

# **Mathematics**

Teacher Toolkit: CAPS Planner and Tracker

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 is the NECT and where do I fit in?

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



But who will help me?

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





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

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





How do I use the planner and tracker?



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



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

- 1. Find the textbook that YOU are using.
- **2.** Use the planning page each week to plan your teaching for the week. It will help you link the CAPS content and skills to relevant material in the textbook, the teacher's guide, and other materials such as the DBE workbook.
- **3.** Keep a record of the date when you were able to complete the topic. It may be different from the date you planned, and for different classes. Write this date in the column on the right for your records.
- **4.** At the end of the week, reflect and check if you are up to date. Make notes in the blank space.
- **5.** Be ready to have a professional and supportive curriculum coverage conversation with your HoD (or subject or phase head).

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









# 2. Purpose of the tracker

The Grade 8 Mathematics Curriculum and Assessment Planner and Tracker is a tool to support you in your role as 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 8 is based on the requirements prescribed by the Department of Basic Education's Curriculum and Assessment Policy Statement (CAPS) for Mathematics in the Senior Phase. The work set out for each day is linked directly to the topics and subtopics given in the CAPS, and the specified amount of time is allocated to each topic. The tracker gives the page number in the CAPS document of the topics and subtopics being addressed in each session to help you 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 Book and Teacher's Guide. 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



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 8. 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 sequence of work in 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 Learner Book's 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 on 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.

CAPS requires that learners write one test this term. An exemplar term 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. We recommend that your learners write this test in Week 9. You should use this test in conjunction with your provincial assessement programme. Most of the Learner's Books provide term tests. These may be used for revision or for informal assessments, but they 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 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.

- 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 every day.
  - Use newspapers and magazines to cut out pictures that could be used in your teaching. If you have access to the internet, use Google to search for and print out pictures that you may need to use as illustrations in your lessons.
  - Make sure you have chalk or marking pens so that you can use your chalk or whiteboard as needed. If you have digital resources, check that they are in working order.
  - Check the assessment programme so that you can prepare any resources such as test papers needed for formal assessment so that learners can settle down and begin working promptly.
- 3. **Prepare the content:** Think carefully about what it is that you will teach your learners in this lesson. Think about the prior knowledge of the content that learners should have 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 and 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
     Special needs education: Building an inclusive education and training system. Pretoria. <a href="www.education.gov.za">www.education.gov.za</a>,
     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 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 maths and problem solving skills. It is important that you prepare yourself for the classwork activity you need to assist learners as they do the classwork. You might also need to select particular questions from each activity for the classwork so that learners can manage the selection the exercises given in the various Learner's Books vary greatly in length and you need to make this selection in advance (ensuring that all types of activities or concepts are covered each day) so that you can give quick and clear instructions to your learners about which numbers of each exercise they should do.

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

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

This is also the part of the lesson where you can assist learners who need extra support and extend those who need enrichment. Throughout the lesson, try to identify learners that need additional support or extension by paying attention to how well they managed the homework, how they respond when you develop the new content, and how they cope with the class activities. While the rest of the class is busy working through the classwork activities, you should spend some time with those that need extra support and help them to work through the remediation activities. If learners successfully complete the daily classwork activities ahead of the rest of the class, be prepared to give them the enrichment activities to do.

• Allocate homework (5 minutes): This is the fourth and final activity of the lesson. In this step you should tell the learners about the homework for the day and make sure they know what is expected of them and understand what it is that they have to do.

For homework, you can select a few questions from the daily classwork in their Learner's 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 maths 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.







# C. ASSESSMENT TERM PLAN

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

#### 1. Formal assessment

Table 1 below shows the minimum requirement for formal assessment in Grade 8 given by the CAPS (p. 155). (No changes required by Circular S1 of 2017.)

Table 1: N	UMBER OF A	ASSE!	SSME	NT T	ASKS	AND WE	IGHTING
SBA	FORMS OF ASSESSMENT	Minir		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%

<sup>\*</sup>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.

	FORMAL ASSESSMENT OF LTSMs	TERM PLAN FOR EACH
LTSMs	ASSIGNMENT	End-of-term test
Premier Mathematics	<b>Week 7 – Day 32</b> LB p. 62	Week 9 – Day 42 Exemplar test (60 minutes)
	Memorandum: TG p. 41	Alternative test Term 1 formal assessment: Test TG pp. 44–45 Memorandum: TG p. 45
Spot On Mathematics	<b>Week 7 – Day 32</b> Activity 4: LB p. 67	Week 9 – Day 42 Exemplar test (60 minutes)
	Memorandum: TG pp. 91–92	Alternative test End-of-term 1 assessment: Test TG pp. 124–125 Memorandum: TG pp. 126–127
Platinum Mathematics	Week 7 – Day 32 Revision: LB p. 51 Memorandum: TG p. 24	Week 9 – Day 42 Exemplar test (60 minutes)
	Alternative assignment Assignment: Numbers around the world LB pp. 30–31 Memorandum: TG p. 15	Alternative test Formal assessment exemplar test: LB pp. 70–71 (only for revision) Memorandum: TG p. 33
Oxford Headstart Mathematics	Week 7 – Day 35 Assignment: Revision ex. LB p. 114 Memorandum: p. 110	Week 9 – Day 42 Exemplar test (60 minutes)
	Alternative assignment Assignment 1: Whole numbers LB p. 36 Memorandum: TG p. 56	



LTSMs	ASSIGNMENT	End-of-term test
Oxford Successful Mathematics	Week 6 – Day 27 Assignment: Option 2: Exponents and algebra LB pp. 432–433 Memorandum: TG pp. 333–334	Week 9 – Day 43 Exemplar test (60 minutes)
	Alternative assignment Assignment: Option 1: Ratio, rate and integers LB p. 431 Memorandum: TG p. 332	Alternative test Test 1: TG pp. 335–336 Memorandum: TG p. 337
Clever: Keeping Maths Simple	Week 7 – Day 32 Assignment: Use control test LB pp. 107–108 Memorandum: TG pp. 92–93	Week 9 – Day 42 Exemplar test (60 minutes)
	Alternative assignments Assignment 1: Numbers, operations and relationships LB p. 105 Memorandum: TG p. 90 Assignment 2: Patterns, functions and algebra LB p. 106 Memorandum: TG p. 91	
Solutions for All Mathematics	Week 7 – Day 32 Assignment: Use 'Check what you know' LB pp. 89–91 Memorandum: TG pp. 53–54	Week 9 – Day 42 Exemplar test (60 minutes)
	Alternative assignment Term 1 assignment TG pp. 338–339 Memorandum: TG pp. 340–341	Alternative test Term 1 Control test TG pp. 333–335 Memorandum: TG pp. 336–337

LTSMs	ASSIGNMENT	End-of-term test
Mathematics Today	Week 7 – Day 32 Formal assessment:	Week 9 – Day 42 Exemplar test (60 minutes)
	Assignment LB pp. 54–55 TG p. 17	Alternative test Formal assessment: Term 1 test TG pp. 33–34 Memorandum: TG p. 35
Sasol Inzalo Mathematics Book 1	Week 7 – Day 32 Note: An assignment will have to be sourced from another set of LTSMs	Week 9 – Day 42 Exemplar test (60 minutes)
		Topics in exemplar test  Whole numbers  Integers  Exponents  Numeric and geometric patterns  Functions and relationships  Algebraic expressions







#### 2. Informal assessment

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

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

- *Premier Mathematics* provides revision exercises of the units at the end of the term with full solutions provided in the Teacher's Guide.
- Spot On Mathematics provides a revision activity at the end of each module with full solutions in the Teacher's Guide.
- Platinum Mathematics provides comprehensive revision exercises at the end of each topic in the Learner's Book (with full solutions in the Teacher's Guide), as well as basic target and advanced target worksheets at the back

- of the Teacher's Guide. An extension and remediation worksheet book is also given.
- Oxford Headstart Mathematics gives revision exercises at the end of each chapter with solutions in the Teacher's Guide.
- Oxford Successful Mathematics has a summary and a consolidation exercise at the end of each chapter in the Learner's Book (with full solutions in the Teacher's Guide).
- Solutions for All Mathematics has a summary and a revision exercise
   ('Check what you know') at the end of each unit. The final unit of each term
   comprises revision of all the units done during the term. Comprehensive
   solutions are provided in the Teacher's Guide. Enrichment is provided
   occasionally and is indicated 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.

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







# D. TRACKERS FOR EACH SET OF APPROVED LTSMs

#### **Premier Mathematics**

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

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 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 form the basis for collegial conversations with your head of department and your peers.







	PREMIER	MATHE	MATICS	Week 1						
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class	
								Date	comp	leted
1	Whole numbers: Mental calculations; Ordering and comparing whole numbers	75	1-2	1-2	1-2	No. 1 (pp. 2-3)	No. 1-7 (pp. 7-8) No. 1-2 (p. 9) No. 1-3 (pp. 10-11)			
2	Properties of whole numbers: Commutative, distributive, associative laws; Calculation techniques	75-76	3-4	2-5	2-4	No. 2a-2b (pp. 4-7)	No. 1-4 (pp. 1-3) No. 1-7 (p. 4) No. 1-4 (pp. 5-6) No. 1-7 (pp. 12-14) No. 1-4 (p. 15) No. 1-4 (pp. 16-17)			
3	Multiples and factors	76-77	5	5-7	4-6	No. 3-5 (pp. 8-13)	No. 1-5 (p. 18) No. 1-6 (pp. 19-20) No. 1-3 (pp. 22-23)			
4	Solving problems using ratio and rate	77	6	7-9	6-8		No. 1-11 (pp. 24-26)			
5	Solving problems in financial contexts	77	7	9-10	8	No. 6 (pp. 14-15)	No. 1-8 (pp. 27-28)			
		Refle	ection							
the le exten	<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?	pport or	What will y	you change	next time?	Why?				
			HOD:				Da	te:		



	PREMIER	R MATHEI #Suppl		Week 2	!			
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class
		PP.	<b></b>	PP.	Pp.	WORKSOOK		Date completed
6	Solving problems in financial contexts	77	8	10-12	9	No. 7-9 (pp. 16-21)		
7	Solving problems in financial contexts involving exchange rates; Revision	77	9 4	13 65	10 43-44	No. 10 (pp. 22-23)		
8	Integers: Counting, ordering and comparing integers	78-79	1 2	14-16	10-12	No. 11 (pp. 24-25)	No. 1-9 (pp. 29-34) No. 1-6 (pp. 39)	
9	Calculations with integers: Addition	78-79	3#	16-17	12	No. 12 (pp. 26-27)	No. 1-12 (pp. 35-38)	
10	Calculations with integers: Subtraction	78-79	4#	18	13	No. 12 (pp. 26-27)		

Note: Refer to Day 8: Students require cards with integers on them.

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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:



11 Cal 12 Cal 13 Squ 14 Pro	PS concepts and skills    culations with integers: Multiplication     culations with integers: Division     cuares, cubes, square roots and cube roots of integers     coperties of integers	78-79 78-79 78-80	5 (no. 1#) 5 (no. 2-3#) 6	LB pp.  18-20  18-20  20-22	TG pp. 13-14	No. 12 (pp. 26-27)	No. 1-12 (pp. 40-42) No. 1-6	Date	Class	
12 Cal 13 Squ 14 Pro 15 Sol	lculations with integers: Division uares, cubes, square roots and cube roots of integers	78-79 78-80	(no. 1#) 5 (no. 2-3#)	18-20		(pp. 26-27) No. 12	(pp. 40-42)	Date	comp	lete
12 Cal 13 Squ 14 Pro 15 Sol	lculations with integers: Division uares, cubes, square roots and cube roots of integers	78-79 78-80	(no. 1#) 5 (no. 2-3#)	18-20		(pp. 26-27) No. 12	(pp. 40-42)			
13 Squ 14 Pro 15 Sol	uares, cubes, square roots and cube roots of integers	78-80	(no. 2-3#)		13-14		No. 1-6		1 1	$\rightarrow$
14 Pro			6	20.22		(pp. 26-27)	(pp. 43-44)			
15 Sol	operties of integers	80		20-22	14-15		No. 1-13 (pp. 47-49)			
		00	7	23-24	15-16	No. 13 (pp. 28-29)	No. 1-5 (pp. 44-45)			
	ving problems in contexts involving multiple operations h integers	80	8	24-25	16		No. 1-2 (pp. 46-47)			
		Refle	ection							
ne learne xtend lea	out and make a note of: What went well? What did not go well? ers find difficult or easy to understand or do? What will you do to arners? Did you complete all the work set for the week? If not, he on track?	support or		ou change						



	PREM	IER MATHE		Week 4						
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class	
								Dat	e compl	eted
16	Integers: Revision (squares, square roots, cubes, cube roots) (use DBE workbook and Sasol Inzalo)	78-80				No. 15-18* (pp. 32-39)	No. 1-4 (p. 50)			
17	Exponents: Mental calculations Revision (use Sasol Inzalo)	81	1	26-28	17-18		No. 1-3 (pp. 51-53) No. 1-2 (p. 54) No. 1-3 (p. 55) No. 1-4 (pp. 56-57)			
18	Comparing and representing numbers then integers in exponential form	81-82	2 3	28-29	18-19		No. 1-7 (pp. 58-59)			
19	Scientific notation	81 85	4	30-31	20	No. 19 (pp. 40-41)	No. 1-8 (pp. 74-75)			
20	Using the laws of exponents: Multiplication	82-83	5	31-32	21	No. 20 (pp. 42-43)	No. 1-8 (pp. 60-62) No. 1-6 (pp. 65-67)			
		Refle	ction							
the le	c about and make a note of: 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, heack on track?	o support or	What will y	you change	next time?	Why?				

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Date:

HOD:



	PREMIER	MATHE	MATICS	Week 5						
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo		Class	
		pp.	ex.	pp.	pp.	workbook				
								Date	comp	letec
21	Using the laws of exponents: Division	82-83	6	32	22	No. 21 (pp. 44-45)	No. 1-6 (pp. 68-69) No. 1-3 (pp. 71-72)			
22	Using the laws of exponents: A power raised to a power	82-83	7	33	22	No. 22 (pp. 46-47)	No. 1-4 (pp. 72-73) No. 1-2 (p. 73) No. 1-11 (pp. 63-65)			
23	Using the laws of exponents: Two different bases raised to the same power	82-83	8	34	23	No. 24 (pp. 50-51)				
24	Using the laws of exponents: A number raised to the power 0	82-83	9	35	23-24	No. 23 (pp. 48-49)	No. 1-2 (p. 70)			
25	Solving problems in contexts involving numbers in exponential form	82	10	35-36	24		No. 1-8 (pp. 70-71)			
		Refle	ection							
the le exten	about and make a note of: 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?	pport or	What will y	ou change	next time?	Why?				
			HOD:				Dat	te:		



	PREMIER	MATHE	MATICS	Week 6					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class
26	Revision: Exponents	80-84	2	63-64	42-43	No. 25-26 (pp. 52-55)	No. 1-6 (p. 76)	Date	completed
27	Numeric and geometric patterns: Investigating and extending patterns looking for relationships between numbers	85	1	37	25	No. 27a (pp. 56-57)	No. 1-8 (pp. 77-79) No. 1-3 (p. 80) No. 1-3 (pp. 81-82) No. 1-4 (pp. 82-83)		
28	Describing and justifying the general rules for observed relationships between numbers	85-86	2	38-40	26-27		No. 1-4 (pp. 84-85) No. 1-4 (pp. 85-86)		
29	Investigating and extending geometric patterns; Looking for relationships between patterns	86-88	3 (no. 1-4)	40-43	28-29		No. 1-5 (pp. 86-87)		
30	Investigating and extending geometric patterns; Looking for relationships between patterns	86-88	3 (no. 5)	40-43	28-29		No. 1-7 (pp. 87-89)		
		Refle	ction						

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?a

HOD: Date:

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	PREMIER	MATHE	MATICS	Week 7	,				
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo	Cla	ass
		pp.	ex.	pp.	pp.	workbook			
								Date co	mpleted
31	Exponential patterns and revision		4	43	29	No. 27b (pp. 58-59)	No. 1-2 (pp. 90-91) No. 1-2 (p. 91) No. 1-3 (p. 92)		
32	Formal assessment: Assignment		Ass.	62	41				
33	Functions and relationships: Input and output values or rules using flow diagrams	88-89	1	44-46	29-30		No. 1-9 (pp. 93-96) No. 1-6 (pp. 97-99)		
34	Input and output values using formulae and equations	88-89	2	46-48	30-31		No. 1-3 (pp. 103-104) No. 1-3 (p. 104)		
35	Equivalent forms of the same relationship or rule	88-89	3	48-49	31		No. 1-11 (pp. 100-101) No. 1-2 (p. 102)		
		Refle	ection				-		
the le	about and make a note of: 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?	pport or	What will y	you change	next time?	Why?			
			HOD:				Dat	te:	



	PREMIER	MATHE	MATICS	Week 8	}				
Day	CAPS concepts and skills	CAPS	LB ex.	LB	TG	DBE workbook	Sasol Inzalo	Class	
		pp.	<u>-</u>	pp.	pp.	WOIKDOOK			
								Date comple	ted
36	<b>Go over assignment solutions</b> (30 minutes); Revision of functions and relationships (use <i>DBE workbook</i> ) (30 minutes)	88-89				No. 28 (pp. 60-61)			
37	Algebraic expressions: Recognising and interpreting rules or relationships represented in symbolic form	90	1	50-51	32-33	No. 29a (pp. 62-63)	No. 1-2 (pp. 105-107)		
38	Identifying variables and constants in given formulae and equations; Conventions for writing algebraic expressions	90	2 3	52-53	33-34	No. 29b (pp. 64-65)			
39	Identifying and classifying like and unlike terms	90	4	53-54	34-35	No. 30-31 (pp. 66-69)	No. 1-8 (pp. 112-114) No. 1-9 (pp. 114-116)		
40	Recognising and identifying coefficients and exponents	90	5	55	35		No. 1-12 (pp. 108-111)		
40	Recognising and identifying coefficients and exponents	90		55	35	(ρρ. 00-09)	No. (pp. 11 No.	1-9 4-116) 1-12	1-9 4-116) 1-12

#### Reflection

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

What will you change next time? Why?

