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7

GRADE

MATHEMATICS

TEACHER TOOLKIT

CAPS Planner

TERMS 3 & 4



Jika iMfundo
what I do matters

ENDORSED BY



GRADE 7

Mathematics
Teacher Toolkit:
CAPS Planner

TERMS 3 & 4

Published in 2020 by Jika iMfundo.

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A. INTRODUCTION

This book is intended to help you cover the curriculum for Grade 7 Mathematics in Terms 3 and 4. There is a companion book for Terms 1 and 2. Teachers should keep these books to use from year to year.

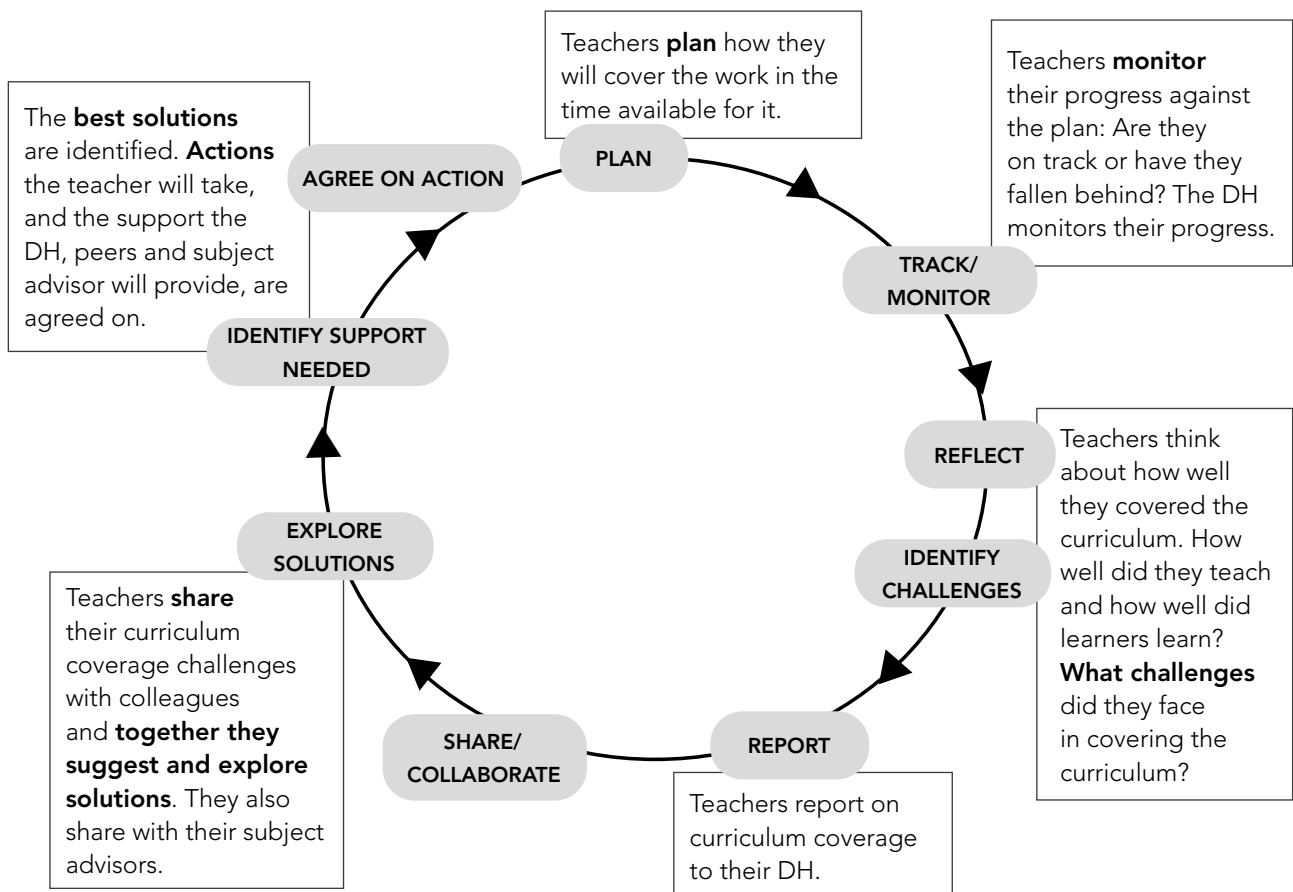
1. The need to improve curriculum coverage

In South Africa, too many learners drop out of school before Grade 12, and too few of those who reach Grade 12 do well in the NSC examinations. There are many reasons for such poor outcomes. One of the most important of these is that the curriculum is not covered each year. In other words, the teachers do not teach everything required by the CAPS in the year, and learners do not sufficiently understand the concepts and develop the skills that are taught. **Improving curriculum coverage is the key thing that teachers can do to improve learning outcomes.**

2. A cycle of activities that support improved curriculum coverage

Covering the curriculum is a complex task in which teachers face many challenges. However, there is a cycle of practices that can support curriculum coverage (see Figure 1). If these practices become routine in the school, curriculum coverage, and thus learners' outcomes, should improve.

Figure 1: The cycle of practices for supporting improved curriculum coverage



B. INFORMATION ABOUT RESOURCES IN THIS BOOK

In this book, you will find resources which will help you plan, track, reflect and report on curriculum coverage for the purpose of working collaboratively with peers and your department head (DH) and subject adviser to solve curriculum coverage problems. The resources are described below.

1. Planners for a daily programme of work

Later in this book there are planners that will help you plan what to teach each day in Term 3 and Term 4 (see Resources 1 and 2 in Section C). These planners provide a daily programme of work. There is a planner for all the books on the approved list of Learning and Teaching Support Materials (LTSMs) for Grade 7 Mathematics.

1.1 How planners link to the CAPS

Planners link the CAPS contents and skills to activities in the learner's book (LB) and teacher's guide (TG) of each set of LTSMs. They also show which DBE workbook pages have related worksheets for extension or remediation. The daily plan of activities ensures that time is allocated to all the work required by the CAPS in the term. Should you miss a lesson for any reason, it is important that you do not skip this lesson, but continue in the next lesson from where you left off.

In the CAPS, four-and-a-half hours have been allocated to Mathematics in the Senior Phase each week. To comply with this, the planners give the content and skills for five lessons of about 55 minutes for each week in the term.

1.2 The structure of the planners

The example of a planner below (Table 1) is Week 7 from *Mathematics Today* Term 3. It shows you how the planning for a week is arranged. The same layout, abbreviations and symbols are used in the planners for all the LTSMs for each term.

The table heading states the week of the term and the LTSM to which the planning is linked. Look at the notes to see what each column tells you.

Table 1: An example of a planner

MATHEMATICS TODAY Week 7					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
31	Enlargements and reductions p. 65 Draw enlargements and reductions of geometric figures on squared paper and recognise the production of congruent figures	Ex. 16.5 1–2	217	82	
32	Draw enlargements and reductions of geometric figures on squared paper and recognise the change of size of figures by increasing or decreasing BUT keeping the same length will produce similar instead of congruent figures	Ex. 16.6 4–5	220	82	
33	Draw enlargements and reductions of geometric figures on squared paper and find the factor of enlargement or reduction	Ex. 16.5 4–5	218	82	Worksheet 99 p. 76
34	FORMAL ASSESSMENT Project	Task	222	85	
35	Classifying 3-D objects p. 66 Describe, sort and compare polyhedral in terms of: <ul style="list-style-type: none">• shape• number of faces	Ex. 17.1	224	86	Worksheet 100 p. 78

The columns, from left to right, give the following information:

- The number of the lesson in the term.
- The CAPS content and skills that are dealt with in each lesson, and the page number in the CAPS where the topic or subtopic begins.
- The activity in the learner's book that should be done by the learners during the lesson.
- The page number in the learner's book where the activity and related content can be found.
- The page number in the teacher's guide where support is given for the work to be done.
- The page number in the DBE workbook where there is an activity that can be used for remediation or extension of the CAPS concepts/skill addressed in the lesson.

