prescribed by the CAPS (p. 53)		
Knowledge	3	6%	≈ 20%		
Routine procedures	28	56%	≈ 35%		
Complex procedures	12	24%	≈ 30%		
Problem solving	7	14%	≈ 15%		

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