HOD: Date:

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	PREMIEI	R MATHE	MATICS	Week 9	)					
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo		Class	5
		pp.	ex.	pp.	pp.	workbook				
								Dat	te com	pleted
41	Expanding and simplifying algebraic expressions	90	6	56-57	36-37	No. 39 (pp. 86-87)	No. 1-10 (pp. 117-118)			
42	Formal assessment: Test									
43	Algebraic equations: Setting up equations to describe problem situations; Analysing and interpreting equations that describe a given situation	91	1 2	58-59	38	No. 32-33 (pp. 70-73)	No. 1-3 (pp. 119-122)			
44	Solving equations by inspection	91	3	60	39	No. 34-35 (pp. 74-77)	No. 1-3 (pp. 123-124)			
45	Determining the numerical value of an expression by substitution	91	4	60-61	39-40	No. 36a-36b (pp. 78-81)	No. 1-4 (pp. 124-126)			
		Refle	ction							
the le	k about and make a note of: What went well? What did not go well? Wearners find difficult or easy to understand or do? What will you do to so and learners? Did you complete all the work set for the week? If not, how eack on track?	upport or	What will y	ou change	next time?	Why?				

HOD: Date:



	PREMIER	MATHE	MATICS	Week 10	0					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Da	Cla	mpleted
46	Revision of algebraic expressions and equations	91	3	64-65	43	No. 37-38 (pp. 82-85)				
47	Go over test solutions									
48	Revision									
49	Revision									
50	Revision									
		End-of-terr	n reflection	1						
1. V	a about and make a note of:  Vas the learners' performance during the term what you had expected or? Which learners need particular support with Mathematics in the new what 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	kt term? Which		ONE change effectively n		ou make to you	ur teaching practi	ce to	help yo	ou teach

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 **on track**?

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# **Spot On Mathematics**

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

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

- 1. Day/lesson number.
- 2. CAPS content linked to Learner's Book content.
- 3. CAPS page numbers at the start of each CAPS topic.
- 4. Learner's Book exercises that cover the CAPS content for the day.

  Where an exercise has been recommended for more than one day, it has been divided into two parts.
- 5. Page reference in the Learner's Book (LB page reference).
- 6. Page reference in your Teacher's Guide for the day's activities (TG page reference).
- 7. DBE workbook link to related content (worksheet and page numbers are referenced)
- 8. Sasol Inzalo mathematics book link to related content (exercise and page numbers are referenced).
- 9. Date completed.

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

### Weekly reflection

The tracker 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 form the basis for collegial conversations with your head of department and your peers.







Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo		Class
,		pp.	act.	pp.	pp.	workbook			
								Date	e completed
1	Whole numbers: The properties of whole numbers: Commutative, associative and distributive properties	75	1.1 (no. 1-6)	2-4	42-43	No. 1-2b (pp. 2-7)	No. 1-4 (pp. 1-3) No. 1-7 (p. 4) No. 1-4 (pp. 5-6)		
2	Solving problems involving whole numbers	75-76	1.1 (no. 7-12)	4	43-44		No. 1-7 (pp. 7-8) No. 1-2 (p. 9) No. 1-3 (pp. 10-11)		
3	Calculations with whole numbers	75-76	1.2 (no. 1-3)	5-7	45		No. 1-7 (pp. 12-14) No. 1-4 (p. 15) No. 1-4 (pp. 16-17)		
4	Solving problems involving whole numbers and in financial contexts	77	1.2 (no. 4-11)	7	46	No. 10 (pp. 22-23)	No. 1-8 (pp. 27-28)		
5	Multiples and factors	76-77	1.3*	8-11	47-48	No. 3-5 (pp. 8-13)	No. 1-5 (p. 18) No. 1-6 (pp. 19-20) No. 1-3 (pp. 22-23)		
			ection						
the le exten	about and make a note of: What went well? What did not go well? Warners 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?	pport or	What will y	ou change	next time?	Why?			
			HOD:				Dat	e:	

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Day	CAPS concepts and skills	ON MATHE CAPS	LB	Week 2	TG	DBE	Sasol Inzalo	_	Class	
,		pp.	act.	pp.	pp.	workbook		Т		
								Dat	te comp	leted
6	Solving problems involving whole numbers using ratio, rate and financial contexts	77	1.4	12-17	49-50	No. 6-7 (pp. 14-17)	No. 1-11 (pp. 24-26)			
7	Revision of whole numbers	75-77	Rev.	19	52-53	No. 8-9 (pp. 18-21)				
8	Integers: Counting, ordering and comparing integers	78-79	2.1a 2.1b (no. 1-2)	23-27	56-57	No. 11 (pp. 24-25)	No. 1-9 (pp. 29-34)			
9	Counting, ordering and comparing integers	78-79	2.1b (no. 3-7)	27	57		No. 1-6 (pp. 39)			
10	Calculations with integers: Addition and subtraction	78-79	2.2 (no. 1-4)	28-29	58-59	No. 12 (pp. 26-27)	No. 1-12 (pp. 35-38)			
		Refle	ection							
the le exter	A about and make a note of: 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 eack on track?	support or	What will y	ou change	next time?	Why?				

HOD: Date:



	SPOT ON	MATHE	MATICS	Week 3	3				
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class
11	Calculations with integers: Addition and subtraction	78-79	2.2 (no. 5-11)	30	59			Date	completed
12	Multiplication and division of integers	78-79	2.3	31-32	60-61		No. 1-12 (pp. 40-42) No. 1-6 (pp. 43-44)		
13	Calculations with numbers involving the squares, cubes, square roots and cube roots of integers	78-80	2.4 (no. 1-3)	33-35	62	No. 15-18 (pp. 32-39)	No. 1-13 (pp. 47-49)		
14	Calculations involving properties of integers	80	2.4 (no. 4-8)	35	63	No. 13 (pp. 28-29)	No. 1-5 (pp. 44-45)		
15	Solving problems in contexts involving multiple operations with integers	80	2.5	36-37	64		No. 1-2 (pp. 46-47)		

#### Reflection

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

What will you change next time? Why?

HOD: Date:

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Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo		Class	
		pp.	act.	pp.	pp.	workbook				$\perp$
								Date	e compl	eted
16	Revision	78-80	2	39-41	66-67		No. 1-4 (p. 50)			
17	<b>Exponents:</b> Mental calculations; Comparing and representing integers in exponential form	81	3.1 (no. 1-5)	44-45	68-71		No. 1-3 (pp. 51-53) No. 1-2 (p. 54) No. 1-3 (p. 55) No. 1-4 (pp. 56-57)			
18	Comparing and representing integers in exponential form	81-82	3.1 (no. 6-8)	46	71-72		No. 1-7 (pp. 58-59)			
19	Using the laws of exponents: Multiplication, division and a power raised to a power	82-83	3.2a (no. 1-3)	47-49	73		No. 1-8 (pp. 60-62) No. 1-6 (pp. 65-67) No. 1-6 (pp. 68-69)			
20	Using the laws of exponents: A power raised to a power, power of 0 and mixed operations	82-83	3.2a (no. 4-7)	49	74		No. 1-11 (pp. 63-65) No. 1-2 (p. 70) No. 1-8 (pp. 70-71)			
Vote	: Refer to Day 17: Students require a 3x3 grid with random square or cu	be number	S.							
		Refle	ection							

extend learners? Did you complete all the work set for the week? If not, how will you get back on track?

HOD: Date:



	SPOT ON	MATHE	MATICS	Week 5	5				
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Date	Class
21	Consolidation of laws of exponents (use DBE workbook)	82-83				No. 20-21 (pp. 42-45)	No. 1-3 (pp. 71-72)		
22	Consolidation of laws of exponents cont. (use DBE workbook)	82-83				No. 22-23 (pp. 46-49)	No. 1-4 (pp. 72-73)		
23	Consolidation of laws of exponents cont. (use DBE workbook)	82-83				No. 24-25 (pp. 50-53)	No. 1-2 (p. 73)		
24	Scientific notation; Solving problems in contexts involving exponents	81-82 85	3.2b	50-51	75-76	No. 19 (pp. 40-41)	No. 1-8 (pp. 74-75)		
25	Revision of exponents	80-84	3 (no. 1-6)	53	78	No. 26 (pp. 54-55)			
		Refle	ection						
the le	a about and make a note of: What went well? What did not go well? We have arners find difficult or easy to understand or do? What will you do to suppled learners? Did you complete all the work set for the week? If not, how each on track?	pport or	What will y	ou change	next time?	Why?			

HOD: Date:

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	SPOT O	N MATHE	MATICS	Week	6					
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo		Class	
		pp.	act.	pp.	pp.	workbook				
								Dat	e comp	leted
26	Revision of exponents cont.	80-84	3 (no. 7-11)	53-54	78-79	No. 26 (pp. 54-55)	No. 1-6 (p. 76)			
27	Numeric and geometric patterns: Investigating and extending number patterns; Describing and justifying the general rule for numeric relationships	85-86	4.1 (no. 1-2)	56-59	82-83		No. 1-8 (pp. 77-79) No. 1-3 (p. 80) No. 1-3 (pp. 81-82) No. 1-4 (pp. 82-83)			
28	Investigating and extending number patterns; Describing and justifying the general rule for numeric relationships	85-86	4.1 (no. 3-10)	60	83-84		No. 1-4 (pp. 84-85) No. 1-4 (pp. 85-86)			
29	Investigating and extending geometric patterns; Looking for relationships between patterns	86-88	4.2 (no. 1-3)	61-64	85-87		No. 1-5 (pp. 86-87)			
30	Investigating and extending geometric patterns; Looking for relationships between patterns cont.	86-88	4.2 (no. 4-7)	64-65	88-89		No. 1-7 (pp. 87-89)			

**Note:** Refer to Day 27: Students require beads, matches, paper clips or noodles.

#### Reflection

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

What will you change next time? Why?

HOD: Date:



Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class
								Date	e completed
31	Revision of numeric and geometric patterns (use DBE workbook)	85-88				No. 27a-27b (pp. 56-59)	No. 1-2 (pp. 90-91) No. 1-2 (p. 91) No. 1-3 (p. 92)		
32	Formal assessment: Assignment		4	67	91-92				
33	Functions and relationships: Input and output values or rules using formulae, equations, flow diagrams and tables	88-89	5.1a	68-71	93-96		No. 1-9 (pp. 93-96) No. 1-6 (pp. 97-99)		
34	Input and output values using formulae, equations, flow diagrams and tables	88-89	5.1b	72-73	97	No. 28 (pp. 60-61)	No. 1-3 (pp. 103-104) No. 1-3 (p. 104)		
35	Equivalent forms of the same relationship or rule	88-89	5.2	74-75	98-99		No. 1-11 (pp. 100-101) No. 1-2 (p. 102)		

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:





SPOT OI	N MATHE	MATICS	Week	8						
CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE	Sasol Inzalo	Class			
					WOIRDOOK		D		n loto	
Go over assignment solutions (30 minutes); Revision of functions and relationships (30 minutes)	88-89	5	77	101				ate con	ipiete	
Algebraic expressions: Recognising and interpreting rules or relationships represented in symbolic form; Identifying variables and constants	90	6.1	78-81	103-105	No. 29a (pp. 62-63)	No. 1-2 (pp. 105-107)				
Interpreting and writing algebraic expressions	90	6.2	82-83	106-107	No. 32 (pp. 70-71)					
Like and unlike terms; Expanding and simplifying algebraic expressions	90	6.3	84-85	108-109	No. 30-31 (pp. 66-69)	No. 1-8 (pp. 112-114) No. 1-9 (pp. 114-116)				
Revision of algebraic expressions	90	6 No. 1-3	87	111		No. 1-10 (pp. 117-118)				
	Refle	ection							'	
earners find difficult or easy to understand or do? What will you do to so	upport or	vvnat will y	ou cnange	next time?	vvny?					
)	Go over assignment solutions (30 minutes); Revision of functions and relationships (30 minutes)  Algebraic expressions: Recognising and interpreting rules or relationships represented in symbolic form; Identifying variables and constants  Interpreting and writing algebraic expressions  Like and unlike terms; Expanding and simplifying algebraic expressions  Revision of algebraic expressions  Revision of algebraic expressions	CAPS concepts and skills  Go over assignment solutions (30 minutes); Revision of functions and relationships (30 minutes)  Algebraic expressions: Recognising and interpreting rules or relationships represented in symbolic form; Identifying variables and constants  Interpreting and writing algebraic expressions  90  Like and unlike terms; Expanding and simplifying algebraic expressions  90  Revision of algebraic expressions  90  Reflect about and make a note of: What went well? What did not go well? What did earners find difficult or easy to understand or do? What will you do to support or and learners? Did you complete all the work set for the week? If not, how will you	Go over assignment solutions (30 minutes); Revision of functions and relationships (30 minutes)  Algebraic expressions: Recognising and interpreting rules or relationships represented in symbolic form; Identifying variables and constants  Interpreting and writing algebraic expressions  Po 6.2  Like and unlike terms; Expanding and simplifying algebraic expressions  Revision of algebraic expressions  Revision of algebraic expressions  Reflection  Reflection	CAPS concepts and skills  CAPS pp.  Bact.  Go over assignment solutions (30 minutes); Revision of functions and relationships (30 minutes)  Algebraic expressions: Recognising and interpreting rules or relationships represented in symbolic form; Identifying variables and constants  Interpreting and writing algebraic expressions  Po 6.2  Eike and unlike terms; Expanding and simplifying algebraic expressions  Revision of algebraic expressions  Po 6.3  Reflection  Reflection  Reflection  What will you do to support or ad learners? Did you complete all the work set for the week? If not, how will you	CAPS concepts and skills  CAPS pp. act.	CAPS concepts and skills  CAPS pp. act. B pp. pp. DBE workbook  Go over assignment solutions (30 minutes); Revision of functions and relationships (30 minutes)  Algebraic expressions: Recognising and interpreting rules or relationships represented in symbolic form; Identifying variables and constants  Interpreting and writing algebraic expressions  90 6.2 82-83 106-107 No. 32 (pp. 70-71)  Like and unlike terms; Expanding and simplifying algebraic expressions  90 6.3 84-85 108-109 No. 30-31 (pp. 66-69)  Revision of algebraic expressions  90 6 87 111  **Revision of algebraic expressions**  **Reflection**  **Resident and make a note of: What went well? What did not go well? Wh	CAPS concepts and skills  CAPS pp. act. pp. bc. pp. pp. pp. bc. pp. pp. bc. pp	CAPS concepts and skills  CAPS pp. act.	CAPS concepts and skills  CAPS pp. act.	