Abbreviations and symbols used in the planners
<ul style="list-style-type: none"> • TG = teacher's guide • LB = learner's book
<p>* = select (this indicates that teachers should choose some of the questions given in the activity referred to) # = supplement (this indicates that the activity/exercise referred to is insufficient, and teachers should provide additional examples)</p>

1.3 How to use the planners

Plan for the term

- **Find the correct planner to use** – the one that gives the daily plans for the LTSM that you use mostly in your class. You can of course use the others to help you find additional or alternative activities related to the same skills and concepts.
- **Check the length of the term against the number of weeks in the planner.** The school terms are not the same length each year. However, the planner is the same from year to year. The planner for Mathematics Grade 7 **Term 3** gives a daily plan for a term that is eleven weeks long. The prescribed content should be completed by the end of Week 8, including some catch-up and consolidation time. Weeks 9 and 10 are for revision and the test, leaving Week 11 for review of the test, remediation and learner corrections. **Term 4** has plans for a term that is nine weeks long. The prescribed content should be completed by the end of Week 6, allowing catch-up time for some lessons missed for various reasons in the first six weeks. Weeks 7 and 8 are set aside for revision and the end-of-year examination and Week 9 for review of this examination and learner corrections. If the terms in any year are of a different length, or if your school allocates more or less time for examinations than is in the planner, you will have to adjust your planning accordingly. It is very important to do this planning at the beginning of the term so that you neither rush through the work when you in fact have more time for it than allocated in the planner, nor find that you have followed the pace of the planner, but run out of teaching time.

Plan for lessons

- **Compare your timetable with the number of lessons in the week, and the length of each lesson.** In the planners, there are five lessons of approximately 55 minutes per week. If you do not have five periods of this length each week, you will need to adjust the programme for each lesson in the planner to fit the length and number of your lessons.
- **Plan and prepare for each lesson.** The planners give support for the planning of a programme of work. They do not offer help with detailed lesson planning or preparation.

Planning for a lesson involves drawing up a plan of action. A lesson plan should include an introduction, sequenced content and activities for learners to work on individually or in groups, a conclusion, and homework activities to consolidate the learning of the day or to prepare for the next day's lesson where possible. No lesson plan templates are provided here. You should use the one you prefer or that is specified by your school/subject adviser.

When preparing for a Mathematics lesson you should:

- make sure that you understand every aspect of the content knowledge and skills addressed in the lesson;
- consider relevant prior knowledge that the new work builds on, how you will check that learners have this knowledge, and how you will help close any gaps from the past;
- think carefully about how best to help learners understand new work and develop new skills;
- work through each of the learner activities yourself, noting alternative answers where necessary, and making notes on possible learner difficulties in relation to the activities;
- ensure that any resources you need to use in the lesson are available;
- decide how you will pair/group your learners;
- check in your teacher's guide and learner's book for enrichment/challenge activities for learners who have completed their work and/or need a challenge;
- see where there are remedial and support activities for learners who have barriers to learning; and
- check that the DBE worksheet page in the edition of the workbook you are using does have an appropriate activity related to the work for the lesson (these might have changed slightly since the 2017 edition on which the page references in the planners are based).

These brief points are elaborated on in Resource 3 in Section C.

2. Plans for assessment

Curriculum coverage requires teachers to teach the content given in the CAPS each term/year. It also requires that learners understand the concepts and develop the skills that are taught. Thus, assessment gives vital information about how well the curriculum is being covered. It tells teachers which topics or aspects of topics learners are struggling with, and how many learners are managing well, just coping, or struggling. Teachers need to reflect on possible reasons for and implications of these patterns of achievement, thinking about, for example, what they tell of the efficacy of their teaching methodology and how it could be improved, what feedback they can give learners to encourage and support improvement, and whether they can move on to new work, or need to remediate that which has already been taught.

The CAPS requires that teachers assess their learners' progress by means of both informal and formal assessment, and resources in this book assist teachers with planning for both.

2.1 Informal assessment

Informal assessment is ongoing and part of the teaching process as teachers listen to learners' responses and questions in class, and check their classwork and homework books. No record of the marks for informal assessment needs to be kept, but recording some of these will help you monitor learners' progress.

The CAPS for Mathematics in the Senior Phase does not specify exactly what needs to be done for informal assessment, and consequently the planner does not schedule informal assessment activities. Teachers should use their discretion in this regard. All the LTSMs include activities that are either intended to be used for informal assessment, or which could effectively serve this purpose. You should think about which to use when you do your planning. Occasionally suggestions are made in the planners.

2.2 Formal assessment

Formal assessment is assessment for which marks are recorded. In South African schools, these marks should be entered into SA-SAMS.

The resources in this book help you plan when your learners will complete formal assessment tasks. Knowing this helps you to plan related activities such as when tasks and marking guidelines will be moderated, when marking will be completed and moderated, when marks will be recorded, and when feedback will be given to learners. All these activities are important in ensuring that assessment is at the correct level and that information from it can be used to support improved curriculum coverage.

Formal assessment tasks specified in the amended Section 4 of the CAPS

The CAPS specifies two formal assessment tasks for Term 3 – a project and a test. In Term 4 only one is specified – an examination.¹

Formal assessment programmes in the LTSMs and planners

Resource 4 in Section C shows how the formal assessment tasks are integrated into the planners for Terms 3 and 4 respectively. They show when tasks are scheduled in the planner for each of the LTSMs. A note is also made of this date in the planners themselves by writing **Formal assessment** in the CAPS content column. You will see an example of this in Table 1, Lesson 34. The planners also allocate time for you to return marked work and go through it with your learners.

Note: The amended Section 4 of the CAPS no longer prescribes the assignment in Term 3 and the assignment and the investigation in Term 4 that were previously prescribed for formal assessment. However, the planner tables generally still show where these tasks were scheduled. You can still give them to your learners for practice/informal assessment if you wish, or you can instead use the periods allocated to them for catch up, consolidation or revision as best suits your class.

Not all the LTSMs provide an example of all the assessment activities required for the assessment tasks, and some of those provided might not be suitable for your class nor be compliant with the amended Section 4 of the CAPS. It is therefore essential that you check the assessment activities carefully before giving them to the learners and, if necessary, adapt them, set your own, use examples from a different set of LTSMs or, in the case of the Term 3 test, use the one provided in Section C of this book. In some cases, there might be a test or examination set by the

¹ The DBE makes changes to the assessment requirements from time to time. In such instances, you might need to change the assessment programme shown here to align with the revised requirements.

district or province which you are required to use. Also note that where a test is given in the learner's book it should not be used for formal assessment as learners can prepare for it in advance.

The dates in the assessment programme provided for your LTSM might not suit your context for some reason. You should be sure to check this, and schedule dates that are more appropriate where necessary.

3. Resources to support content knowledge, pedagogy and assessment practices

Sound content and pedagogical knowledge and teaching and learning resources enable teachers to support learning, and thus have a positive impact on curriculum coverage. For this reason, where appropriate, guidelines for teaching certain topics or skills, explanatory information about the content, suggestions for sound structuring of lessons and exemplar assessment tasks are provided in this series of books. Below is a brief description of resources provided in the Resources section of this book.

3.1 Guidelines for preparing a Mathematics lesson

Section 1.3 above drew attention to the need for thorough preparation for a Mathematics lesson to be successful, and gave some brief pointers to effective preparation. Resource 3 in Section C gives more detail about the points made in 1.3, as well as suggestions for how to structure the main activities in a lesson. Following this format in most lessons will ensure that remediation are given attention, together with the learning of new concepts and skills and opportunities for practising and consolidating these.

3.2 An exemplar Term 3 test, memorandum and analysis of cognitive levels

An exemplar test is provided in Resource 5, with a marking memorandum together with an analysis of cognitive levels in Resource 6. Resource 7 shows the weighting of the cognitive levels compared with the weighting specified in the CAPS (p. 157), and the weighting of marks across content areas compared with the weighting specified in the CAPS (p. 11). Note that this test is out of 55 marks which complies with the amended specification that it be for a minimum of 40 marks. It is an hour long, which complies with the amended specification that it be a maximum of one hour.

3.3 A revision end-of-year examination paper, memorandum and analysis of cognitive levels

A revision examination paper is provided for Term 4 (Resource 8). Resource 9 is the marking guideline with an analysis of the cognitive levels. Resource 10 shows the weighting of marks in the examination for the cognitive levels and content areas compared with the weightings specified in the CAPS. Note that the amended specifications for the revision end-of-year examination require two 1.5-hour papers, each for 50 marks, and specify the weighting of marks for different content areas in these papers. The examination paper provided in Section C does not comply with these revised specifications and can thus NOT be used for formal assessment.

Assessment resources described in 3.2 and 3.3 above support curriculum coverage by:

- providing an exemplar test that complies with the specifications given in the amended Section 4 of the CAPS;
- providing correct marking guidelines so that learners' work will be marked to the same standard across different markers; and
- supporting teachers' ability to work with the levels of questions required by the CAPS by providing a detailed analysis of the levels of questions asked in the tasks (this strengthens their ability to set assessment tasks that comply with the weighting of cognitive levels themselves in future).

You can photocopy and use the exemplar tests and examination paper as they are or adapt them in ways that make them more useful to you. Both can be used for informal assessment/revision/practice, but only the test can be used for formal assessment.

3.4 An exemplar formal assessment mark record sheet

Resource 11 provides a template on which to record formal assessment marks for the year to help you see how individual learners are progressing, and which topics might need remedial work. Should you wish, you could also record any informal assessment marks that you have to give a fuller picture.

3.5 *A template for tracking, reflecting and reporting for collaborative problem solving*

Planning is one activity on the curriculum coverage support cycle (Figure 1), and you have seen how the material in this book supports teachers with planning. The templates provided as Resource 12 in Section C are tools to assist teachers with other aspects of the cycle. There is a template to use in conventional schools, and one for use in multigrade schools. The template for conventional schools is reproduced below, with annotations that show how it is used as a tool for curriculum coverage support. The template for multigrade schools works in the same way.

Teachers should print a copy of the relevant template for each week of the term and use it together with the teaching plan for that week. This teaching plan could be the planner for their LTSM in this book or the ATP or another daily planning resource. They record curriculum coverage information and their reflection on it for all the Mathematics lessons with each class they teach in the week.

Note that dates are not given in the tracking and reflecting template. Teachers should fill two dates into the spaces at the top of the template. Firstly, they should record the week in the planner when the work they are doing is scheduled to be done; secondly, they should record the week when they in fact are starting that work. These dates will help them see how well they are keeping up with the pace set in the planner they are following.

This is the no. of the week in the planner that is being followed.

This is the no. of the week in the term when the work actually starts. If curriculum coverage is behind, this might be a later week than the week in the planner.

Week no. in planner _____

Week no. in term when work planned for week started _____

Refer to the planner for details of the week's work (or the ATP for subjects without planners)

Class (or subject for FP)				

On track by end of week? (Yes/no)

How many learners are working confidently? (Rough estimate)

How many learners in this class?

At the end of the week, the teacher uses evidence from informal and formal assessment, to estimate for each class how many learners out of the total are working confidently at Level 4 or above. They use this information, together with the amount of work planned that they have taught, to state whether or not their curriculum coverage is on track.

DAY	BRIEF NOTES ON THE DAY'S WORK: Consider such things as: <i>What concepts/skills did the learners struggle with or manage well in this lesson? What could be the reasons for this? Did the class complete the work you had planned? Do you need to change your plans for the next lesson? What changes will you make?</i>
1	
2	Each day, the teacher reflects on how their lesson went, and how they could improve it using the prompts provided. They also think about whether or not they can proceed as planned in the next lesson. This is a professional judgement they make based on informal and formal assessment. They note the main points here.
3	
4	
5	

Prompts for daily reflection.

Reflection on the week:

**What concepts and skills for the week did learners struggle with?
What could you do differently next time to better support or extend learning?
What good practice could you share?**

**Did you cover the curriculum for the week? If not, what were some of the challenges? What can you do to catch up? What help do you need?
How will your progress this week affect your plan for next week?**

At the end of the week, the teacher reflects on the week's teaching and learning. They think about what learners found difficult, and how they can change their practice so learning improves.

At the end of the week, the teacher considers whether or not the work planned for the week has been taught and learnt, and if not, what can be done to solve curriculum coverage problems and get back on track.

The teacher writes their reflections here for their own professional development, but also to share them with their DH to get support in solving problems.

DH: _____

Date: _____

At the end of the week, the DH reads the teacher's reflections and record of curriculum coverage and signs the template. S/he uses the information shared in a supportive conversation with the teacher. Together they consider any curriculum coverage problems the teacher faces and work towards finding solutions.

C. RESOURCES

1. PLANNERS FOR TERM 3

1.1 Clever: Keeping Maths Simple

CLEVER: KEEPING MATHS SIMPLE Week 1					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
1	Investigate and extend patterns pp. 58–61 Relationship between numbers including patterns represented in physical or diagram form	1a–c 2 3a–c	200	193	Worksheet 65 p. 2 no. 2
2	Relationship between numbers including patterns not limited to sequences including difference	Ex. 1c–d 2c–d 3c	202	193 194	Worksheet 65 p. 2 no. 1
3	Relationship between numbers including patterns not limited to sequences including ratio	Ex. 2e–f	205	194	Worksheet 66 p. 4 Worksheet 67 p. 6
4	Relationship between numbers including patterns of learners own creation	Ex. 3 2a–f	208	196	Worksheet 67 p. 6
5	Relationship between numbers including patterns represented in tables	Ex. 3 1a–j	208	195	Worksheet 68 p. 8

CLEVER: KEEPING MATHS SIMPLE Week 2					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
6	Relationship between numbers including patterns represented in diagrams, tables, difference and ratio	Ex. 3 3a–g	209	196	Worksheet 68 p. 9
7	Input and output values p. 62 Determine rules for patterns using – flow diagrams, tables and formula	1a 2b	210	197	Worksheet 72 p. 18
8	Determine, interpret and justify equivalence of different descriptions of the same rule represented – verbally, in flow diagrams, in tables; Formula, by number sentence	Ex. 1 1a 2a–b	214	201	Worksheet 73 p. 20
9	Revision <ul style="list-style-type: none"> Numeric and geometric patterns Input/output values 	Ex. 2 1a, f 2a–e Ex. 1 1b, 3	205 214	202 201	Worksheet 71b p. 16
10	Algebraic language p. 63 Recognise and interpret rules or relationships represented in symbolic form	Ex. 1 2a–e	221	207	Worksheet 74 p. 22