**30** Grade 8 Mathematics

HOD:

Date:



SPOT ON MATHEMATICS Week 9 #Supplement																										
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class		Class		Clas		Cla		Cla		Clas		Clas		Cla				ass
								Date completed																		
41	Revision of algebraic expressions	90	6 (no. 4-6#)	87	111-112	No. 29b (pp. 64-65)	No. 1-12 (pp. 108-111)																			
42	Formal assessment: Test																									
43	Algebraic equations: Setting up equations to describe problem situations; Analysing and interpreting equations	91	7.1	88-91	113-115	No. 32-33 (pp. 70-73)	No. 1-3 (pp. 119-122)																			
44	Solving equations	91	7.2	92-93	116-117	No. 34-35 (pp. 74-77)	No. 1-3 (pp. 123-124)																			
45	Determining the numerical value of an expression by substitution	91	7.3 (no. 1-4)	94	118	No. 36a (pp. 78-79)	No. 1-4 (pp. 124-126)																			
		Refle	ection																							
the le	c about and make a note of: What went well? What did not go well? What side arners find difficult or easy to understand or do? What will you do to so do learners? Did you complete all the work set for the week? If not, how	upport or	What will y	ou change	next time?	Why?																				

get back on track?

HOD: Date:





	SPOT ON	I MATHE	MATICS	Week 1	10						
Day	CAPS concepts and skills	CAPS pp.	LB	LB	TG	DBE	Sasol Inzalo	Class			
			act.	pp.	pp.	workbook					
								Date completed			
46	Determining the numerical value of an expression by substitution	91	7.3 (no. 5-12)	95	119-120	No. 36b (pp. 80-81)					
47	Revision of algebraic expressions and equations	91	7	97	122-123	No. 37-39 (pp. 82-87)					
48	Go over test solutions										
49	Revision										
50	Revision										
		End-of-ter	m reflection								
<ul> <li>What strategy can you put in place for them to catch up with the class? Which learners would benefit from extension activities? What can you do to help them?</li> <li>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?</li> </ul>				e implicatio	the content ons for your o <b>n track</b> ?	as prescribed work on these	by the CAPS for topics in future?	the term What pla	ı? If no an will	t, what you	
HOD:	:						Pate:				

## •

## **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.
- 4. Learner's Book exercises that cover the CAPS content for the day.

  Where an exercise has been recommended for more than one day, it has been divided into two parts.
- 5. Page reference in the Learner's Book (LB page reference).
- 6. Page reference in your Teacher's Guide for the day's activities (TG page reference).
- 7. DBE workbook link to related content (worksheet and page numbers are referenced).
- 8. Sasol Inzalo mathematics book link to related content (exercise and page numbers are referenced).
- 9. Date completed.

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

# Weekly reflection

Gr 8 Maths Tracker Term 1 2018 p116 KZN.indd 33

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 form the basis for collegial conversations with your head of department and your peers.

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PLATINUM MATHEMATICS Week 1												
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo	Class				
		pp.	ex.	pp.	pp.	workbook						
								Date completed				
1	Whole numbers: Ordering and comparing whole numbers	75	1.1	3-5	3, 4	No. 1 (pp. 2-3)						
2	Properties of whole numbers	75	1.2	6-7	4, 5	No. 2a-2b (pp. 4-7)	No. 1-4 (pp. 1-3) No. 1-7 (p. 4) No. 1-4 (pp. 5-6)					
3	Calculations using whole numbers	76	1.3	8-9	5, 6		No. 1-7 (pp. 7-8) No. 1-2 (p. 9) No. 1-3 (pp. 10-11) No. 1-7 (pp. 12-14) No. 1-4 (p. 15) No. 1-4 (pp. 16-17)					
4	Multiples and factors: Factors and the highest common factor	76-77	1.4	10-11	6, 7	No. 3 (pp. 8-9)	No. 1-5 (p. 18) No. 1-6 (pp. 19-20) No. 1-3 (pp. 22-23)					
5	Multiples and factors: The lowest common multiple	76-77	1.5	11-12	6, 7	No. 4-5 (pp. 10-13)						

**Note:** 1. Refer to Day 1: Students require a number line of whole numbers. 2. Refer to Day 2: A chart of properties may be helpful.

3. Refer to Day 3: A multiplication chart (12 x 12) and a units chart may be helpful. 4. Refer to Day 4: A prime numbers chart (up to 100) may be helpful.

#### Reflection

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

What will you change next time? Why?

HOD: Date:



	PLATINU	М МАТНЕ	MATICS	Week	2			
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class
								Date completed
6	Solving problems involving whole numbers: Ratios, rates and financial contexts	77	1.6	13-16	7-8	No. 6-8 (pp. 14-19)	No. 1-11 (pp. 24-26) No. 1-8 (pp. 27-28)	
7	Revision of whole numbers	75-77	Rev.	17	8	No. 9-10 (pp. 20-23)		
8	Integers: Counting, ordering and comparing integers	78-79	2.1	18-20	9-10	No. 11 (pp. 24-25)	No. 1-9 (pp. 29-34) No. 1-6 (p. 39)	
9	Calculations with integers: Addition and subtraction	78-79	2.2	21-22	10-12		No. 1-12 (pp. 35-38)	
10	Calculations with integers: Multiplication and division; Solving problems in contexts	78-79	2.3	22-25	12		No. 1-12 (pp. 40-42) No. 1-6 (pp. 43-44)	

**Note:** 1. Refer to Day 6: Students require a list of words such as sum, difference, etc.

2. Refer to Day 8: Pictures, fridge thermometer weather reports may be useful.

3. Refer to Day 9: Students require a table of numbers (TG p. 10).

Ret	lection

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?



	PLATINUI		EMATICS lement	Week :	3					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class	
								Date	compl	eted
11	Properties of integers	80	2.4	26-27	12		No. 1-5 (pp. 44-45)			
12	Properties of integers cont. (use DBE workbook)	80				No. 13 (pp. 28-29)				
13	Squares, cubes, square roots and cube roots of integers	78-80	2.5 (no. 1#)	27-28	13	No. 15-18 (pp. 32-39)	No. 1-13 (pp. 47-49)			
14	Solving problems in contexts involving multiple operations with integers; Revision: calculations with integers (use <i>DBE workbook</i> )	80	2.5 (no. 2-5)	28	13	No. 12 (pp. 26-27)	No. 1-2 (pp. 46-47)			
15	Revision of integers	78-80	Rev. (no. 1-5)	29	14		No. 1-4 (p. 50)			
		Refle	ction							

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?



	PLATINUM	Л МАТНЕ	EMATICS	Week	4					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Dat	Class	
16	Revision of integers cont.	78-80	Rev. (no. 6-12)	29	14					
17	<b>Exponents:</b> Comparing and representing numbers in exponential form	81-82	3.1	32-34	16-17		No. 1-3 (pp. 51-53) No. 1-7 (pp. 58-59)			
18	Squares, cubes, square roots and cube roots	82-83	3.2	35-37	17-18	No. 25 (pp. 52-53)	No. 1-2 (p. 54) No. 1-3 (p. 55) No. 1-4 (pp. 56-57)			
19	Calculations using numbers in exponential form: Laws of exponents	82-83	3.3	38-39	18-19		No. 1-8 (pp. 60-62)			
20	Laws of exponents; Solving problems in contexts involving numbers in exponential form	82-83	3.4	39-40	18-19		No. 1-11 (pp. 63-65)			

**Note:** 1. Refer to Day 17: Students require square shapes and cubes.

2. Refer to Day 18: Charts of square and cube numbers may be helpful.

# Reflection

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

What will you change next time? Why?



	PLATINUN	и матні	EMATICS	Week	5			
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class
								Date completed
21	Revision: Laws of exponents (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	82-83				No. 20-21 (pp. 42-45)	No. 1-6 (pp. 65-67) No. 1-6 (pp. 68-69)	
22	Revision: Laws of exponents cont. (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	82-83				No. 22-23 (pp. 46-49)	No. 1-2 (p. 70) No. 1-8 (pp. 70-71)	
23	Calculations using numbers in exponential form (use DBE workbook or Sasol Inzalo book)	82-83				No. 24 (pp. 50-51) No. 26 (pp. 54-55)	No. 1-3 (pp. 71-72) No. 1-4 (pp. 72-73) No. 1-2 (p. 73)	
24	Scientific notation	81 85	3.5	41-42	19-20	No. 19 (pp. 40-41)	No. 1-8 (pp. 74-75)	
25	Revision: Exponents	80-84	Rev. (no. 1-6)	43	20		No. 1-6 (p. 76)	

Note: 1. Refer to Day 24: Pictures of solar system and other examples of very large numbers may be useful.

# 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:



	PLATINUN	л МАТНІ	EMATICS	Week	6				
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Clas	s
								Date com	pleted
26	Revision: exponents	80-84	Rev. (no. 7-20)	43	20				
27	Numeric and geometric patterns: Investigating and extending numeric patterns; Describing the general rules for observed relationships	85	4.1	44	21-22		No. 1-8 (pp. 77-79) No. 1-3 (p. 80)		
28	Investigating and extending numeric patterns; Describing the general rules for observed relationships	85-86	4.2	45	22	No. 27a (pp. 56-57)	No. 1-3 (pp. 81-82) No. 1-4 (pp. 82-83)		
29	Investigating and extending numeric patterns; Describing the general rules for observed relationships	86-88	4.3 4.4	46-48	22-23		No. 1-4 (pp. 84-85) No. 1-4 (pp. 85-86)		
30	Describing and justifying the general rules	86-88	4.5	49	23		No. 1-5 (pp. 86-87)		

**Note:** 1. Refer to Day 27: Pictures/examples of patterns in our world and different prepared patterns may be helpful. 2. Refer to Day 29: Prepared chart of open table with given rule, flash cards, matches.

## Reflection

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

What will you change next time? Why?



	PLATINUN	Л МАТНЕ	EMATICS	Week	7					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class	
31		07.00	1.7	FO	24	N - 27L	N - 1 7	Dat	e comp	oleted
31	Investigating and extending geometric patterns; Looking for relationships between patterns	86-88	4.6	50	24	No. 27b (pp. 58-59)	No. 1-7 (pp. 87-89)			
32	Formal assessment: Assignment		Rev.	51	24					
33	Functions and relationships: Input and output values or rules using flow diagrams	88-89	5.1	52-54	25		No. 1-9 (pp. 93-96) No. 1-6 (pp. 97-99)			
34	Input and output values using tables	88-89	5.2	55	25-26	No. 28 (pp. 60-61)				
35	Input and output values using formulae	88-89	5.3	56	26		No. 1-3 (pp. 103-104) No. 1-3 (p. 104)			

**Note:** Refer to Day 33: Students require pictures of processing plants.

# Reflection

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

What will you change next time? Why?

HOD: Date:



	PLATINUN	Л МАТНЕ	MATICS	Week	8			
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class
								Date completed
36	Go over assignment solutions (30 minutes); Revision of functions and relationships (30 minutes)	88-89	Rev.	57	26		No. 1-11 (pp. 100-101) No. 1-2 (p. 102)	
37	Algebraic expressions: Recognising and interpreting rules or relationships represented in symbolic form	90	6.1	58-60	27-28	No. 29a (pp. 62-63)	No. 1-2 (pp. 105-107)	
38	Identifying variables and constants in given equations; Conventions for writing algebraic expressions	90	6.2	61-63	28-29	No. 29b (pp. 64-65)		
39	Identifying and classifying like and unlike terms; Adding and subtracting	90	6.3	64	29	No. 30-31 (pp. 66-69)	No. 1-8 (pp. 112-114) No. 1-9 (pp. 114-116)	
40	Revision of algebraic expressions	90	Rev.	65	30	No. 32 (pp. 70-71)	No. 1-12 (pp. 108-111)	

Note: 1. Refer to Day 37: Tables of algebraic vocabulary, symbols (TG p. 27) are provided.

2. Refer to Day 39: A summary of order of operations should be given.

## Reflection

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

What will you change next time? Why?



	PLATINUN	л МАТНІ	EMATICS	Week	9					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Dat	Class e comp	
41	Revision of all topics covered (use test in LB as revision – leave out No. 16)	90	Test	70-71	33	No. 39 (pp. 86-87)	No. 1-10 (pp. 117-118)			
42	Formal assessment: Test									
43	Algebraic equations: Solving equations; Setting up equations to describe problem situations	91	7.1	66-68	31,32	No. 33-34 (pp. 72-75)	No. 1-3 (pp. 119-122)			
44	Analysing and interpreting equations that describe a given situation; Revision of algebraic equations	91	7.2 rev. (no. 1-4)	68-69	32	No. 35 (pp. 76-77)	No. 1-3 (pp. 123-124)			
45	Determining the numerical value of an expression using substitution (use DBE workbook or Sasol Inzalo book)	91				No. 36a (pp. 78-79)	No. 1-4 (pp. 124-126)			
Note	Refer to Day 43: A picture of scales with different weights is required.					•				

D (		
Ket	lectior	١

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

What will you change next time? Why?

HOD: Date:



	PLATINUM	MATHE	MATICS	Week '	10				
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class
46	Determining the numerical value of an expression using substitution (use DBE workbook)	91				No. 36b (pp. 80-81)		Date	e complete
47	Revision of algebraic equations	91	Rev. (no. 5-10)	69	32	No. 37-38 (pp. 82-85)			
48	Go over test solutions								
49	Revision								
50	Revision								
1. V fo V	x about and make a note of: Vas the learners' performance during the term what you had expected a or? Which learners need particular support with Mathematics in the nex Vhat strategy can you put in place for them to catch up with the class? Vearners would benefit from extension activities? What can you do to hel	and hoped t term? Vhich		DNE chang ffectively r		ou make to you	ur teaching practi	ce to h	elp you tead

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 **on track**?



# **Oxford Headstart Mathematics**

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

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

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

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

# Weekly reflection

The tracker 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 form the basis for collegial conversations with your head of department and your peers.







			lect						
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class
								Date c	ompleted
1	Whole numbers: Ordering and comparing whole numbers	75	1-2	7-8	31-32	No. 1 (pp. 2-3)	No. 1-7 (pp. 7-8) No. 1-2 (p. 9) No. 1-3 (pp. 10-11)		
2	Properties of whole numbers; Calculations using whole numbers: Estimating and rounding off	75-76	1	9-11 12-13	33-35 35-38	No. 2a-2b (pp. 4-7)	No. 1-4 (pp. 1-3) No. 1-7 (p. 4)		
3	Calculations using whole numbers: Addition and subtraction; Rounding off and compensating	75-76	2-3	14-16	38-40		No. 1-4 (pp. 5-6) No. 1-7 (pp. 12-14)		
4	Multiplication and division; More rounding off and compensating		4-5	16-18	40-42		No. 1-4 (p. 15) No. 1-4 (pp. 16-17)		
5	The order of operations; Multiples and factors	76-77	6 1-3*	20-24	42-49	No. 3-5 (pp. 8-13)	No. 1-5 (p. 18) No. 1-6 (pp. 19-20) No. 1-3 (pp. 22-23)		
		Refle	ection						
the le exten	about and make a note of: What went well? What did not go well? Warners 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	you change	next time?	Why?			
			HOD:				Dat	:e:	

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	OXFORD HEA	A <b>DSTART N</b> *Se		ATICS \	Week 2				
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Cla Date co	
6	Solving problems involving whole numbers: Ratio and rate	77	1-3*	25-29	49-52		No. 1-11 (pp. 24-26)	Date col	npiete
7	Solving problems: Speed, distance, time and exchange rates (30 minutes); Revision (30 minutes)	75-77	4-5 rev.	30-33 34-35	52-54 54-55	No. 6-10 (pp. 14-23)	No. 1-8 (pp. 27-28)		
8	Integers: Counting, ordering and comparing integers	78-79	1-3	38-41	58-61	No. 11 (pp. 24-25)	No. 1-9 (pp. 29-34) No. 1-6 (pp. 39)		
9	Calculations with integers: Addition and subtraction; Solving problems in contexts	78-79	1-3	42-46	61-63		No. 1-12 (pp. 35-38)		
10	Calculations with integers: Multiplication, division and order of operations	78-79	4-6	46-49	64-66	No. 12 (pp. 26-27)	No. 1-12 (pp. 40-42) No. 1-6 (pp. 43-44)		
		Refle	ction	<u>'</u>	,				
ne le xten	a about and make a note of: What went well? What did not go well? earners 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, he ack on track?	support or	What will	you change	next time?	Why?			
			HOD:				Da		



	OXFORD HEAD	<b>START N</b> *Sel		ATICS \	Week 3				
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class Date complete	ted
11	Squares, cubes, square roots and cube roots of integers; Properties of integers	78-80	7 1-2	49-50 42-54	66 67-69	No. 15-18 (pp. 32-39) No. 13 (pp. 28-29)	No. 1-13 (pp. 47-49) No. 1-5 (pp. 44-45)		
12	Solving problems in financial contexts involving multiple operations with integers	80	1-3*	55-59	69-74		No. 1-2 (pp. 46-47)		
13	Solving problems in financial contexts	80	4-5	60-64	72-74				
14	Solving problems in financial contexts	80	6-8*	64-69	75-77				
15	Revision	78-80	Rev.	70-71	78		No. 1-4 (p. 50)		

Note: Refer to Day 12: An example of a budget and a cellphone/phone bill must be shown.