CLEVER: KEEPING MATHS SIMPLE Week 3

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
11	Identify variables and constants in given formulae	Ex. 1 1a–h	221	207	Worksheet 74 p. 23
12	Identify variables and constants in given equations	Ex. 2 1a–e	222	207	Worksheet 77 p. 28
13	Number sentences p. 64 <ul style="list-style-type: none"> Write number sentences to describe problem situations Analyse and interpret number sentences that describe a given situation 	Ex. 1 1a–e 2a–c	225	212	Worksheet 79 p. 32
14	Solve and complete number sentences by: <ul style="list-style-type: none"> inspection trial and improvement 	Ex. 2 2a–e 3a–e	228	213	Worksheet 79 p. 33
15	Algebraic language p. 63 <ul style="list-style-type: none"> Identify variables and constants in given formulae or equations Determine the numerical value of an expression by substitution 	Ex. 2 4a–e 7a–b	229	213	Worksheet 78 p. 30

CLEVER: KEEPING MATHS SIMPLE Week 4

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
16	Revision Algebraic equations and number sentences	Ex. 2 6a–b 8a–c	229	213 214	Worksheet 78 p. 30
17	Assignment Select one of the three options provided OR catch up or revision	Task	275 276 277	252 253 254	
18	Interpreting graphs p. 65 Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> linear or non-linear (temperature and time graphs) 	1a–e	231	220	Worksheet 80a p. 34
19	Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> constant increasing (rainfall and time graphs) 	Ex. 1 1a–d	233	220	Worksheet 80b p. 36
20	Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> constant decreasing (time and distance travelled) 	Ex. 1 2a–d	233 234	221	Worksheet 81 p. 38

CLEVER: KEEPING MATHS SIMPLE Week 5

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
21	Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> linear or non-linear constant increasing or decreasing (drawing of graphs) 	Ex. 2 1a–c 3a–b	236 237	221	Worksheet 81 p. 39
22	Draw global graphs from given descriptions of a problem situation, by identifying features like: <ul style="list-style-type: none"> linear and non-linear (drawing of graphs) 	Ex. 4 4a–b	237	221	Worksheet 82 p. 40
23	Draw global graphs from given descriptions of a problem situation, by identifying features like: <ul style="list-style-type: none"> constants (drawing of graphs) 	Ex. 2 5a–c	238	221	Worksheet 83a p. 42

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
24	Revision Algebraic equations, number sentences and graphs	Ex. 2 3a–e 5a–3 Ex. 1 2a–d 3a–c	228 229 233 234	213 220	
25	Remediation of assignment if done OR catch up or revision				

CLEVER: KEEPING MATHS SIMPLE Week 6

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
26	Transformations p. 65 <ul style="list-style-type: none"> Recognise, describe and perform translations with geometric figures and shapes on squared paper 	Ex. 1 1 & 2 Ex. 2 1–5	241–242 244–245	224 225–227	Worksheet 86 p. 50 Worksheet 88 p. 54
27	Recognise, describe and perform reflections with geometric figures and shapes on squared paper	Ex. 3 1–3	249–250	228–230	Worksheet 86 p. 51 no. b Worksheet 89 p. 56
28	Recognise, describe and perform rotations with geometric figures and shapes on squared paper	Ex. 4 1–4	252–253	232–236	Worksheet 86 p. 51 no. a Worksheet 87 p. 52
29	Recognise, describe and perform rotations with geometric figures and shapes on squared paper	Ex. 5 1–3	258	239–241	Worksheet 92 p. 62
30	FORMAL ASSESSMENT Project	Task	278	255	

CLEVER: KEEPING MATHS SIMPLE Week 7

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
31	Enlargements and reductions p. 65 Draw enlargements and reductions of geometric figures on squared paper and find the factor of enlargement or reduction	Ex. 5 4–6	249	241–242	Worksheet 93 p. 64
32	Draw enlargements and reductions of geometric figures on squared paper and recognise the change of size of figures by increasing or decreasing BUT keeping the same length will produce similar instead of congruent figures	Ex. 5 7–9	259	242	Worksheet 94 p. 66
33	Draw enlargements and reductions of geometric figures on squared paper and find the factor of enlargement or reduction	Ex. 5 10–12	260	242	Worksheet 94 p. 67
34	Classifying 3-D objects p. 66 Describe, sort and compare polyhedral in terms of: <ul style="list-style-type: none"> shape number of faces 	Ex. 1 1a–g Ex. 2 3, 4, 5	262 269	247 248	Worksheet 99 p. 76
35	Describe, sort and compare polyhedral in terms of: <ul style="list-style-type: none"> number of edges number of vertices 	Ex. 3 3a–e 4a–e	273	249 250	Worksheet 100 p. 78

CLEVER: KEEPING MATHS SIMPLE Week 8

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
36	Revise using nets to create models of geometric solids: cubes; prisms; Draw sketches of nets using knowledge of shape and number of faces of solids	Ex. 3 1a–d 2a–c	273	249	Worksheet 102a p. 82
37	Remediation of project	Act. 1–3	272	248	Worksheet 104 p. 88
38	Construction of nets is based on the number and shape of the solid and does not require measuring of internal angles of polygons	Ex. 3 6	274	251	Worksheet 104 p. 89
39	Able to work out relative position of faces of the nets, using trial and error to match edges and vertices to build the 3-D object	Ex. 3 7	274	251	Worksheet 101 p. 80
40	Revision Numeric and geometric patterns	Ex. 2 2a–c Ex. 3 2a–f	205 208	195 196	

CLEVER: KEEPING MATHS SIMPLE Week 9

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
41	Revision Algebraic equations and expressions				
42	Revision Geometry				Worksheet 102b p. 84
43	Revision				
44	Revision				
45	Revision				

CLEVER: KEEPING MATHS SIMPLE Week 10
Revision and test – plan your week

CLEVER: KEEPING MATHS SIMPLE Week 11
Revision and remediation of test

1.2 Mathematics Today

MATHEMATICS TODAY Week 1					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
1	Investigate and extend patterns pp. 58–61 Relationship between numbers including patterns represented in physical or diagram form	Ex. 11.1 1, 2	159	55	
2	Relationship between numbers including patterns not limited to sequences including difference	Ex. 11.1 5	160	56	Worksheet 65 p. 2
3	Relationship between numbers including patterns not limited to sequences including ratio				Worksheet 66 p. 4
4	Relationship between numbers including patterns of learners own creation	Ex. 11.1 8	161	56	
5	Relationship between numbers including patterns represented in tables	Ex. 11.2 3	162	56	Worksheet 68 p. 8

MATHEMATICS TODAY Week 2					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
6	Relationship between numbers including patterns represented in diagrams, tables, difference and ratio	Ex. 11.2 4, 5	162	56	Worksheet 68 p. 9
7	Input and output values p. 62 Determine rules for patterns using flow diagrams, tables and formula	Ex. 12.1 1a–c	171	60	Worksheet 72 p. 18
8	Determine, interpret and justify equivalence of different descriptions of the same rule represented verbally, in flow diagrams, in tables; Formula by number sentence	Ex. 12.1 6, 9	171	60	Worksheet 73 p. 20
9	Revision <ul style="list-style-type: none"> Numeric and geometric patterns Input/output values 	1, 2, 3 1	168 176	57 61	Worksheet 71b p. 16
10	Algebraic language p. 63 Recognise and interpret rules or relationships represented in symbolic form	Ex. 13.1 1a–b 2a–b	179	64	Worksheet 74 p. 22

MATHEMATICS TODAY Week 3					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
11	Identify variables and constants in given formulae	Ex. 13.2 1, 4	180	64	Worksheet 74 p. 23
12	Identify variables and constants in given equations	Ex. 13.3 1, 2	182	65	Worksheet 77 p. 28
13	Number sentences p. 64 <ul style="list-style-type: none"> Write number sentences to describe problem situations Analyse and interpret number sentences that describe a given situation 	Ex. 14.1 2, 4	186	67	Worksheet 79 p. 32
14	Solve and complete number sentences by: <ul style="list-style-type: none"> inspection trial and improvement 	Ex. 14.1 5 Ex. 14.3 1	186 188	67	Worksheet 79 p. 33
15	Algebraic language p. 63 <ul style="list-style-type: none"> Identify variables and constants in given formulae or equations Determine the numerical value of an expression by substitution 	Ex. 14.2 1, 2, 4	187 188	67	Worksheet 78 p. 30

MATHEMATICS TODAY Week 4

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
16	Revision Algebraic equations and number sentences	1, 2 1, 4	184 192	65 68	Worksheet 76 p. 30
17	Assignment OR catch up or revision	Task	193–194	69	
18	Interpreting graphs p. 65 Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> linear or non-linear (temperature and time graphs) 	Ex. 15.1 7	198	70	Worksheet 80a p. 34
19	Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> constant increasing (rainfall and time graphs) 	Ex. 15.1 1	197	70	Worksheet 80b p. 36
20	Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> constant decreasing (time and distance travelled) 	Ex. 15.1 5	197	70	Worksheet 81 p. 38

MATHEMATICS TODAY Week 5

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
21	Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> linear or non-linear constant increasing or decreasing (drawing of graphs) 	Ex. 15.2 1, 4, 5	201 202	70 71	Worksheet 81 p. 39
22	Draw global graphs from given descriptions of a problem situation, by identifying features like: <ul style="list-style-type: none"> linear and non-linear (drawing of graphs) 	Ex. 15.3 1, 2	203 204	72	Worksheet 82 p. 40
23	Draw global graphs from given descriptions of a problem situation, by identifying features like: <ul style="list-style-type: none"> constants (drawing of graphs) 	Ex. 15.3 4, 5	205 206	73	Worksheet 83a p. 42
24	Revision Algebraic equations, number sentences and graphs	1, 3 1, 2	192 207	68 74	
25	Transformations p. 65 Recognise, describe and perform translations with geometric figures and shapes on squared paper	Ex. 16.2 1, 2	212	81	Worksheet 86 p. 50 Worksheet 88 p. 54

MATHEMATICS TODAY Week 6

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
26	Transformations p. 65 Identify and draw lines of symmetry in geometric figures	Ex. 16.1 2, 5	209 210	80	Worksheet 86 p. 51 no. b Worksheet 89 p. 56
27	Recognise, describe and perform translations and reflection with geometric figures and shapes on squared paper	Ex. 16.2 1, 2 Ex. 16.2 3	212	81	Worksheet 86 p. 50 Worksheet 88 p. 54 Worksheet 86 p. 51 no. a Worksheet 87 p. 52
28	Recognise, describe and perform rotations with geometric figures and shapes on squared paper	Ex. 16.4 1, 3	215 216	81 82	Worksheet 92 p. 62
29	Draw enlargements and reductions of geometric figures on squared paper and compare them in terms of shape	Ex. 16.5 1, 3	217 218	82	Worksheet 93 p. 64
30	Draw enlargements and reductions of geometric figures on squared paper and compare them in terms of size	Ex. 16.6 3, 5	219 220	82	

MATHEMATICS TODAY Week 7

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
31	Enlargements and reductions p. 65 Draw enlargements and reductions of geometric figures on squared paper and recognise the production of congruent figures	Ex. 16.5 1–2	217	82	
32	Draw enlargements and reductions of geometric figures on squared paper and recognise the change of size of figures by increasing or decreasing BUT keeping the same length will produce similar instead of congruent figures	Ex. 16.6 4–5	220	82	
33	Draw enlargements and reductions of geometric figures on squared paper and find the factor of enlargement or reduction	Ex. 16.5 4–5	218	82	Worksheet 99 p. 76
34	FORMAL ASSESSMENT Project	Task	222	85	
35	Classifying 3-D objects p. 66 Describe, sort and compare polyhedral in terms of: <ul style="list-style-type: none"> • shape • number of faces 	Ex. 17.1	224	86	Worksheet 100 p. 78

MATHEMATICS TODAY Week 8

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
36	Describe, sort and compare polyhedral in terms of: <ul style="list-style-type: none"> • number of edges • number of vertices 	Ex. 17.2	226	86	Worksheet 102a p. 82
37	Revision Use nets to create models of geometric solids: cubes; prisms; Draw sketches of nets using knowledge of shape and number of faces of solids	Ex. 17.5 1, 2, 3 Ex. 17.6 1, 2, 3	231	88	Worksheet 104 p. 89 Worksheet 104 p. 88
38	Remediation of project				
39	Construction of nets is based on the number and shape of the solid and does not require measuring of internal angles of polygons	Ex. 17.7 1, 2, 3	233	88	Worksheet 101 p. 80
40	Able to work out relative position of faces of the nets, using trial and error to match edges and vertices to build the 3-D object	Ex. 17.3 2, 3	229	86	

MATHEMATICS TODAY Week 9

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
41	Revision Numeric and geometric patterns Functions and relationships	1–4 1–5	168 184	57 61–62 PWB Topic 11 & 12	
42	Revision Algebraic number sentences Graphs	1–7 1–3	192 207	68 74 PWB Topic 13–16	
43	Revision Transformations	1–4	221	84 PWB Topic 16	
44	Revision Geometry: 3-D objects	1–15	234	89 PWB Topic 17	
45	Revision	Task	–	90	

MATHEMATICS TODAY Week 10

Revision and test – plan your week

MATHEMATICS TODAY Week 11

Revision and remediation of test

1.3 Oxford Headstart Mathematics

OXFORD HEADSTART MATHEMATICS Week 1					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
1	Investigate and extend patterns pp. 58–61 Relationship between numbers including patterns represented in physical or diagram form	Act. 1 1a–c Act. 2 1, 2	216 218	179–181	
2	Relationship between numbers including patterns not limited to sequences including difference	Act. 3 3, 4	218	183	Worksheet 65 p. 2
3	Relationship between numbers including patterns not limited to sequences including ratio	Act. 3 5	218	183	Worksheet 66 p. 4
4	Relationship between numbers including patterns of learners own creation	Act. 3 8 Act. 4 8	220 221	–	
5	Relationship between numbers including patterns represented in tables	1–3	223	184	Worksheet 68 p. 8

OXFORD HEADSTART MATHEMATICS Week 2					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
6	Input and output values p. 62 Determine rules for patterns using flow diagrams, tables and formula	Act. 1 1, 3, 5, 7 Act. 3	226 228	188 189	Worksheet 68 p. 9
7	Determine, interpret and justify equivalence of different descriptions of the same rule represented verbally, in flow diagrams, in tables; Formula by number sentence	Act. 1 1, 3	230 231	190 191	Worksheet 72 p. 18
8	Revision <ul style="list-style-type: none"> • Numeric and geometric patterns • Input/output values 	1, 3	233	191–192	Worksheet 73 p. 20
9	Algebraic language p. 63 Recognise and interpret rules or relationships represented in symbolic form	Act. 1 2 Act. 2 1–10	237 238	194–195 196	Worksheet 71b p. 16
10	Identify variables and constants in given formulae	Act. 1 1	237	191–192	Worksheet 74 p. 22

OXFORD HEADSTART MATHEMATICS Week 3

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
11	Identify variables and constants in given equations	Act. 3 1–3	240	196–197	Worksheet 74 p. 23
12	Number sentences p. 64 <ul style="list-style-type: none"> Write number sentences to describe problem situations Analyse and interpret number sentences that describe a given situation 	Act. 1 1a–c 2a–c	242 243	199–200	Worksheet 77 p. 28
13	Solve and complete number sentences by: <ul style="list-style-type: none"> inspection trial and improvement 	Act. 2 1–5 Act. 3 1–2	244 244–245	200 200	Worksheet 79 p. 32
14	Assignment OR catch up or revision	Task	245	201	Worksheet 79 p. 33
15	Algebraic language p. 63 <ul style="list-style-type: none"> Identify variables and constants in given formulae or equations Determine the numerical value of an expression by substitution 	Act. 3 2–5	244–245	200–201	Worksheet 78 p. 30