#### Reflection

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

What will you change next time? Why?



Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo		Class	
		pp.	act.	pp.	pp.	workbook				
								Date	com	oleted
16	Revision	78-80	Rev.	70-71	78					
17	Exponents: Squares, cubes, square roots and cube roots	82-83	1-3	73-77	79-82		No. 1-3 (pp. 51-53) No. 1-2 (p. 54) No. 1-3 (p. 55) No. 1-4 (pp. 56-57			
18	Comparing and representing integers in exponential form	81-82	1-3	78-82	83-86		No. 1-7 (pp. 58-59)			
19	Calculations using numbers in exponential form: Laws of exponents: Multiplication	82-83	1	83-84	87-89	No. 20 (pp. 42-43)	No. 1-8 (pp. 60-62) No. 1-6 (pp. 65-67)			
20	Laws of exponents: Division	82-83	2	85	89	No. 21 (pp. 44-45)	No. 1-6 (pp. 68-69) No. 1-3 (pp. 71-72) No. 1-4 (pp. 72-73) No. 1-2 (p. 73)			
Vote	Refer to Day 17: Resources: Square shapes, cubes.									
		Refle	ction							
he le exten	a <b>about and make a note of:</b> What went well? What did not go well? What same a well? What will you do to su dearners? Did you complete all the work set for the week? If not, how ack on track?	pport or	What will	you change	next time?	Why?				

HOD: Date:



	OXFORD HEAD	START N	1ATHEM)	ATICS \	Week 5				
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Date	Class
21	Laws of exponents: Raising numbers in brackets to powers; Zero as an exponent	82-83	3 4	86-87	90-91	No. 22-23 (pp. 46-49)	No. 1-11 (pp. 63-65) No. 1-2 (p. 70)		
22	Performing calculations using the laws of exponents	82-83	5 6	87-88	91	No. 24 (pp. 50-51)			
23	Performing calculations with squares, cubes, square roots and cube roots using the laws of exponents; Problem solving involving exponents	81-83	7	89-91	92	No. 25 (pp. 52-53)	No. 1-8 (pp. 70-71)		
24	Scientific notation	81 85	1-2	92-95	93-95	No. 19 (pp. 40-41)	No. 1-8 (pp. 74-75)		
25	Scientific notation	81 85	3	95	95				

# Reflection

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

What will you change next time? Why?

HOD: Date:

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	OXFORD HEAD	START N	ЛАТНЕМ	IATICS \	Week 6					
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo		Class	3
		pp.	act.	pp.	pp.	workbook				
								Dat	e com	pleted
26	Revision: exponents	82-83	Rev.	96-97	96	No. 26 (pp. 54-55)	No. 1-6 (p. 76)			
27	<b>Numeric and geometric patterns:</b> Investigating and extending patterns; Looking for relationships; Describing and justifying the general rules for observed relationships between numbers	85-86	MM 1	99-100	97-100		No. 1-8 (pp. 77-79) No. 1-3 (p. 80) No. 1-3 (pp. 81-82) No. 1-4 (pp. 82-83)			
28	Creating and justifying the general rules	85-86	2	101	100		No. 1-4 (pp. 84-85) No. 1-4 (pp. 85-86)			
29	Using tables to investigate and extend numeric patterns; Describing and justifying the general rules	86-88	3	101-102	100-102		No. 1-5 (pp. 86-87)			
30	Using tables to investigate and extend numeric patterns; Describing and justifying the general rules	86-88	3	101-102	100-102		No. 1-7 (pp. 87-89)			
		Refle	ection							
the le	<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	next time?	Why?				
			HOD:				Da	te:		



Day	CAPS concepts and skills	CAPS	ATHEM LB	LB	TG	DBE	Sasol Inzalo		Class	
Day	CAPS concepts and skills	pp.	act.	рр.	pp.	workbook	Sasoi inzaio		Class	
								Dat	te comp	leted
31	Revision of numeric and geometric patterns (use DBE workbook)	85-88				No. 27a-27b (pp. 56-59)	No. 1-2 (pp. 90-91) No. 1-2 (p. 91) No. 1-3 (p. 92)			
32	Functions and relationships: Input and output values or rules using flow diagrams	88-89	MM 1	104-106	103-105		No. 1-9 (pp. 93-96) No. 1-6 (pp. 97-99)			
33	Input and output values or rules using formulae, flow diagrams and tables	88-89	2	106-108	105-106	No. 28 (pp. 60-61)	No. 1-3 (pp. 103-104) No. 1-3 (p. 104)			
34	Equivalent forms of the same relationship or rule	88-89	MM 1 2	110-113	106-109		No. 1-11 (pp. 100-101) No. 1-2 (p. 102)			
35	Formal assessment: Assignment (use Revision ex.)		Rev.	114	110					
		Refle	ction							

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	N <b>DSTART M</b> *Se		ATICS \	Week 8					
Day	CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class	
36	Algebraic expressions: Recognising and interpreting rules or relationships represented in symbolic form; Identifying variables and constants	90	MM 1 2	116-119	111-114	No. 29a (pp. 62-63)	No. 1-2 (pp. 105-107)	Date	compl	eted
37	Go over assignment (30 minutes); Conventions for writing and analysing algebraic expressions (30 minutes)	90	3	119-121	114-115	No. 29b (pp. 64-65)				
38	Identifying and classifying like and unlike terms	90	4 5	121-123	116-117	No. 30-31 (pp. 66-69)	No. 1-8 (pp. 112-114) No. 1-9 (pp. 114-116)			
39	Expanding and simplifying algebraic expressions	90	MM 1 2	124-126	118-120	No. 32 (pp. 70-71)	No. 1-12 (pp. 108-111)			
40	Adding like terms	90	3 4*	126-127	120-121		No. 1-10 (pp. 117-118)			
Note	Refer to Day 38: Resources: Photocopies of coins and notes.						'			
		Refle	ction							

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?



OXFORD HEAD			ATICS \	Week 9					
CAPS concepts and skills	CAPS pp.	LB act.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class	;
							Date	com	oleted
Subtracting like terms	90	5 6*	128-129	121-122					
Formal assessment: Test									
Algebraic equations: Setting up equations to describe problem situations	91	MM 1	131-133	123-125	No. 33-34 (pp. 72-75)	No. 1-3 (pp. 119-122)			
Analysing and interpreting equations that describe a given situation; Solving equations by inspection	91	2 MM 1	133-134 135-136	125-128		No. 1-3 (pp. 123-124)			
Determining the numerical value of an expression by substitution	91	2	137	128	No. 36a-36b (pp. 78-81)	No. 1-4 (pp. 124-126)			
	CAPS concepts and skills  Subtracting like terms  Formal assessment: Test  Algebraic equations: Setting up equations to describe problem situations  Analysing and interpreting equations that describe a given situation; Solving equations by inspection	CAPS concepts and skills  CAPS pp.  Subtracting like terms  90  Formal assessment: Test  Algebraic equations: Setting up equations to describe problem situations  Analysing and interpreting equations that describe a given situation; Solving equations by inspection  *Sel	CAPS concepts and skills  CAPS pp.  Subtracting like terms  90  5 6*  Formal assessment: Test  Algebraic equations: Setting up equations to describe problem situations  Analysing and interpreting equations that describe a given situation; Solving equations by inspection  *Select  CAPS pp.  B act.  91  MM  1	CAPS concepts and skills  CAPS pp.  Subtracting like terms  90  5 6*  Formal assessment: Test  Algebraic equations: Setting up equations to describe problem situations  Analysing and interpreting equations that describe a given situation; Solving equations by inspection  *Select  LB pp.  128-129 6*  131-133 11-133 131-133 11-133	CAPS concepts and skills  CAPS pp.  Subtracting like terms  90  5 6*  Formal assessment: Test  Algebraic equations: Setting up equations to describe problem situations  Analysing and interpreting equations that describe a given situation; Solving equations by inspection  *Select  CAPS pp.  B LB pp.  128-129  121-122  121-122  MMM 131-133 123-125  125-128	CAPS concepts and skills  CAPS pp. LB pp. DBE workbook  Subtracting like terms  90 5 128-129 121-122  Formal assessment: Test  Algebraic equations: Setting up equations to describe problem situations  Analysing and interpreting equations that describe a given situation; Solving equations by inspection  Petermining the numerical value of an expression by substitution  91 2 133-134 125-128  Determining the numerical value of an expression by substitution  91 2 137 128 No. 36a-36b	CAPS concepts and skills  CAPS pp.  Burner B	CAPS concepts and skills  CAPS pp.  But pp.  CAPS pp.  C	CAPS concepts and skills  CAPS pp.  LB pp.  pp.  TG pp.  Date comp  Date comp  Subtracting like terms  Formal assessment: Test  Algebraic equations: Setting up equations to describe problem situations  Analysing and interpreting equations that describe a given situation; Solving equations by inspection  Page 128-129 121-122  MM 131-133 123-125 No. 33-34 (pp. 72-75) (pp. 119-122)  No. 1-3 (pp. 123-124)  Determining the numerical value of an expression by substitution  P1 2 137 128 No. No. 1-4 (pp. 124-126)

#### Reflection

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

What will you change next time? Why?

HOD: Date:

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	OXFORD HEA	DSTART N	IATHEM <i>i</i>	ATICS V	Veek 10					
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo		Class	
		pp.	act.	pp.	pp.	workbook				
								Date	comp	oleted
46	Revision of algebraic expressions and equations	91	Rev.	138-141	129-130	No. 37-39 (pp. 82-87)				
47	Go over test solutions									
48	Revision									
49	Revision									
50	Revision									
		End-of-terr	n reflection	า						
V. le	or? Which learners need particular support with Mathematics in the neighbor with the class of the strategy can you put in place for them to catch up with the class of arners would benefit from extension activities? What can you do to he will will be a second of the care will be a second of the care will be a second of the curties of the future?	? Which nelp them? n you adjust	are th	ou cover all e implicatio to get back	ns for your	as prescribed work on these	by the CAPS for topics in future?	the teri What p	n? If no lan will	ot, what you
HOD:	:					D	ate:			

# •

# **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.
- 4. Learner's Book exercises that cover the CAPS content for the day.

  Where an exercise has been recommended for more than one day, it has been divided into two parts.
- 5. Page reference in the Learner's Book (LB page reference).
- 6. Page reference in your Teacher's Guide for the day's activities (TG page reference).
- 7. DBE workbook link to related content (worksheet and page numbers are referenced).
- 8. Sasol Inzalo mathematics book 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

Gr 8 Maths Tracker Term 1 2018 p116 KZN.indd 55

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 form the basis for collegial conversations with your head of department and your peers.





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	OXFORD SUCC	<b>ESSFUL N</b> *Se		IATICS	Week 1					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class	
								Date	comple	eted
1	Whole numbers: Ordering and comparing whole numbers	75	1 2	9-12	28-31	No. 1 (pp. 2-3)	No. 1-7 (pp. 7-8) No. 1-2 (p. 9) No. 1-3 (pp. 10-11)			
2	Properties of whole numbers: Commutative, associative and distributive properties	75-76	1-3	13-15	31-35	No. 2a-2b (pp. 4-7)	No. 1-4 (pp. 1-3) No. 1-7 (p. 4)			
3	Properties of whole numbers: Identity elements; Calculations using whole numbers: Estimating, rounding off, compensating and the four operations	75-76	4 1 2	15-16 17-20	35-36 36-40		No. 1-4 (pp. 5-6) No. 1-7 (pp. 12-14) No. 1-4 (p. 15) No. 1-4 (pp. 16-17)			
4	Multiples and factors	76-77	1-3*	21-24	40-44	No. 3-5 (pp. 8-13)	No. 1-5 (p. 18) No. 1-6 (pp. 19-20) No. 1-3 (pp. 22-23)			
5	Solving problems involving whole numbers: Ratio and rate (including exchange rates)	77	1 2*	25-28	44-46	No. 10 (pp. 22-23)	No. 1-11 (pp. 24-26)			

**Note:** 1. Refer to Day1: A place chart (9 digits) should be provided.

2. Refer to Day 5: Resources: blocks or sweets.

#### Reflection

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

What will you change next time? Why?

HOD: Date:



	OXFORD SUC	CESSFUL	MATHEM.	ATICS	Week 2			
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class
6	Solving problems involving whole numbers: Financial contexts	77	1	29-32	47-49	No. 6-8 (pp. 14-19)	No. 1-8 (pp. 27-28)	Date completed
7	Solving problems: Financial contexts (30 minutes); Revision (consolidation) (30 minutes)	75-77	Cons.	35	49-50	No. 9 (pp. 20-21)		
8	Integers: Counting, ordering and comparing integers	78-79	1 2	36-39	51-55	No. 11 (pp. 24-25)	No. 1-9 (pp. 29-34) No. 1-6 (p. 39)	
9	Calculations with integers: Addition and subtraction	78-79	1 (no. 1-8)	40-42	55-57		No. 1-12 (pp. 35-38)	
10	Calculations with integers: Addition and subtraction	78-79	1 (no. 9-10) 2	42-43	57-58			

Note: Refer to day 8: Resources: Cardboard, coloured pens for number lines and various cards (TG p. 52).

#### Reflection

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

What will you change next time? Why?



	OXFORD SU				Week 3					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Clas	S
		PP.	CA.	pp.	pp.	WOIRDOOK		Dat	o com	pleted
11	Calculations with integers: Multiplication	78-79	1	44-45	58-59		No. 1-12 (pp. 40-42)	Dat	e com	pieted
12	Calculations with integers: Multiplication and division	78-79	2-3	45-46	60-61		No. 1-6 (pp. 43-44)			
13	Calculations with integers: Multiple operations	78-79	Rev. 1 2	47-48	61-64	No. 12 (pp. 26-27)	No. 1-13 (pp. 47-49)			
14	Properties of integers	80	Rev. 1-4	49-52	64-67	No. 13 (pp. 28-29)	No. 1-5 (pp. 44-45)			
15	Solving problems in contexts involving integers	80	Rev. 1	53-55	67-69	No. 15-16 (pp. 32-35)	No. 1-2 (pp. 46-47)			
		Refle	ection							
the le	c about and make a note of: What went well? What did not go we earners find difficult or easy to understand or do? What will you do not learners? Did you complete all the work set for the week? If not, eack on track?	o support or	What will y	ou change	next time?	Why?				



	OXFORD SUCC	ESSFUL I	MATHEM	ATICS	Week 4			
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class
16	Revision: Integers	78-80	Cons.	57	69	No. 17-18 (pp. 36-39)	No. 1-4 (p. 50)	Date completed
17	Exponents: Squares, cubes, square roots and cube roots	81-83	1 2	58-60	70-73	No. 25 (pp. 52-53)	No. 1-3 (pp. 51-53) No. 1-2 (p. 54) No. 1-3 (p. 55) No. 1-4 (pp. 56-57)	
18	Comparing and representing whole numbers in exponential form	81-82	1 2	61-62	73-75		No. 1-7 (pp. 58-59)	
19	Comparing and representing integers in exponential form	81-82	3	62-63	75-76			
20	The laws of exponents (use DBE workbook)	82-83				No. 20-21 (pp. 42-45)		

**Note:** Refer to Day 17: Resources: Cardboard, coloured pens for cards (TG p. 71); newspapers/magazines.

# Reflection

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

What will you change next time? Why?