OXFORD HEADSTART MATHEMATICS Week 4

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
16	Revision Algebraic equations and number sentences	1–8	247	202	Worksheet 76 p. 30
17	Interpreting graphs p. 65 Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> linear or non-linear (temperature and time graphs) 	Act. 1 1–4	253–254	207	Worksheet 84 p. 46
18	Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> constant increasing (rainfall and time graphs) 	Act. 2 1–5	256	208	Worksheet 80a p. 34
19	Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> constant decreasing (time and distance travelled) 	Act. 3 1–2	257–258	209	Worksheet 80b p. 36
20	Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> linear or non-linear constant increasing or decreasing (drawing of graphs) 	Act. 1 5–7	255	207	Worksheet 81 p. 38

OXFORD HEADSTART MATHEMATICS Week 5

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
21	Draw global graphs from given descriptions of a problem situation, by identifying features like: <ul style="list-style-type: none"> linear and non-linear (drawing of graphs) 	Act. 3 3	258	209	Worksheet 81 p. 39
22	Draw global graphs from given descriptions of a problem situation, by identifying features like: <ul style="list-style-type: none"> constants (drawing of graphs) 	Act. 3 4	258	209	Worksheet 82 p. 40
23	Revision Algebraic equations, number sentences and graphs	1–5	259	210	Worksheet 83a p. 42

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
24	Transformations p. 65 Recognise, describe and perform translations and reflections with geometric figures and shapes on squared paper	Act. 1 1–6 Act. 2 1–4	262–264	212–213 214–215	Worksheet 86 p. 50 Worksheet 88 p. 54
25	Remediation of assignment if done OR catch up or revision				

OXFORD HEADSTART MATHEMATICS Week 6

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
26	Recognise, describe and perform rotations with geometric figures and shapes on squared paper	Act. 3 1–4	265	218	Worksheet 86 p. 51 no. b Worksheet 89 p. 56
27	Identify and draw lines of symmetry in geometric figures	Act. 2 1, 2	268	217–218	Worksheet 86 p. 51 no. a Worksheet 87 p. 52
28	Draw enlargements and reductions of geometric figures on squared paper and compare them in terms of shape	Act. 1 1	272	219–220	Worksheet 92 p. 62
29	Draw enlargements and reductions of geometric figures on squared paper and compare them in terms of size	Act. 1 2 Act. 2 1	273 274	220	Worksheet 93 p. 64
30	FORMAL ASSESSMENT Project	Task Option 1 or 2 or 3	289	228	

OXFORD HEADSTART MATHEMATICS Week 7

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
31	Enlargements and reductions p. 65 Draw enlargements and reductions of geometric figures on squared paper and recognise the production of congruent figures				Worksheet 94 p. 66
32	Draw enlargements and reductions of geometric figures on squared paper and recognise the change of size of figures by increasing or decreasing BUT keeping the same length will produce similar instead of congruent figures				Worksheet 94 p. 67
33	Revision	1–4	278	222	
34	Classifying 3-D objects p. 66 Describe, sort and compare polyhedral in terms of: <ul style="list-style-type: none"> • shape • number of faces 	Act. 1	281	225	Worksheet 99 p. 76
35	Describe, sort and compare polyhedral in terms of: <ul style="list-style-type: none"> • number of edges • number of vertices 	Act. 5	286	227	Worksheet 100 p. 78

OXFORD HEADSTART MATHEMATICS Week 8

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
36	Revise using nets to create models of geometric solids: cubes; prisms; Draw sketches of nets using knowledge of shape and number of faces of solids	Act. 2 Act. 3 Act. 4	282 282 284	226	Worksheet 104 p. 88 Worksheet 102a p. 82
37	Remediation of project				
38	Construction of nets is based on the number and shape of the solid and does not require measuring of internal angles of polygons	Act. 6 1, 2	287	227	Worksheet 104 p. 89
39	Able to work out relative position of faces of the nets, using trial and error to match edges and vertices to build the 3-D object	Act. 6 3, 4	287	2	Worksheet 101 p. 80
40	Revision Numeric and geometric patterns	1–3	223	184–185	

OXFORD HEADSTART MATHEMATICS Week 9

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
41	Revision Functions and relationships	1–4	233	191–192	
42	Revision Algebraic equations and expressions	1–10	247	202	
43	Revision Graphs	1–7	259	210	
44	Revision Geometry	1–5	290	229	
45	Revision				

OXFORD HEADSTART MATHEMATICS Week 10
Revision and test – plan your week

OXFORD HEADSTART MATHEMATICS Week 11
Revision and remediation of test

1.4 Oxford Successful Mathematics

OXFORD SUCCESSFUL MATHEMATICS Week 1

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
1	Investigate and extend patterns pp. 58–61 Relationship between numbers including patterns represented in physical or diagram form	Ex. 1 1, 3	215	145	
2	Relationship between numbers including patterns not limited to sequences including difference	Ex. 2 1, 2	216	146	Worksheet 65 p. 2
3	Relationship between numbers including patterns not limited to sequences including ratio	Ex. 3 3	217	147	Worksheet 66 p. 4
4	Relationship between numbers including patterns of learners own creation	Ex. 1 4	215	146	
5	Relationship between numbers including patterns represented in tables	Ex. 3 1	217	147	Worksheet 68 p. 8

OXFORD SUCCESSFUL MATHEMATICS Week 2

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
6	Relationship between numbers including patterns represented in diagrams, tables, difference and ratio	Ex. 3 2, 4	218	147	Worksheet 68 p. 9
7	Input and output values p. 62 Determine rules for patterns using flow diagrams, tables and formula	Ex. 1 1, 2	228	153	Worksheet 72 p. 18
8	Determine, interpret and justify equivalence of different descriptions of the same rule represented verbally, in flow diagrams, in tables; Formula by number sentence	Ex. 1 1, 3, 4	230	153	Worksheet 73 p. 20
9	Revision <ul style="list-style-type: none"> Numeric and geometric patterns Input/output values 	Ex. 1 1, 4, 6	231	157	Worksheet 71b p. 16
10	Algebraic language p. 63 Recognise and interpret rules or relationships represented in symbolic form	Ex. 1 1–4	238	159	Worksheet 74 p. 22

OXFORD SUCCESSFUL MATHEMATICS Week 3

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
11	Identify variables and constants in given formulae	Ex. 2 2, 4	241	162	Worksheet 74 p. 23
12	Identify variables and constants in given equations	Ex. 2 1	240	161	Worksheet 77 p. 28
13	Number sentences p. 64 <ul style="list-style-type: none"> Write number sentences to describe problem situations Analyse and interpret number sentences that describe a given situation 	Ex. 1 1	243	163	Worksheet 79 p. 32
14	Solve and complete number sentences by inspection trial and improvement	Ex. 1 2	244	164	Worksheet 79 p. 33
15	Algebraic language p. 63 <ul style="list-style-type: none"> Identify variables and constants in given formulae or equations Determine the numerical value of an expression by substitution 	Ex. 2 1–4	245	164	Worksheet 78 p. 30