	OXFORD SUCCE	ESSFUL I	MATHEM	<b>IATICS</b>	Week 5				
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo	С	lass
		pp.	ex.	pp.	pp.	workbook			
								Date co	ompleted
21	The laws of exponents (use DBE workbook or Sasol Inzalo book)	82-83				No. 22-23 (pp. 46-49)	No. 1-8 (pp. 60-62) No. 1-6 (pp. 65-67)		
22	The laws of exponents	82-83	1	64-65	76-78		No. 1-6 (pp. 68-69) No. 1-3 (pp. 71-72) No. 1-4 (pp. 72-73) No. 1-2 (p. 73)		
23	Calculations with numbers in exponential form	82-83	1-3	66-67	78-80		No. 1-11 (pp. 63-65)		
24	Scientific notation	81 85	1	68-69	80-82	No. 19 (pp. 40-41)	No. 1-8 (pp. 74-75)		
25	Solving problems in contexts involving numbers in exponential form	82	2	69-70	82-83		No. 1-2 (p. 70) No. 1-8 (pp. 70-71)		
		Refle	ction						
the le	about and make a note of: 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?	pport or	What will	you change	next time?	Why?			
			HOD:				Dat	:e:	



	OXFORD SUCCE	SSFUL	MATHEM	ATICS	Week 6				
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class
		1.1.						Date	e completed
26	Revision (consolidation): Exponents	80-84	Cons.	72	83	No. 25-26 (pp. 52-55)	No. 1-6 (p. 76)		
27	Formal assessment: Assignment		Ass.	432- 433	333- 334				
28	Numeric and geometric patterns: Investigating and extending patterns; Looking for relationships	85	1	74-77	84-88		No. 1-8 (pp. 77-79) No. 1-3 (p. 80) No. 1-3 (pp. 81-82) No. 1-4 (pp. 82-83)		
29	Describing and justifying the general rules for observed relationships between numbers/patterns	85-86	1 (no. 1-6)	78-80	88-90		No. 1-4 (pp. 84-85) No. 1-4 (pp. 85-86)		
30	Describing and justifying the general rules for observed relationships between numbers/patterns	85-86	1 (no. 7-10)	80-81	90-91		No. 1-5 (pp. 86-87)		

**Note:** Refer to Day 28: Resources: Matchsticks, counters, blocks, paper, glue.

## Reflection

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

What will you change next time? Why?

HOD: Date:

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and justifying the general rules for observed relationships umbers/patterns numeric and geometric patterns (use <i>DBE workbook</i> or book)	86-88 85-88	<b>ex.</b> 2	<b>pp.</b> 81-82	<b>pp.</b> 91-92	workbook		Dat	e comp	oletec
numbers/patterns numeric and geometric patterns (use DBE workbook or		2	81-82	91-92			Dat	e comp	oletec
numbers/patterns numeric and geometric patterns (use DBE workbook or		2	81-82	91-92					
	85-88					No. 1-7 (pp. 87-89)			
					No. 27a-27b (pp. 56-59)	No. 1-2 (pp. 90-91) No. 1-2 (p. 91) No. 1-3 (p. 92)			
signment solutions									
and relationships: Input and output values or rules using ms and tables	88-89	1	83-86	92-94		No. 1-9 (pp. 93-96) No. 1-6 (pp. 97-99)			
output values using formulae	88-89	2	86	95		No. 1-3 (pp. 103-104) No. 1-3 (p. 104)			
	Refle	ction							
lifficult or easy to understand or do? What will you do to sup	oport or	What will	you change	next time?	Why?				
n dit	nake a note of: What went well? What did not go well? W fficult or easy to understand or do? What will you do to suid you complete all the work set for the week? If not, how	Reflection nake a note of: What went well? What did not go well? What did fficult or easy to understand or do? What will you do to support or id you complete all the work set for the week? If not, how will you	Reflection  make a note of: What went well? What did not go well? What did fficult or easy to understand or do? What will you do to support or id you complete all the work set for the week? If not, how will you	Reflection  nake a note of: What went well? What did not go well? What did fficult or easy to understand or do? What will you do to support or id you complete all the work set for the week? If not, how will you	Reflection  nake a note of: What went well? What did not go well? What did fficult or easy to understand or do? What will you do to support or id you complete all the work set for the week? If not, how will you	Reflection  Nake a note of: What went well? What did not go well? What did fficult or easy to understand or do? What will you do to support or id you complete all the work set for the week? If not, how will you	Reflection  Reflection  Reflection  What will you change next time? Why?	Autput values using formulae  88-89  2  88-89  2  86  95  No. 1-3 (pp. 103-104) No. 1-3 (pp. 103-104) No. 1-3 (pp. 104)  Reflection  Make a note of: What went well? What did not go well? What did fficult or easy to understand or do? What will you do to support or id you complete all the work set for the week? If not, how will you	Reflection  Reflection  Reflection  What went well? What did not go well? What did fficult or easy to understand or do? What will you do to support or id you complete all the work set for the week? If not, how will you  No. 1-6 (pp. 97-99)  No. 1-3 (pp. 103-104) No. 1-3 (pp. 103-104) No. 1-3 (pp. 104)  What will you change next time? Why?



	OXFORD SUCC	ESSFUL I	ИАТНЕМ	ATICS	Week 8			
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class  Date completed
36	Equivalent forms of the same relationship or rule	88-89	1	87-88	96-99		No. 1-11 (pp. 100-101) No. 1-2 (p. 102)	
37	Revision of functions and relationships (consolidation)	88-89	Cons.	90	99	No. 28 (pp. 60-61)		
38	Algebraic expressions: Recognising and interpreting rules or relationships represented in symbolic form; Identifying variables and constants	90	1 2	91-94	100-103	No. 29a (pp. 62-63)	No. 1-2 (pp. 105-107)	
39	Conventions for writing algebraic expressions	90	3	94-95	103- 104	No. 29b (pp. 64-65)		
40	Identifying and classifying like and unlike terms; Adding and subtracting like terms	90	1-3	96-98	104- 106	No. 30-31 (pp. 66-69)	No. 1-8 (pp. 112-114) No. 1-9 (pp. 114-116)	
		Refle	ction		•	,		

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?



Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo		Clas	s
		pp.	ex.	pp.	pp.	workbook				
								Dat	e com	pleted
41	Identifying coefficients, constants and exponents in algebraic expressions	90	1-2	99-101	106-108	No. 32 (pp. 70-71)	No. 1-12 (pp. 108-111)			
42	Expanding and simplifying algebraic expressions	90	1-3	102-105	108-112	No. 39 (pp. 86-87)	No. 1-10 (pp. 117-118)			
43	Formal assessment: Test									
44	Algebraic equations: Setting up equations to describe problem situations; Analysing and interpreting equations that describe a given situation	91	1 2	106-108	112- 113	No. 33-34 (pp. 72-75)	No. 1-3 (pp. 119-122)			
45	Solving equations by inspection	91	3	108	113- 114	No. 35 (pp. 76-77)	No. 1-3 (pp. 123-124)			
		Refle	ection							
he le exten	a <b>about and make a note of:</b> What went well? What did not go well? Nearners find difficult or easy to understand or do? What will you do to sold 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?				



Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo		Clas	s
		pp.	ex.	pp.	pp.	workbook				
1.		0.4	4	400	444			Dat	e com	pleted
46	Determining the numerical value of an expression by substitution	91	4	108- 109	114	No. 36a-36b (pp. 78-81)	No. 1-4 (pp. 124-126)			
47	Revision of algebraic expressions and equations (consolidation)	91	Cons.	111	115	No. 37-39 (pp. 82-87)				
48	Go over test solutions									
49	Revision									
50	Revision									
		End-of-tern	n reflection							
. W	a about and make a note of:  /as the learners' performance during the term what you had expected 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	xt term? Which		ONE chang effectively n		ou make to you	ır teaching practi	ce to h	ielp yo	ı teach
	/ith which specific topics did the learners struggle the most? How can our teaching to improve their understanding of this section of the curr						by the CAPS for topics in future?			

your teaching in the future?

are the implications for your work on these topics in future? What plan will you make to get back **on track**?



# 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.
- 4. Learner's Book exercises that cover the CAPS content for the day.

  Where an exercise has been recommended for more than one day, it has been divided into two parts.
- 5. Page reference in the Learner's Book (LB page reference).
- 6. Page reference in your Teacher's Guide for the day's activities (TG page reference).
- 7. DBE workbook link to related content (worksheet and page numbers are referenced).
- 8. Sasol Inzalo mathematics book link to related content (exercise and page numbers are referenced).
- 9. Date completed.

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

# Weekly reflection

The tracker 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 form the basis for collegial conversations with your head of department and your peers.







	CLEVER: KEE			TE VV						
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class	_
		PP.		PP.	PP.			Date	complet	-0d
1	Whole numbers: Times tables; Ordering and comparing numbers (What you already know); Properties of whole numbers	75	1	1-7	1-7	No. 1-2b (pp. 2-7)	No. 1-7 (pp. 7-8) No. 1-2 (p. 9) No. 1-3 (pp. 10-11)	Date	Complet	
2	Calculations using whole numbers: Rounding off, compensating and the four operations	75-76	2 (no. 1-2)	8-14	8-11		No. 1-4 (pp. 1-3) No. 1-7 (p. 4)			
3	Calculations using whole numbers	75-76	2 (no. 3-5)	8-15	11-12		No. 1-4 (pp. 5-6) No. 1-7 (pp. 12-14) No. 1-4 (p. 15) No. 1-4 (pp. 16-17)			
4	Multiples and factors	76-77	3	15-19	13-16	No. 3-5 (pp. 8-13)	No. 1-5 (p. 18) No. 1-6 (pp. 19-20) No. 1-3 (pp. 22-23)			
5	Solving problems involving whole numbers: Ratio and rate	77	4	19-22	16-22		No. 1-11 (pp. 24-26)			
		Refle	ection							
the le	about and make a note of: What went well? What did not go well? What arners 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?	pport or	What will y	ou change	next time?	Why?				
			HOD:				Dat	te:		

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	CLEVER: KEEF		ATHS SIMI elect	PLE W	eek 2						
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Da	Cla ate cor	nss mplete	ed
6	Solving problems involving whole numbers: Ratio and rate; Financial contexts	77	4-5*	19-23	16- 23	No. 6-7 (pp. 14-17)	No. 1-8 (pp. 27-28)	$\Box$			
7	Solving problems involving whole numbers: Financial contexts	77	6	24-26	23-24	No. 8-10 (pp. 18-23)					
8	Integers: What you already know; Counting, ordering and comparing integers	78-79	1	27-32	25-30	No. 11 (pp. 24-25)	No. 1-9 (pp. 29-34) No. 1-6 (p. 39)				
9	Calculations with integers: Addition and subtraction	78-79	2	33-37	30-34		No. 1-12 (pp. 35-38)				
10	Calculations with integers: Multiplication and division	78-79	3 (no. 1-2)	37-41	35		No. 1-12 (pp. 40-42) No. 1-6 (pp. 43-44)				

Note: Refer to Day 8: Resources: Chain diagram, thermometer, bank statements, newspapers.

## Reflection

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

What will you change next time? Why?

HOD: Date:



	CLEVER: KEE	PING MA	THS SIM	PLE W	eek 3				
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class
11	Squares, cubes, square roots and cube roots	78-80	3 (no. 3-5)	40-41	35-36		No. 1-13 (pp. 47-49)	Date	completed
12	Squares, cubes, square roots and cube roots (use <i>DBE workbook</i> )	78-80				No. 15-18 (pp. 32-39)			
13	Properties of integers	80	4	42-46	36-38		No. 1-5 (pp. 44-45)		
14	Solving problems in contexts involving multiple operations with integers	80	5	47-49	38-40		No. 1-2 (pp. 46-47)		
15	Revision (use DBE workbook or Sasol Inzalo book)	78-80				No. 12 (pp. 26-27)	No. 1-4 (p. 50)		
		Refle	ection					•	
the le	c about and make a note of: What went well? What did not go well? Wearners find difficult or easy to understand or do? What will you do to so deep learners? Did you complete all the work set for the week? If not, how	upport or	What will y	ou change	next time?	Why?			

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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	CLEVER: KI		AIHS SIMI Dlement	PLE W	eek 4				
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Cl	ass
								Date co	mplete
16	Revision (use <i>DBE workbook</i> )	78-80				No. 13 (pp. 28-29)			
17	<b>Exponents:</b> Comparing and representing whole numbers in exponential form: Squares, square roots, cubes, cube roots	81-83	1	50-54	41-47		No. 1-3 (pp. 51-53) No. 1-2 (p. 54) No. 1-3 (p. 55)		
18	Comparing and representing integers in exponential form	81-82	2 (no. 1, 2, 5, 6)	54-58	48		No. 1-4 (pp. 56-57) No. 1-7 (pp. 58-59)		
19	Scientific notation	81 85	2 (no. 3-4#)	56-58	48	No. 19 (pp. 40-41)	No. 1-8 (pp. 74-75)		
20	The laws of exponents	82-83	3	58-62	49-51		No. 1-8 (pp. 60-62)		

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

What will you change next time? Why?

HOD: Date:



	CLEVER: KEEF	PING MA	ATHS SIMI	PLE W	eek 5				
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class
								Date	completed
21	The laws of exponents cont. (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	82-83				No. 20-21 (pp. 42-45)	No. 1-6 (pp. 68-69) No. 1-3 (pp. 71-72) No. 1-4 (pp. 72-73) No. 1-2 (p. 73)		
22	The laws of exponents cont. (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	82-83				No. 22-23 (pp. 46-49)	No. 1-11 (pp. 63-65) No. 1-6 (pp. 65-67)		
23	Calculations using numbers in exponential form	82-83	4	62-66	51-53	No. 24 (pp. 50-51)	No. 1-2 (p. 70)		
24	Solving problems in contexts involving numbers in exponential form	82	5 (no. 1-7)	67-69	53-55		No. 1-8 (pp. 70-71)		
25	Solving problems in contexts involving numbers in exponential form cont.	82	5 (no. 8-10)	69-70	55				
		Refle	ection					·	
Think	rahout and make a note of: What wont wall? What did not go wall? W	hat did	M/bat will v	ou change	novt time?	\//b\/2			

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

What will you change next time? Why?

HOD: Date:



	CLEVER: KEE		<b>ATHS SIM</b> Dlement	PLE W	eek 6					
Day	CAPS concepts and skills	CAPS	LB ex.	LB	TG	DBE workbook	Sasol Inzalo		Class	;
		pp.	ex.	pp.	pp.	WOIRDOOR		Dat	te com	oleted
26	Revision: exponents (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	80-84				No. 25-26 (pp. 52-55)	No. 1-6 (p. 76)			Sieteu
27	Numeric and geometric patterns: Revision What you already know	85		71	56-62					
28	Investigating and extending patterns; Describing and justifying the general rules for observed relationships between numbers	85	1 (no. 1-2)	72-75	62-64	No. 27a (pp. 56-57)	No. 1-8 (pp. 77-79) No. 1-3 (p. 80) No. 1-3 (pp. 81-82) No. 1-4 (pp. 82-83)			
29	Investigating and extending patterns; Describing and justifying the general rules for observed relationships between numbers	85-86	1 (no. 3-6)	75-76	64-66		No. 1-4 (pp. 84-85) No. 1-4 (pp. 85-86)			
30	Investigating and extending geometric patterns; Describing and justifying the general rules	86-88	2 (no. 1#)	77-79	66	No. 27b (pp. 58-59)	No. 1-5 (pp. 86-87)			
Note	Refer to Day 27: Resources: Matches and 2-D shapes.									
			ection							
the le	about and make a note of: What went well? What did not go well? Warners 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	ou change	next time?	Why?				
			HOD:				Da	te:		



Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo		Class	
		pp.	ex.	pp.	pp.	workbook		Dat	e comple	eted
31	Investigating and extending geometric patterns; Describing and justifying the general rules cont.	86-88	2 (no. 2-3)	79-80	66-67		No. 1-2 (pp. 90-91) No. 1-2 (p. 91) No. 1-3 (p. 92)			T
32	Formal assessment: Assignment		Cont. test	107-108	92-93					
33	Functions and relationships: Input and output values or rules using flow diagrams, tables and equations	88-89	What you	81	68-72		No. 1-9 (pp. 93-96) No. 1-6 (pp. 97-99)			
34	Input and output values using flow diagrams, tables and equations; Equivalent forms of the same relationship or rule	88-89	1 (no. 1-4)	82-85	73-74		No. 1-11 (pp. 100-101) No. 1-2 (p. 102)			
35	Input and output values using flow diagrams, tables and equations; Equivalent forms of the same relationship or rule cont.	88-89	1 (no. 5)	85-86	74		No. 1-3 (pp. 103-104) No. 1-3 (p. 104)			
		Refle	ection			•		,		
the 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 suid learners? Did you complete all the work set for the week? If not, how ack on track?	pport or	What will y	vou change I	next time?	Why?				

HOD: Date:



	CLEVER: KEEF	PING MA	ATHS SIM	PLE W	eek 8					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class	
		PP.		pp.	PP.	Workbook		Date	comp	letec
36	Go over assignment solutions (30 minutes); Revision of functions and relationships (30 minutes)	88-89	Ass. 2 (q. 1)	106	91	No. 28 (pp. 60-61)				
37	Algebraic expressions: Recognising and interpreting rules or relationships represented in symbolic form; Algebraic conventions	90	What you 1	87-89	75-81	No. 29a (pp. 62-63)	No. 1-2 (pp. 105-107)			
38	Identifying coefficients and exponents in expressions	90	2	90,91	81	No. 29b (pp. 64-65)	No. 1-12 (pp. 108-111)			
39	Formulating algebraic expressions	90	3	91-93	82-83	No. 32 (pp. 70-71)				
40	Identifying like terms and degrees of algebraic expressions	90	4	93-94	83	No. 30 (pp. 66-67)	No. 1-8 (pp. 112-114) No. 1-9 (pp. 114-116)			
		Refle	ection							
he le exten	about and make a note of: What went well? What did not go well? Warners find difficult or easy to understand or do? What will you do to sugdie learners? Did you complete all the work set for the week? If not, how tack on track?	oport or	What will y	you change	next time?	Why?				
			HOD:				Da <sup>-</sup>	te:		



Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class	
								Dat	e comp	leted
41	Identifying and classifying like and unlike terms	90	5	94-97	83-84	No. 31 (pp. 68-69)	No. 1-10 (pp. 117-118)			
42	Formal assessment: Test									
43	Algebraic equations: Solving equations by inspection	91	What you	98	85-87		No. 1-3 (pp. 123-124)			
44	Solving equations; Setting up equations to describe problem situations	91	1 (no. 1-4)	98-103	87-88	No. 33-34 (pp. 72-75)	No. 1-3 (pp. 119-122)			
45	Determining the numerical value of an expression by substitution	91	1 (no. 5-9)	103-104	88-89	No. 36a-36b (pp. 78-81)	No. 1-4 (pp. 124-126)			

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

What will you change next time? Why?

HOD: Date:



	CLEVER: KEEF	PING MA	THS SIME	PLE We	ek 10					
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo		Class	
		pp.	ex.	pp.	pp.	workbook				
								Dat	te com	oletec
46	Revision of algebraic equations (use <i>DBE workbook</i> )	91				No. 35 (pp. 76-77) No. 37-39 (pp. 82-87)				
47	Go over test solutions									
48	Revision									
49	Revision									
50	Revision									
		End-of-tern	n reflection							
2. W	That strategy can you put in place for them to catch up with the class? Narners would benefit from extension activities? What can you do to hele with which specific topics did the learners struggle the most? How can your teaching to improve their understanding of this section of the curric the future?	p them?	are the		ns for your		by the CAPS for topics in future?			
HOD							ate:			

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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.
- 4. Learner's Book exercises that cover the CAPS content for the day.

  Where an exercise has been recommended for more than one day, it has been divided into two parts.
- 5. Page reference in the Learner's Book (LB page reference).
- 6. Page reference in your Teacher's Guide for the day's activities (TG page reference).
- 7. DBE workbook link to related content (worksheet and page numbers are referenced).
- 8. Sasol Inzalo mathematics book link to related content (exercise and page numbers are referenced).
- 9. Date completed.

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

## Weekly reflection

The tracker 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 form the basis for collegial conversations with your head of department and your peers.







	SOLUTIONS FO	OR ALL N	1ATHEM <i>A</i>	ATICS V	Veek 1				
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class
1	Whole numbers: Times tables (MM); Ordering and comparing numbers; Rounding off; Calculations using whole numbers	75	MM Ex. 1.1 Act. 1.1	1-4	1-4	No. 1 (pp. 2-3)	No. 1-7 (pp. 7-8) No. 1-2 (p. 9) No. 1-3 (pp. 10-11)		
2	Calculations using whole numbers: Mixed operations; Factors and multiples	75-76	Ex. 1.2 Act. 1.2 Ex. 1.3	5-7	4-6	No. 3-5 (pp. 8-13)	No. 1-5 (p. 18) No. 1-6 (pp. 19-20) No. 1-3 (pp. 22-23)		
3	Properties of whole numbers	75-76	Act. 1.3 Ex.1.4 Act. 1.4 Ex. 1.5	8-12	7-9	No. 2a-2b (pp. 4-7)	No. 1-4 (pp. 1-3) No. 1-7 (p. 4)		
4	Revising order of operations; Calculations	75-76	Act. 1.5 Ex. 1.6	12-14	9-10		No. 1-4 (pp. 5-6) No. 1-7 (pp. 12-14)		
5	Solving problems involving whole numbers	77	Act. 1.6 Ex. 1.7	14-18	10-11		No. 1-4 (p. 15) No. 1-4 (pp. 16-17)		
		Refle	ection						
the le	<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?	pport or	What will y	ou change	next time?	Why?			
			HOD:				Da	te:	



	SOLUTIONS F		<b>//ATHEM</b> elect	ATICS V	Veek 2					
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo		Class	5
		pp.	ex.	pp.	pp.	workbook				
6	Solving problems involving whole numbers: Ratio and rate	77	Act. 1.7 Ex. 1.8 Act. 1.8 Ex. 1.9	18-23	11-12		No. 1-11 (pp. 24-26)	Dat	te com <sub>l</sub>	oleted
7	Solving problems in financial contexts (30 minutes); Revision (check what you know) (30 minutes)	75-77	Act. 1.9 Ex. 1.10 Act. 1.10 Check what	23-25 27-32*	13 14-16	No. 6-10 (pp. 14-23)	No. 1-8 (pp. 27-28)			
8	Integers: Counting, ordering and comparing integers (Getting started); Calculations with integers: Addition and subtraction	78-79	Act. 2.1 Act. 2.2 Ex. 2.1 (no. 1-3)	33-36	17-19	No. 11 (pp. 24-25)	No. 1-9 (pp. 29-34) No. 1-6 (p. 39)			
9	Calculations with integers: Subtraction	78-79	Ex. 2.1 (no. 4-13)	36-38	19-20		No. 1-12 (pp. 35-38)			
10	Calculations with integers: Multiplication	78-79	Act. 2.3 Act. 2.4	38-40	20-21	No. 12 (pp. 26-27)	No. 1-12 (pp. 40-42)			
		Refle	ection							
the le	about and make a note of: What went well? What did not go well? What arners find difficult or easy to understand or do? What will you do to so d learners? Did you complete all the work set for the week? If not, how ack on track?	upport or	What will y	ou change	next time?	Why?				
			HOD:				Da	te:		



	SOLUTIONS FO		<b>//ATHEM</b> Iement	ATICS V	Veek 3						
Day	CAPS concepts and skills	CAPS	LB ex.	LB	TG	DBE workbook	Sasol Inzalo		Class		
		pp.	ex.	pp.	pp.	WOIRDOOR		Date	e comp	olete	d
11	Multiplying integers; Squares, cubes, square roots and cube roots	78-80	Ex. 2.2#	41	21-22	No. 15-18 (pp. 32-39)	No. 1-13 (pp. 47-49)				
12	Revision (Check what you know)	78-80	Check what	42-43	22-23						
13	Properties of integers	80	Act. 3.1 Ex. 3.1	44-48	24-26	No. 13 (pp. 28-29)	No. 1-5 (pp. 44-45)				
14	Properties of integers continued	80	Act. 3.2 Act. 3.3 Ex. 3.2	48-51	27						
15	Calculations with integers: Division; order of operations	78-80	Act. 3.4 Act. 3.5 Ex. 3.3	51-54	27-28		No. 1-6 (pp. 43-44)				
		Refle	ection		I.						
the le	a about and make a note of: What went well? What did not go well? Wearners find difficult or easy to understand or do? What will you do to suid 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:				Da	te:			



	CARC LUIL		lect	1.5		227			C'	_
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class	
					I I		_	Dat	e com	oleted
16	Solving problems in financial contexts involving integers (20 minutes); Revision ( <i>Check what you know</i> ) (40minutes)	78-80	Act. 3.6 Check what*	55 56-58	29-30		No. 1-2 (pp. 46-47)			
17	<b>Exponents:</b> Mental calculations; Comparing and representing numbers in exponential form	81-82	Act. 4.1 Ex. 4.1	59-63	31-35		No. 1-3 (pp. 51-53) No. 1-7 (pp. 58-59)			
18	Squares and cubes; Laws of exponents: Multiplication	81-83	Act. 4.2 Act. 4.3 Ex. 4.2	64-66	35-36	No. 20 (pp. 42-43)	No. 1-2 (p. 54) No. 1-3 (p. 55) No. 1-4 (pp. 56-57) No. 1-8 (pp. 60-62) No. 1-6 (pp. 65-67)			
19	Laws of exponents: Division	82-83	Act. 4.4 Ex. 4.3*	66-67	36-37	No. 21 (pp. 44-45)	No. 1-6 (pp. 68-69) No. 1-3 (pp. 71-72)			
20	Laws of exponents: Raising a power to another power; The power of zero	82-83	Act. 4.5 Ex. 4.4 Act. 4.6	67-68	37-38	No. 22-23 (pp. 46-49)	No. 1-11 (pp. 63-65) No. 1-2 (p. 70)			
		Refle	ction							
he le exten	about and make a note of: 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, ho ack on track?	support or	What will y	ou change	next time?	Why?				
			HOD:				Dat	e:		



	SOLUTIONS FO	OP ALL IV	ATHEMA	TICS V	Veek 5						
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		C	lass	
		P.P.		PP.				Da	ate c	omple	ted
21	Laws of exponents: The power of zero; Calculations using numbers in exponential form	82-83	Ex. 4.5 Act. 4.7	68-69	38-40	No. 24 (pp. 50-51)	No. 1-8 (pp. 70-71)	$\Box$			T
22	Calculations using numbers in exponential form (use <i>DBE workbook</i> or <i>Sasol Inzalo</i> book)	82-83				No. 25-26 (pp. 52-55)	No. 1-4 (pp. 72-73) No. 1-2 (p. 73)				
23	Scientific notation	81 85	Act. 4.8	70-71	40	No. 19 (pp. 40-41)	No. 1-8 (pp. 74-75)				
24	Scientific notation	81 85	Ex. 4.6	72-73	41						
25	Revision: Exponents (Check what you know)	80-84	Check what (no. 1-3)	73-74	41-42		No. 1-6 (p. 76)				
		Refle	ction								
the le	a about and make a note of: What went well? What did not go well? We transfer and difficult or easy to understand or do? What will you do to suit 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:



	SOLUTIONS FO	OR ALL N	1ATHEMA	ATICS V	Veek 6				
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class  Date complete	4
26	Revision: Exponents (Check what you know)		Check what (no. 4-6)	73-74	42-43			Date completes	<u>u</u>
27	Numeric and geometric patterns: Investigating and extending patterns; Describing and justifying the general rules for observed relationships	85	Getting started	75-77	44-47		No. 1-8 (pp. 77-79) No. 1-3 (p. 80) No. 1-3 (pp. 81-82) No. 1-4 (pp. 82-83)		
28	Investigating and extending numeric patterns; Describing and justifying the general rules	85-86	Act. 5.1 Ex. 5.1 No. 1.2	77-80	47-48	No. 27a (pp. 56-57)	No. 1-4 (pp. 84-85) No. 1-4 (pp. 85-86)		
29	Investigating and extending numeric patterns; Describing and justifying the general rules cont.	85-86	Ex. 5.1 No. 3-7	80-82	48-50		No. 1-5 (pp. 86-87)		
30	Investigating and extending geometric patterns; Describing and justifying the general rules cont.	86-88	Act. 5.3	83-87	50-52	No. 27b (pp. 58-59)	No. 1-7 (pp. 87-89)		
		Refle	ection						
the le	about and make a note of: 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?	pport or	What will y	ou change	next time?	Why?			
			HOD:				Dat	te:	



	SOLUTIONS FO	OR ALL N	/ATHEMA	ATICS V	Veek 7					
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo		Class	
		pp.	ex.	pp.	pp.	workbook				
								Date	comp	leted
31	Investigating and extending exponential patterns	85-88	Act. 5.4	88	52-53		No. 1-2 (pp. 90-91) No. 1-2 (p. 91) No. 1-3 (p. 92)			
32	Formal assessment: Assignment		Check what	89-91	53-54					
33	Functions and relationships: Input and output values or rules using flow diagrams	88-89	Getting started Act. 6.1 Act. 6.2	92-95	55-59	No. 28 (pp. 60-61)	No. 1-9 (pp. 93-96) No. 1-6 (pp. 97-99)			
34	Input and output values using flow diagrams and equations	88-89	Ex. 6.1	96-98	59-63		No. 1-3 (pp. 103-104) No. 1-3 (p. 104)			
35	Equivalent forms of the same relationship or rule	88-89	Act. 6.3 Ex. 6.3	98-102	63-65		No. 1-11 (pp. 100-101) No. 1-2 (p. 102)			
		Refle	ection							
the le	a about and make a note of: What went well? What did not go well? What make a note of: What well? What will you do to su dearners? 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:				Dat	te:		



	SOLUTIONS FO	OR ALL IV	1ATHEMA	ATICS V	Veek 8					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Dat	Clas	ss   
36	Go over assignment solutions (30 minutes); Revision of functions and relationships (30 minutes)	88-89	Check what	103-104	65-66					
37	Algebraic expressions: Recognising and interpreting rules or relationships represented in symbolic form	90	Act. 7.1 Ex. 7.1	107-110	67-68 70-72	No. 29a (pp. 62-63)	No. 1-2 (pp. 105-107)			
38	Identifying variables and constants in given formulae and equations; Conventions for writing algebraic expressions	90	Act. 7.2 Ex. 7.2	111-113	72-74	No. 29b (pp. 64-65)				
39	Identifying, classifying and simplifying like and unlike terms	90	Act. 7.3 Act. 7.4 Ex. 7.3	114-116	74-76	No. 30-31 (pp. 66-69)	No. 1-8 (pp. 112-114) No. 1-9 (pp. 114-116)			
40	Formulating algebraic expressions	90	Act. 7.5	116	76	No. 32 (pp. 70-71)	No. 1-12 (pp. 108-111)			
		Refle	ction							

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:



Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo		Cla	SS	
	Str 5 concepts and skins	pp.	ex.	pp.	pp.	workbook	Susor means				Т
								Dat	e cor	nplet	ed
41	Revision of algebraic expressions	90	Check what	117-118	76-77	No. 39 (pp. 86-87)	No. 1-10 (pp. 117-118)				Τ
42	Formal assessment: Test										
13	Algebraic equations: Setting up expressions and equations to describe problem situations	91	Getting started Ex. 8.1	119-123	78-80	No. 33-34 (pp. 72-75)	No. 1-3 (pp. 119-122)				
14	Using substitution in equations to generate tables of ordered pairs; Setting up equations to describe problem situations	91	Act. 8.1 Ex. 8.2 Act. 8.2	123-126	80-81	No. 35 (pp. 76-77)					
45	Solving equations by inspection	91	Act. 8.3 Ex. 8.3	126-127	81	No. 37 (pp. 82-83)	No. 1-3 (pp. 123-124)				
		Refle	ction								
xte	earners 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?										



	SOLUTIONS FO		elect		CCK TO					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class	
		''						Date	compl	eted
46	Setting up and solving equations	91	Ex. 8.4	128-131	82	No. 38 (pp. 84-85)				
47	Determining the numerical value of an expression by substitution	91	Ex. 8.5*	132-134	83	No. 36a-36b (pp. 78-81)	No. 1-4 (pp. 124-126)			
48	Go over test solutions									
49	Revision									
50	Revision									
		End-of-ter	m reflection	1						
1. V	a about and make a note of: Vas the learners' performance during the term what you had expected or? Which learners need particular support with Mathematics in the new What 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	xt term? Which		ONE change effectively ne		ou make to you	ır teaching practi	ce to he	ıp you t	∍ach
y	Vith which specific topics did the learners struggle the most? How can our teaching to improve their understanding of this section of the curring the future?		are the		ns for your		by the CAPS for topics in future?			

HOD:

Teacher Toolkit: CAPS Planner and Tracker 2019 Term 1 87

Date:







## **Mathematics Today**

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

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

- 1. Day/lesson number.
- 2. CAPS content linked to Learner's Book content.
- 3. CAPS page numbers at the start of each CAPS topic.
- 4. Learner's Book exercises that cover the CAPS content for the day.