OXFORD SUCCESSFUL MATHEMATICS Week 4

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
16	Revision Algebraic equations and number sentences	1–4	249	168	Worksheet 76 p. 30
17	Assignment OR catch up or revision	Task	–	264–265 OR 266	
18	Interpreting graphs p. 65 Analyse and interpret global graphs of problem situations with special focus on: • linear or non-linear (temperature and time graphs)	Ex. 1 1–3	254	171	Worksheet 80a p. 34
19	Analyse and interpret global graphs of problem situations with special focus on: • constant increasing (rainfall and time graphs)	Ex. 2 1	256	172	Worksheet 80b p. 36
20	Analyse and interpret global graphs of problem situations with special focus on: • constant decreasing (time and distance travelled)	Ex. 2 2	256	172	Worksheet 81 p. 38

OXFORD SUCCESSFUL MATHEMATICS Week 5

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
21	Analyse and interpret global graphs of problem situations with special focus on: • linear or non-linear • constant increasing or decreasing (drawing of graphs)	Ex. 1 1	260	174	Worksheet 81 p. 39
22	Draw global graphs from given descriptions of a problem situation, by identifying features like: • linear and non-linear (drawing of graphs)	Ex. 1 2	260	174	Worksheet 82 p. 40
23	Draw global graphs from given descriptions of a problem situation, by identifying features like: • constants (drawing of graphs)	Ex. 2 1	261	175	Worksheet 83a p. 42
24	Revision Algebraic equations, number sentences and graphs	1, 2	264	176	
25	Remediation of assignment if done OR catch up or revision				

OXFORD SUCCESSFUL MATHEMATICS Week 6

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
26	Transformations p. 65 Recognise, describe and perform translations and reflections with geometric figures and shapes on squared paper	Ex. 1 1–5 Ex. 2 1 Ex. 2 3, 4	265 271	179	Worksheet 86 p. 50 Worksheet 88 p. 54 Worksheet 86 p. 51 no. b Worksheet 89 p. 56
27	Recognise, describe and perform rotations with geometric figures and shapes on squared paper	Ex. 2 5, 6	271	179	Worksheet 86 p. 51 no. a Worksheet 87 p. 52
28	Identify and draw lines of symmetry in geometric figures	Ex. 1 1–3 Ex. 2	273 275	180	Worksheet 92 p. 62
29	Draw enlargements and reductions of geometric figures on squared paper and compare them in terms of size and shape	Ex. 1 1	278	182	Worksheet 93 p. 64
30	FORMAL ASSESSMENT Project Select one of the two options	Project option 1 or 2	386–387 388–389	267 268	

OXFORD SUCCESSFUL MATHEMATICS Week 7

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
31	Enlargements and reductions p. 65 Draw enlargements and reductions of geometric figures on squared paper and recognise the production of congruent figures	Ex. 1 2	278	182	Worksheet 94 p. 66
32	Draw enlargements and reductions of geometric figures on squared paper and recognise the change of size of figures by increasing or decreasing BUT keeping the same length will produce similar instead of congruent figures	Ex. 2 1	279	183	Worksheet 94 p. 67
33	Draw enlargements and reductions of geometric figures on squared paper and find the factor of enlargement or reduction	Ex. 2 2	279	183	
34	Classifying 3-D objects p. 66 Describe, sort and compare polyhedral in terms of: • shape • number of faces	Ex. 1 1–7	284	186	Worksheet 99 p. 76
35	Describe, sort and compare polyhedral in terms of: • number of edges • number of vertices	Ex. 2 1–7	287	188	Worksheet 100 p. 78

OXFORD SUCCESSFUL MATHEMATICS Week 8

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
36	Revise using nets to create models of geometric solids: cubes; prisms; Draw sketches of nets using knowledge of shape and number of faces of solids	Ex. 2 1–4 Ex. 1 1–5	293 291	189	Worksheet 104 p. 88 Worksheet 102a p. 82
37	Remediation of project				
38	Able to work out relative position of faces of the nets, using trial and error to match edges and vertices to build the 3-D object	2, 3, 4, 5	296	190	Worksheet 104 p. 89
39	Construction of nets is based on the number and shape of the solid and does not require measuring of internal angles of polygons	7, 8	298	191	Worksheet 101 p. 80
40	Revision Numeric and geometric patterns	1–4 1–3	221–222 224	149–150	

OXFORD SUCCESSFUL MATHEMATICS Week 9

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
41	Revision Functions and relationships	1–8 1–4	232–233 235	157–159	
42	Revision Algebraic equations and expressions	1–7	249	168	
43	Revision Graphs	1, 2	264	176	
44	Revision Geometry	1–4 1–6	281 296	184 191	
45	Revision				

OXFORD SUCCESSFUL MATHEMATICS Week 10

Revision and test – plan your week

OXFORD SUCCESSFUL MATHEMATICS Week 11

Revision and remediation of test

1.5 Platinum Mathematics

PLATINUM MATHEMATICS Week 1					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
1	Investigate and extend patterns pp. 58–61 Relationship between numbers including patterns represented in physical or diagram form	Ex. 11.1 1a–c 2d–f 3a–c	143	70	
2	Relationship between numbers including patterns not limited to sequences including difference	Ex. 11.2 1d–f 2e–g	143 144	70	Worksheet 65 p. 2
3	Relationship between numbers including patterns not limited to sequences including ratio	Ex. 11.2 2a–c	144	70	Worksheet 66 p. 4
4	Relationship between numbers including patterns of learners own creation	Ex. 11.3 2	145	71	
5	Relationship between numbers including patterns represented in tables	Ex. 11.3 3b–d	145	71	Worksheet 68 p. 8

PLATINUM MATHEMATICS Week 2					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
6	Relationship between numbers including patterns represented in diagrams, tables, difference and ratio	Ex. 11.5 2a–c 3a, d, g	148	72	Worksheet 68 p. 9
7	Revision • Numeric and geometric pattern	1a–c 2a–b 4a–c	149	73	Worksheet 72 p. 18
8	Assignment OR catch up or revision	Task	150	74	Worksheet 73 p. 20
9	Input and output values p. 62 Determine rules for patterns using flow diagrams, tables and formula	Ex. 12.1 1a–c 3a–c 5a, b	153	76	Worksheet 71b p. 16
10	Determine, interpret and justify equivalence of different descriptions of the same rule represented verbally, in flow diagrams, in tables; Formula by number sentence	Ex. 12.3 1, 4a, 5a	156	77	Worksheet 74 p. 22

PLATINUM MATHEMATICS Week 3

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
11	Algebraic language p. 63 Recognise and interpret rules or relationships represented in symbolic form	Ex. 13.1 1–10	159	80	Worksheet 74 p. 23
12	Identify variables and constants in given formulae	Ex. 13.2 1–5	160	80	Worksheet 77 p. 28
13	Identify variables and constants in given equations	Ex. 13.3 1a, b 2c, d 3a–e	162	81	Worksheet 79 p. 32
14	Number sentences p. 64 <ul style="list-style-type: none"> Write number sentences to describe problem situations Analyse and interpret number sentences that describe a given situation 	Ex. 14.1 1a–c 2a–f	165	83	Worksheet 79 p. 33
15	Solve and complete number sentences by: <ul style="list-style-type: none"> inspection trial and improvement 	Ex. 14.2 1–5	166	84	Worksheet 78 p. 30

PLATINUM MATHEMATICS Week 4

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
16	Algebraic language p. 63 <ul style="list-style-type: none"> Identify variables and constants in given formulae or equations Determine the numerical value of an expression by substitution 	1a, b 2c, d 5a	167	85	Worksheet 76 p. 30
17	Revision Algebraic equations and number sentences	3a–c 4a, b	167	85	
18	Interpreting graphs p. 65 Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> linear or non-linear (temperature and time graphs) 	Ex. 15.1 2a–g	172	87	Worksheet 80a p. 34
19	Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> constant increasing (rainfall and time graphs) 	Ex. 15.1 4	173	87	Worksheet 80b p. 36
20	Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> constant decreasing (time and distance travelled) 	Ex. 15.1 3	172	87	Worksheet 81 p. 38