  Where an exercise has been recommended for more than one day, it has been divided into two parts.
- 5. Page reference in the Learner's Book (LB page reference).
- 6. Page reference in your Teacher's Guide for the day's activities (TG page reference).
- 7. DBE workbook link to related content (worksheet and page numbers are referenced).
- 8. Sasol Inzalo mathematics book link to related content (exercise and page numbers are referenced).
- 9. Date completed.

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

## Weekly reflection

The tracker 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 form the basis for collegial conversations with your head of department and your peers.







	MATHEI	MATICS '	TODAY	Week 1					
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE workbook	Sasol Inzalo		Class
		pp.	ex.	pp.	pp.	Workbook			
1	Whole numbers: Mental calculations; Ordering and comparing numbers; Properties of whole numbers	75	1.1 1.2 1.3	5-7	1	No. 1 (pp. 2-3)	No. 1-7 (pp. 7-8) No. 1-2 (p. 9) No. 1-3 (pp. 10-11)	Date	completed
2	Calculations using whole numbers: Without a calculator, estimation and with a calculator	76	1.4 1.5 1.6	8-10	2		No. 1-4 (pp. 1-3) No. 1-7 (p. 4) No. 1-4 (pp. 5-6) No. 1-7 (pp. 12-14) No. 1-4 (p. 15) No. 1-4 (pp. 16-17)		
3	Multiples and factors	76-77	1.7-1.10	11-12	2	No. 3-5 (pp. 8-13)	No. 1-5 (p. 18) No. 1-6 (pp. 19-20) No. 1-3 (pp. 22-23)		
4	Solving problems involving whole numbers: Ratio and rate	77	1.11-1.14	13-14	3		No. 1-11 (pp. 24-26)		
5	Solving problems involving whole numbers: Financial contexts	77	1.15 1.16	15-16	3	No. 6-7 (pp. 14-17)	No. 1-8 (pp. 27-28)		
		Refle	ection						
the le exten	about and make a note of: 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	ou change	next time?	? Why?			
			HOD:				Dat	:e:	



	MATH	EMATICS '	TODAY	Week 2						
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class	5
								Dat	e com	pleted
6	Solving problems involving whole numbers: Financial contexts	77	1.17 1.18	16-17	3-4	No. 8-10 (pp. 18-23)				
7	Whole numbers revision	75-77	Rev.	18	4-5					
8	Integers: Ordering and comparing integers	78-79	2.1	18-21	6	No. 11 (pp. 24-25)	No. 1-9 (pp. 29-34) No. 1-6 (p. 39)			
9	Counting integers; Calculations with integers: Addition	78-79	2.2-2.4	22-23	6-7		No. 1-12 (pp. 35-38)			
10	Calculations with integers: Subtraction	78-79	2.5	24	7					
		Refle	ection							
the le	c about and make a note of: 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 eack on track?	support or	What will y	ou change	next time?	Why?				

HOD: Date:



	MATHE	MATICS 1	ODAY	Week 3				
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Class  Date completed
11	Calculations with integers: Multiplication	78-79	2.6 2.7	25-26	7		No. 1-12 (pp. 40-42)	
12	Calculations with integers: Division	78-79	2.8	27	7		No. 1-6 (pp. 43-44)	
13	Calculations with integers involving multiple operations	78-79	2.9	28	8	No. 12 (pp. 26-27)	No. 1-13 (pp. 47-49)	
14	Solving problems in contexts; Squares and square roots (use DBE workbook)	78-80	2.10	29	8	No. 15-16 (pp. 32-35)	No. 1-2 (pp. 46-47)	
15	Cubes and cube roots (use <i>DBE workbook</i> ); Properties of integers	78-80	2.11	30	8	No. 17-18 (pp. 36-39) No. 13 (pp. 28-29)	No. 1-5 (pp. 44-45)	

## Reflection

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

What will you change next time? Why?

HOD: Date:



	MATHE	MATICS 1	ODAY	Week 4						
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo		Class	
		pp.	ex.	pp.	pp.	workbook				
								Date	e compl	eted
16	Revision: Integers	78-80	Rev.	31	8-9		No. 1-4 (p. 50)			
17	<b>Exponents:</b> Mental calculations with squares, square roots, cubes and cube roots	81-83	3.1 3.2	32-34	10		No. 1-3 (pp. 51-53) No. 1-2 (p. 54) No. 1-3 (p. 55) No. 1-4 (pp. 56-57)			
18	Comparing and representing whole numbers and integers in exponential form	81-82	3.3 3.4	35-36	10-11		No. 1-7 (pp. 58-59)			
19	The laws of exponents	82-83	3.5 3.6	37-38	11	No. 20-21 (pp. 42-45)	No. 1-8 (pp. 60-62) No. 1-6 (pp. 65-67)			
20	Calculations using numbers in exponential form	82-83	3.7 3.8	39	11	No. 22-23 (pp. 46-49)	No. 1-11 (pp. 63-65) No. 1-2 (p. 70)			
		Refle	ction							·
the le	c about and make a note of: What went well? What did not go well? Wearners find difficult or easy to understand or do? What will you do to so delearners? Did you complete all the work set for the week? If not, how eack on track?	upport or	What will	you change	next time?	Why?				

HOD: Date:



	MATHEI	MATICS 1	ODAY	Week 5					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class
21	Calculations using integers in exponential form; Calculations with square roots and cube roots of integers	81-83	3.9 3.10	40-41	12	No. 24 (pp. 50-51)	No. 1-6 (pp. 68-69) No. 1-3 (pp. 71-72) No. 1-4 (pp. 72-73) No. 1-2 (p. 73)	Date	completed
22	Squares, cubes, square roots and cube roots of rational numbers	81-83	3.11	41	12	No. 25 (pp. 52-53)			
23	Scientific notation; Problem solving in contexts involving numbers in exponential form	81 85	3.12	42-43	12	No. 19 (pp. 40-41)	No. 1-8 (pp. 70-71)		
24	Scientific notation	81 85	3.13	43	12		No. 1-8 (pp. 74-75)		
25	Revision: Exponents	80-84	Rev.	44	12-13	No. 26 (pp. 54-55)			

## Reflection

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

What will you change next time? Why?

HOD: Date:



	MATHE	MATICS T #Supp	<b>TODAY</b> lement	Week 6						
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	С	lass	
		PP.		lab.	P P			Date co	mplet	ted
26	Revision: Exponents cont.	80-84	Rev.	44	12-13		No. 1-6 (p. 76)			
27	Numeric and geometric patterns: Investigating and extending numeric patterns; Describing and justifying the general rules for observed relationships	85-86	4.1	45-48	14		No. 1-8 (pp. 77-79) No. 1-3 (p. 80) No. 1-3 (pp. 81-82) No. 1-4 (pp. 82-83)			
28	Investigating and extending numeric patterns; Describing and justifying the general rules	85-86	4.2#	49	14	No. 27a (pp. 56-57)	No. 1-4 (pp. 84-85) No. 1-4 (pp. 85-86)			
29	Investigating and extending geometric patterns; Describing and justifying the general rules	86-88	4.3	50-51	15	No. 27b (pp. 58-59)	No. 1-5 (pp. 86-87)			
30	Investigating and extending geometric patterns; Describing and justifying the general rules cont.	86-88	4.4	52	15		No. 1-7 (pp. 87-89)			
		Refle	ection						Ċ	
the le	about and make a note of: What went well? What did not go well? Narners find difficult or easy to understand or do? What will you do to so 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	te:		



	MATHEN	MATICS	TODAY	Week 7					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class
								Date	completed
31	Revision of numeric and geometric patterns	85-88	Rev.	53	16		No. 1-2 (pp. 90-91) No. 1-2 (p. 91) No. 1-3 (p. 92)		
32	Formal assessment: Assignment		Ass.	54-55	17				
33	Functions and relationships: Input and output values or rules using flow diagrams	88-89	5.1	56-58	18	No. 28 (pp. 60-61)	No. 1-9 (pp. 93-96) No. 1-6 (pp. 97-99)		
34	Input and output values or rules using flow diagrams and equations	88-89	5.2	59-60	18-19		No. 1-3 (pp. 103-104) No. 1-3 (p. 104)		
35	Equivalent forms of the same relationship or rule	88-89	5.3	62-63	19-20		No. 1-11 (pp. 100-101) No. 1-2 (p. 102)		
		Refle	ction	•		·		,	· · · · · ·
Γhink	about and make a note of: What went well? What did not go well? W	hat did	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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	MATHE	MATICS	TODAY	Week 8						
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo		Class	
36	Go over assignment solutions (30 minutes); Revision of functions and relationships (30 minutes)	88-89	Rev.	64	20-21			Dat	e comp	oleted
37	Algebraic expressions: Recognising and interpreting rules or relationships represented in symbolic form	90	6.1 6.2	65-68	22	No. 29a (pp. 62-63)	No. 1-2 (pp. 105-107)			
38	Recognising and identifying terms, coefficients and exponents in given equations; Expanding and simplifying algebraic expressions	90	6.3 6.4	68-71	22-23	No. 29b-31 (pp. 64-69)	No. 1-12 (pp. 108-111) No. 1-8 (pp. 112-114) No. 1-9 (pp. 114-116)			
39	Squares, cubes, square roots and cube roots	90	6.5-6.7	71-74	23-24					
40	Determining the numerical value of algebraic expressions by substitution	90	6.8	74-75	24	No. 36a-36b (pp. 78-81)				
		Refle	ection							
the le	c about and make a note of: What went well? What did not go well? We tarners find difficult or easy to understand or do? What will you do to suid learners? Did you complete all the work set for the week? If not, how	pport or	What will	you change	next time?	Why?				

get back on track?

HOD: Date:



	MATHE	MATICS T	ODAY	Week 9					
Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	Sasol Inzalo	Date	Class e complete
41	Revision of algebraic expressions (use the <i>Revision test</i> )	90	Rev.	76	24		No. 1-10 (pp. 117-118)	Dut	
42	Formal assessment: Test								
43	Algebraic equations: Setting up equations to describe problem situations; Analysing and interpreting equations that describe a given situation	91	7.1	77-79	26	No. 32-33 (pp. 70-73)	No. 1-3 (pp. 119-122)		
44	Solving equations by inspection	91	7.2	80-81	26-28	No. 34 (pp. 74-75)	No. 1-3 (pp. 123-124)		
45	Solving equations using additive and multiplicative inverses	91	7.3	81-82	28-29	No. 35 (pp. 76-77)			

### Reflection

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

What will you change next time? Why?

HOD: Date:



	MATHEN		<b>ODAY</b> elect	Week 10						
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Sasol Inzalo		Class	
		pp.	ex.	pp.	pp.	workbook			Ш.	
46	Solving problems using algebraic equations; Determining numerical values using substitution	91	7.4* 7.5*	83-86	29-30	No. 37-38 (pp. 82-85)	No. 1-4 (pp. 124-126)	Date	compl	eted
47	Go over test solutions					(1-1	data			
48	Using substitution in equations to generate tables of ordered pairs	91	7.6	87	31	No. 36a-36b (pp. 78-81)				
49	Revision									
50	Revision									
Th:l.	about and make a note of:	End-of-teri	n reflection				ur teaching practi	4-		-
fc W	/as the learners' performance during the term what you had expected a br? Which learners need particular support with Mathematics in the nex /hat strategy can you put in place for them to catch up with the class? Warners would benefit from extension activities? What can you do to hel	t term? Which	more	effectively n	ext term?					
yo	/ith which specific topics did the learners struggle the most? How can your teaching to improve their understanding of this section of the curric the future?		are th	ou cover all e implicatio to get back	ns for your	as prescribed work on these	I by the CAPS for topics in future?	the term What pla	? If not, n will y	, what ou
HOD:							Date:			

## •

## Sasol Inzalo Mathematics Book 1

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

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

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

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

## Weekly reflection

Gr 8 Maths Tracker Term 1 2018 p116 KZN.indd 99

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 again, 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 99





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	SASOL INZALO N	<b>ЛАТНЕМ</b>	ATICS BO	OK 1 Wee	ek 1		
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE workbook	Class
		pp.	no.	pp.	pp.	WOIRDOOK	
							Date completed
1	<b>Whole numbers:</b> Properties of whole numbers: The commutative property of addition and multiplication; The associative property of addition and multiplication; More conventions and the distributive property	75	1-4 1-7 1-4	3 4 5-6	1-3 4 5-6	No. 1 (pp. 2-3) No. 2a-2b (pp. 4-7)	
2	Calculations with whole numbers: Estimating, approximating and rounding; Rounding off and compensating	75-76	1-7 1-2	7-8 9	7-8 9		
3	Adding numbers in parts written in columns; Methods of subtraction; A method of multiplication; Long division	76-77	1-3 1-7 1-4 1-4	10-11 12-14 15 16-17	10-11 12-14 15 16-17		
4	Multiples and factors; Prime numbers and composite numbers; Prime factorisation; Common multiples and factors; Investigate prime numbers	77	1-5 1-6 - 1-3 1-3	18 19-20 20-21 22-23 23	18 19-20 20-21 22-23 23	No. 3-5 (pp. 8-13)	
5	Solving problems: Rate and ratio	77	1-11	24-26	24-26		
		Reflec	tion				

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

What will you change next time? Why?

HOD: Date:



	SASOL INZALO I	<b>MATHEM</b> *Sele		OK 1 Wee	ek 2				
Day	CAPS concepts and skills	CAPS pp.	LB no.	LB pp.	TG pp.	DBE workbook		Class	
						-	Date of	completed	
6	Solving problems: Profit, loss, discount and interest	77	1-8	27-28	27-28	No. 6-9 (pp. 14-21)			
7	Revision (use DBE workbook)	77				No. 6-10* (pp. 14-23)			
8	Integers: What is beyond 0? Why people decided to have negative numbers	78-79	1-9	31-34	29-34	No. 11 (pp. 24-25)			
9	Adding and subtracting with integers: Adding can make less and subtraction can make more	78-79	1-12	35-38	35-38	No. 12 (pp. 26-27)			
10	Comparing integers and solving problems	78-79	1-6	39	39	No. 12 (pp. 26-27)			

Note: Refer to Day 8: Learners may require cards with integers on them.

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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:







Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Class
		pp.	no.	pp.	pp.	workbook	
							Date completed
11	Multiplication with integers	78-79	1-12	40-42	40-42	No. 12 (pp. 26-27)	
12	Division with integers	78-79	1-6	43-44	43-44	No. 12 (pp. 26-27)	
13	The associative properties of operations with integers	78-80	1-5	44-45	44-45		
14	Mixed calculations with integers	80	1-2	46-47	46-47	No. 13 (pp. 28-29)	
15	Squares and cubes of integers	80	1-13	47-49	47-49	No. 14 (pp. 30-31)	
		Reflec	tion				
the le exten	about and make a note of: What went well? What did not go warners find difficult or easy to understand or do? What will you did learners? Did you complete all the work set for the week? If no ack on track?	o to support or	What will you	ı change next t	time? Why?		

HOD: Date:



	SASOL INZALO	MATHEM	ATICS BOO	OK 1 We	ek 4		
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Class
		pp.	no.	pp.	pp.	workbook	
							Date completed
16	Revision worksheet	78-80	1-4	50	50		
17	<b>Exponents:</b> Revision: Exponential notation; Squares; Cubes; Square and cube roots	81	1-3 1-2 1-3 1-4	53 54 55 56-57	51-53 54 55 56-57	No. 15-18 (pp. 32-39)	
18	Working with integers: Representing integers in exponential form	81-82	1-7	58-59	58-59		
19	Laws of exponents: Product of powers	82-83	1-8	60-62	60-62	No. 20 (pp. 42-43)	
20	Raising a power to a power; Power of a product		1-11 1-6	63-65 65-67	63-65 65-67		
		Refle	ction				

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:









		LB	LB	TG	DBE	Class
	pp.	no.	pp.	pp.	workbook	
						Date completed
A quotient of powers; The power of zero	82-83	1-6 1-2	68-69 70	68-69 70	No. 21 (pp. 44-45) No. 23 (pp. 48-49)	
Calculations: Mixed operations	82-83	1-8#	70-71	70-71	No. 22 (pp. 46-47)	
quares, cubes and roots of rational numbers: Squaring a fraction	82-83	1-3	71-72	71-72	No. 24 (pp. 50-51)	
inding the square root of a fraction; Cubing a fraction	82-83	1-4 1-2	72-73 73	72-73 73	No. 25-26 (pp. 52-55)	
cientific notation: Very large numbers	82	1-8	74-75	74-75	No. 19 (pp. 40-41)	
	alculations: Mixed operations quares, cubes and roots of rational numbers: Squaring a fraction nding the square root of a fraction; Cubing a fraction	alculations: Mixed operations 82-83 quares, cubes and roots of rational numbers: Squaring a fraction 82-83 nding the square root of a fraction; Cubing a fraction 82-83	alculations: Mixed operations  82-83  1-8#  quares, cubes and roots of rational numbers: Squaring a fraction  82-83  1-3  nding the square root of a fraction; Cubing a fraction  82-83  1-4  1-2	alculations: Mixed operations  82-83  1-8#  70-71  quares, cubes and roots of rational numbers: Squaring a fraction  82-83  1-3  71-72  nding the square root of a fraction; Cubing a fraction  82-83  1-4  72-73  73	1-2 70 70  alculations: Mixed operations 82-83 1-8# 70-71 70-71  quares, cubes and roots of rational numbers: Squaring a fraction 82-83 1-3 71-72 71-72  nding the square root of a fraction; Cubing a fraction 82-83 1-4 72-73 73 73	1-2 70 70 (pp. 44-45) No. 23 (pp. 48-49)  alculations: Mixed operations  82-83 1-8# 70-71 70-71 No. 22 (pp. 46-47)  quares, cubes and roots of rational numbers: Squaring a fraction  82-83 1-3 71-72 71-72 No. 24 (pp. 50-51)  Inding the square root of a fraction; Cubing a fraction  82-83 1-4 72-73 72-73 No. 25-26 (pp. 52-55)  Indication: Very large numbers  82 1-8 74-75 74-75 No. 19

extend learners? Did you complete all the work set for the week? If not, how will you get back on track?

HOD: Date:



	SASOL INZALO	MATHEM	ATICS BOO	OK 1 We	ek 6		
Day	CAPS concepts and skills	CAPS pp.	LB no.	LB pp.	TG pp.	DBE workbook	Class
							Date completed
26	Revision: Worksheet	80-84	1-6	76	76		
27	<b>Numeric and geometric patterns:</b> The term-term relationship in a sequence: Going from one term to the next; Adding or subtracting the same number	85	1-8 1-3	77-79 80	79 80	No. 27a (pp. 56-57)	
28	Multiplying or dividing with the same number; Neither adding nor multiplying by the same number	85-86	1-3 1-4	81-82 82-83	81-82 82-83	No. 27b (pp. 58-59)	
29	The position-term relationship in a sequence: Using position to make predictions; More predictions	86-88	1-4 1-4	84-85 85-86	84-85 85-86		
30	Investigating and extending geometric patterns: Square numbers; Triangular numbers	86-88	1-5 1-7	86-87 87-89	86-87 87-89		
		Reflec	tion			,	

## Reflection

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

What will you change next time? Why?

HOD: Date:







	SASOL INZALO I	МАТНЕМ	ATICS BO	OK 1 We	ek 7			
Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Class	
		pp.	no.	pp.	pp.	workbook		
							Date completed	k
31	Describing patterns in different ways; T-shaped numbers and some other shapes; Revision: Worksheet		1-2 1-2 1-3	90-91 91 92	90-91 91 92			
32	Formal assessment: Assignment							
33	Functions and relationships: Constant and variable quantities: Looking for connections between quantities; Completing some flow diagrams	88-89	1-9 1-6	95-96 97-99	93-96 97-99			
34	Different ways to describe relationships: A relationship between red dots and blue dots; Translating between different languages of description	88-89	1-11 1-2	100-101 102	100-101 102			
35	Algebraic symbols for variables and relationships: Describing procedures in different ways; Writing symbolic formulae	88-89	1-3 1-3	103-104 104	103-104 104			

**Note:** Refer to Day 32: The assignment should be sourced from another set of LTSMs.

## Reflection

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

What will you change next time? Why?

HOD: Date:



	SASOL INZALO N	<b>MATHEM</b> #Suppl		OK 1 Wed	ek 8			
Day	CAPS concepts and skills	CAPS pp.	LB no.	LB pp.	TG pp.	DBE workbook	(	Class
		PP.		pp.	PP.		Date of	completed
36	Go over assignment solutions (30 minutes); Revision of functions and relationships (use <i>DBE workbook</i> ) (30 minutes)	88-89				No. 28 (pp. 60-61)		
37	Algebraic expressions: Algebraic language: Words, diagrams and symbols	90	1-2#	107	105-107	No. 29a-29b (pp. 62-65)		
38	Looking different but yet the same	90	1-12	108-111	108-111			
39	Add and subtract like terms: Rearrange terms and then combine like terms	90	1-8	112-114	112-114	No. 30-31 (pp. 66-69)		
40	Convenient replacements	90	1-9	114-116	114-116			
		Refle	ction					
the le	about and make a note of: What went well? What did not go well? What arners find difficult or easy to understand or do? What will you do to sup diearners? Did you complete all the work set for the week? If not, how	oport or	What will yo	u change next t	time? Why?			

get back on track?

HOD: Date:



Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE		Class	
		pp.	no.	pp.	pp.	workbook			
							Date	comp	leted
41	Revision: Worksheet	90	1-10	117-118	117-118	No. 39 (pp. 86-87)			
42	Formal assessment: Test								
43	<b>Algebraic equations:</b> Setting up equations: Looking for numbers to make statements true	91	1-3	121-122	119-122	No. 32-33 (pp. 70-73)			
44	Solving equations by inspection: The answer is in plain sight	91	1-3	123-124	123-124	No. 34-35 (pp. 74-77)			
45	More examples: Looking for and checking solutions	91	1-4	124-126	124-126	No. 36a-36b (pp. 78-81)			
		Refle	ction						
	<b>c 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 su		vviiat Will yo	u change next t	.iiile: vviiy:				

HOD:

Date:



Day	CAPS concepts and skills	CAPS	LB	LB	TG	DBE	Class	
		pp.	no.	pp.	pp.	workbook		
							Date o	completed
46	Revision of algebraic expressions and equations (use DBE workbook)	91				No. 37-38 (pp. 82-85)		
47	Go over test solutions							
48	Revision							
49	Revision							
50	Revision							
	E	nd-of-terr	n reflection					
2. W	rarners would benefit from extension activities? What can you do to help with which specific topics did the learners struggle the most? How can your teaching to improve their understanding of this section of the curriculative future?	ou adjust	are the ir	cover all the complications for get back <b>on tr</b>	your work or	scribed by the CAPS In these topics in futi	o for the ter ure? What p	m? If not, wh lan will you



## **E. ASSESSMENT RESOURCES**

Suggested Assessment Record Sheet: Term 1								
GRADE 8 MATHEMATICS FORMAL AND INFORMAL ASSESSMENT								
	Assignment 1	Test 1	FORMAL ASSESSMENT TERM 1 MARK					
Total marks/rating								
NAME AND SURNAME								

# **Grade 8 Mathematics Test Term 1**

Time: 60 minutes

Total: 50 marks

## INSTRUCTIONS TO LEARNERS:

- 1. Time: 60 minutes.
- 2. Answer all the questions.
- Show all your workings.
- No calculators.

## **QUESTION 1:**

Arrange the following numbers from smallest to largest: 318 752; 319 052; 318 952; 309 999

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- .. || Complete the number sentence to make the statement true, by filling in <, > or 22 110 22 101 1.2
- Give three multiples of 20.

1.3

Write 360 and 450 each as a product of prime factors and then find the HCF and the LCM of 360 and 450. 7.

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(4)

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Bongani claims that 1 is not a prime number. Is he correct? 1.5

## **QUESTION 2:**

2.1

The ratio of boys to girls at an athletics practice is 4:3. There are 49 athletes in total at the practice. How many boys were at the practice?



(2)

(5)

- The usual price of a heater is R300. There is a 30% discount on all items. How much does the heater cost after the discount? 2.2
- Thandi deposits R850 into a bank. The bank will pay a simple interest rate of 8% per year. How much money will Thandi get when she withdraws all her money after five years? 2.3

© **5** 

(2)

(2)

(2)

(2)

## QUESTION 3:

Find the value of each of the following:

- 0  $11(2-3)-5\times2\times$ 3.1
- $1 (-15) + 3 \times -6$ 3.2
- $-12 \times -21 + 49 \div -7$ 3.3
- (3 + 12)(-5) + (3 + 12) 53.4
- $\overline{\infty}$





## **QUESTION 4:**

 $\sqrt{16} +$ Evaluate:

4.2 
$$\sqrt{-16}$$

 $\subseteq$ 

 $\subseteq$ 

(2)

 $\subseteq$ 

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4.3 
$$\sqrt[3]{-64}$$
  
4.4  $2^5x^2 \times 2^3(x^4)^2$ 

4.5 
$$(3^4 - 5^2) \div 0$$

4.6 
$$\frac{9m^4n^2p^0}{-(0,3)^2n^2m^{10}}$$

## **QUESTION 5:**

Sipho's family has inherited  $5,24\times10^{\circ}$  rand from a wealthy uncle. How much money is this in normal notation?

Ξ

## **QUESTION 6:**

The first three terms of a number sequence are 8; 14; 20

- If the pattern continues in this manner, give the next two terms. 6.1
- Work out the rule for the n-th term in the pattern. 6.2
- Determine the 20th term in the pattern? 6.3

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(5)

(2)

Which term is the number 302 in the pattern? 6.4

## **QUESTION 7:**

If the relationship between x and y is  $y=x^2+1$ , determine the missing values of y in the table:

**(** 

2	
0	
-2	
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## **QUESTION 8:**

Given the algebraic expression:  $-7x^3 + 2x - 5 + 3x^4$ 

- Rewrite the expression in descending powers of x. 8.7
- What is the constant term? 8.2
- What is the coefficient of  $x^2$ ? 8.3

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[2]

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[2]

## QUESTION 9:

Determine the sum of  $x^4$  and  $x^4 - 3xy + y^2$  and  $-3x^4 + 7xy + 10y^2$ 

## QUESTION 10:

- Write an algebraic expression for: The difference between x and 7. 10.1
- Write an algebraic sentence: The quotient of 2 and y. 10.2
- Shakila is w years old. Her mother is 4 times her age. Her father is 3 years older than her mother. a) How old is Shakila's father in terms of w? 10.3
  - If Shakila is 9 years old, how old is her father? a)

TOTAL: 50

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## **Grade 8 Mathematics Test Term 1: Memorandum**

SOLU	UTIONS	MARKS	COGNITIVE LEVELS
QUE	STION 1:		
1.1	309 999; 318 752; 318 952; 319 050 🗸 order	(1)	K
1.2	22 101 < 22 110 <b>√</b> comparison	(1)	K
1.3	20; 40; 60; ✓ (any 3 correct multiples)	(1)	K
1.4	$360 = 2 \times 2 \times 2 \times 3 \times 3 \times 5$ $\checkmark$ prime factors	(1)	RP
	$450 = 2 \times 3 \times 3 \times 5 \times 2$ $\checkmark$ prime factors	(1)	RP
	$HCF = 2 \times 3 \times 3 \times 5 = 90$ $\checkmark$ answer	(1)	RP
	$LCM = 2 \times 2 \times 2 \times 3 \times 3 \times 5 \times 2 = 720 $	(1)	RP
	answer	(1)	K
1.5	Bongani is correct 🗸 conclusion		
QUE	STION 2:		
2.1	4 + 3 = 7 <b>✓</b> addition	(2)	СР
	$\frac{4}{7} \times 49 = \text{boys } \checkmark \text{answer}$		
2.2	$\frac{30}{100}$ $\checkmark$ × 300 = R300 - R90 = R210 $\checkmark$	(2)	СР
	calculation and answer	(2)	СР
2.3	$A = P(1 + i \times n)$		
	$A = 850(1 + 8\% \times 5)$		
	= 850 (1 + 40%)		
	= 850 (1,4) <b>✓</b> expression		
	= R1 190 <b>✓</b> answer		

SOLU	ITIONS	MARKS	COGNITIVE LEVELS
QUES	STION 3:		
3.1	$11(2-3) - 5 \times 2 \times 0$		
	=11(-1) ✓ -0 = -11 ✓ simplification and answer	(2)	RP
3.2	$1 - (-15) + 3 \times -6$	(2)	RP
	= 1 + 15 - 18 $\checkmark$ = 16 - 18 = -2 $\checkmark$ simplification and answer	(2)	RP
3.3	$-12 \times -21 + 49 \div (-7)$		
	= 252 − 7 ✓ = 245 ✓ simplification and answer	(2)	RP
3.4	(3 + 12)(-5) + (3 + 12) - 5		
	= $(15)(-5) + 15 - 5$ $\checkmark = -75 + 15 - 5 = -65$ $\checkmark$ simplification and answer		
QUES	STION 4:		
4.1	$\sqrt{16+9} + \sqrt{25} = 5$ simplification and answer	(1)	RP
4.2	$\sqrt{-16}$ cannot be simplified.	(1)	K
	A non-real number. $\checkmark$ answer	(1)	K
4.3	$\sqrt[3]{\frac{-64}{27}} = \frac{-4}{3}$ \( \sqrt{\text{ or } \frac{4}{-3}} = -\frac{4}{3} \) \( \sqrt{\text{ answer}} \)		
4.4	$2^{5}x^{2} \times 2^{3}(x^{4})^{2}$ $= 2^{5}x^{2} \times 2^{3}x^{8} = 2^{8}x^{10}$		
	= $2^{5}x^{2} \times 2^{5}x^{0} = 2^{5}x^{10}$ = $256x^{10}$ $\checkmark$ simplification and answer	(2)	RP
4.5	$= 250x^{-5} \checkmark \text{ simplification and answer}$ $(3^4 - 5^2) \div 0  \text{- undefined (division by zero)} \checkmark$	(1)	K
7.3	reason	(2)	RP
4.6	$\frac{(9m^4n^2p^0)}{-(0,3)^2n^2m^{10}} = \frac{9m^4n^21}{-0,9n^2m^{10}} = -\frac{900}{0,9m^6} = -\frac{100}{m^6} \checkmark\checkmark$ simplification and answer		

SOLUTIONS	MARKS	COGNITIVE LEVELS		
QUESTION 5:				
5,24 × 10 <sup>6</sup>				
= 5,24 × 1 000 000				
= R5 240 000 <b>✓</b> answer		(1)	K	
QUESTION 6:				
6.1 26; 32 <b>√√</b> one mark for ea	ach answer	(2)	RP	
6.2 $T_n = 6n + 2 \checkmark \checkmark general to$	erm/formula	(2)	PS	
6.3 $T_{20} = 6(20) + 2 = 120 + 2$	= 122 🗸	(1)	СР	
20	substitution			
6.4 $6n + 2 = 302$ <b>/</b> equation				
6n = 300	(2)	СР		
n = 50 ✓ answer				
QUESTION 7:				
x -2 0 2				
y 5 1 5	y 5 1 5 √√ table			
QUESTION 8:				
$-7x^3 + 2x - 5 + 3x^4$				
8.1 descending powers: $3x^4 - 1$	(1)	K		
	(1)	K		
8.2 constant value: −5 🗸 answ	ver	(1)	K	
8.3 coefficient of $x^3$ : -7 $\checkmark$ answer	wer			

SOLUTIONS	MARKS	COGNITIVE LEVELS
QUESTION 9:		
$(x^4 - 3xy + y^2) + (-3x^4 + 7xy + 10y^2)$		
$= x^4 - 3xy + y^2 - 3x^4 + 7xy + 10y^2$		
$=-2x^4+4xy+11y^2$ simplification and answer	(2)	RP
QUESTION 10:		
10.1 $x-7$ $\checkmark$ expression (or: $7-x$ )	(1)	K
10.2 $\frac{2}{y}$ $\checkmark$ expression (or: $\frac{y}{2}$ )	(1)	K
10.3 a) $4w + 3 \checkmark \checkmark$ expression	(2)	PS
b) 4(9) + 3 = 39 <b>✓</b> substitution	(1)	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 70%, while the two higher levels add up to approximately 30%. In this exemplar test, the two lower levels together account for 72% of the marks, and the two higher levels for 28%.

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. 157)				
Knowledge	13	26%	≈ 25%				
Routine procedures	23	46%	≈ 45%				
Complex procedures	9	18%	≈ 20%				
Problem solving	5	10%	≈ 10%				