PLATINUM MATHEMATICS Week 5

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
21	Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> linear or non-linear constant increasing or decreasing (drawing of graphs) 	Ex. 15.2 1a–d	175	88	Worksheet 81 p. 39
22	Draw global graphs from given descriptions of a problem situation, by identifying features like: <ul style="list-style-type: none"> linear and non-linear (drawing of graphs) 	5	176	89	Worksheet 82 p. 40
23	Draw global graphs from given descriptions of a problem situation, by identifying features like: <ul style="list-style-type: none"> constants (drawing of graphs) 	3	176	88	Worksheet 83a p. 42

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
24	Revision Algebraic equations, number sentences and graphs	1, 2, 4	176	88	
25	Remediation of assignment if done OR catch up or revision				

PLATINUM MATHEMATICS Week 6

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
26	Transformations p. 65 Identify and draw lines of symmetry in geometric figures	Ex. 16.2 5, 7	182	92	Worksheet 86 p. 51 no. b Worksheet 89 p. 56
27	Recognise, describe and perform reflections and translations with geometric figures and shapes on squared paper	Ex. 16.1 1–10 Ex. 16.2 1–4	179 181 182	91 92	Worksheet 86 p. 50 Worksheet 88 p. 54 Worksheet 86 p. 51 no. a Worksheet 87 p. 52
28	Recognise, describe and perform rotations with geometric figures and shapes on squared paper	Ex. 16.3 2a–d 3a–d 4	184	93	Worksheet 92 p. 62
29	Draw enlargements and reductions of geometric figures on squared paper and compare them in terms of shape	Ex. 16.4 1a, 2	187	94	Worksheet 93 p. 64
30	Draw enlargements and reductions of geometric figures on squared paper and compare them in terms of size	Ex. 16.4 3, 4a, b	187	94	Worksheet 93 p. 65

PLATINUM MATHEMATICS Week 7

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
31	Enlargements and reductions p. 65 Draw enlargements and reductions of geometric figures on squared paper and recognise the production of congruent figures	5, 6	190	95	Worksheet 94 p. 66
32	Draw enlargements and reductions of geometric figures on squared paper and recognise the change of size of figures by increasing or decreasing BUT keeping the same length will produce similar instead of congruent figures	7, 8	190	95	Worksheet 94 p. 67
33	Draw enlargements and reductions of geometric figures on squared paper and find the factor of enlargement or reduction	Ex. 16.4 7a–c 8a–c	187	94	
34	FORMAL ASSESSMENT Project	Task	192	96	Worksheet 99 p. 76
35	Classifying 3-D objects p. 66 Describe, sort and compare polyhedral in terms of: <ul style="list-style-type: none"> • shape • number of faces 	Ex. 17.1	195	100	Worksheet 100 p. 78

PLATINUM MATHEMATICS Week 8

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
36	Describe, sort and compare polyhedral in terms of: <ul style="list-style-type: none"> • number of edges • number of vertices 	Ex. 17.1 2a–c	195	100	Worksheet 102a p. 82
37	Revision Use nets to create models of geometric solids: prisms; cubes; Draw sketches of nets using knowledge of shape and number of faces of solids	Ex. 17.4 Ex. 17.2 1a–d 2 3a–e	198 202	101	Worksheet 101 p. 80 Worksheet 104 p. 88
38	Construction of nets is based on the number and shape of the solid and does not require measuring of internal angles of polygons	Ex. 17.3 1, 2, 4	198	101	Worksheet 104 p. 89
39	Remediation of project				
40	Able to work out relative position of faces of the nets, using trial and error to match edges and vertices to build the 3-D object	Ex. 17.5 1, 2a–f	204		

PLATINUM MATHEMATICS Week 9

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
41	Revision Numeric and geometric patterns	2, 3, 5	149	73	
42	Revision Functions and relationships	1–4 1–8	157 163	78 82	
43	Revision Algebra Graphs	1–6 1–8	167 176–177	85 88–89	
44	Revision Transformations Geometry	1–12 1–7	190–191 205	95 104	
45	Revision	Task	206	105	

PLATINUM MATHEMATICS Week 10
Revision and test – plan your week

PLATINUM MATHEMATICS Week 11
Revision and remediation of test

1.6 Premier Mathematics

PREMIER MATHEMATICS Week 1					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
1	Investigate and extend patterns pp. 58–61 Relationship between numbers including patterns represented in physical or diagram form	Ex. 1 1a–e 3	80	64	
2	Relationship between numbers including patterns not limited to sequences including difference	Ex. 1 1f–j 2a–d	81	64–65	Worksheet 65 p. 2
3	Relationship between numbers including patterns not limited to sequences including ratio	Ex. 2 1–4	81–82	65	Worksheet 66 p. 4
4	Relationship between numbers including patterns represented in tables	Ex. 3 1–3	83	65–66	Worksheet 68 p. 8
5	Relationship between numbers including patterns of learners own creation	Ex. 2 5, 6 Ex. 3 4 Ex. 4 a–d	82 83 83	65–66	Worksheet 68 p. 9

PREMIER MATHEMATICS Week 2					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
6	Input and output values p. 62 Determine rules for patterns using flow diagrams, tables and formula	Ex. 1 1a–e	85	66	Worksheet 72 p. 18
7	Input and output values p. 62 Determine rules for patterns using flow diagrams, tables and formula	Ex. 1 2a–e	85	66	Worksheet 72 p. 18
8	Input and output values p. 62 Determine, interpret and justify equivalence of different descriptions of the same rule represented verbally, in flow diagrams, in tables; Formula by number sentence	Ex. 2 1–3	86	67	Worksheet 73 p. 20
9	Algebraic language p. 63 Recognise and interpret rules or relationships represented in symbolic form	Ex. 1 1a–j	87	67	Worksheet 71b p. 16
10	Algebraic language p. 63 Recognise and interpret rules or relationships represented in symbolic form	Ex. 1 2a–j	88	67	Worksheet 74 p. 22

PREMIER MATHEMATICS Week 3

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
11	Algebraic language p. 63 Identify variables and constants in given formulae	Ex. 2 1a–e 2a–e	88	68	Worksheet 74 p. 23
12	Identify variables and constants in given equations	Ex. 1 1, 2a–h	89	68	Worksheet 77 p. 28
13	Number sentences p. 64 <ul style="list-style-type: none"> Write number sentences to describe problem situations Analyse and interpret number sentences that describe a given situation 	Ex. 2 1–5	90	69–70	Worksheet 79 p. 32
14	Solve and complete number sentences by: <ul style="list-style-type: none"> inspection trial and improvement 	Ex. 3 1a–e 2e–i 3a–e	90 91	70	Worksheet 79 p. 33
15	Algebraic language p. 63 <ul style="list-style-type: none"> Identify variables and constants in given formulae or equations Determine the numerical value of an expression by substitution 	Ex. 4 1 a–e 2a–e 3a–e	91	71	

PREMIER MATHEMATICS Week 4

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
16	Revision Algebraic Equations and Number Sentences	Ex. 4 1f–i 2f–i 3f–i	91	71	Worksheet 76 p. 30
17	Interpreting graphs p. 65 Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> linear or non-linear (temperature and time graphs) 	Ex. 1 1a–k	93–94	71–72	
18	Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> constant increasing (rainfall and time graphs) 	Ex. 1 3a–l 4a–n	94–95	72	Worksheet 80a p. 34
19	Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> constant decreasing (time and distance travelled) 	Ex. 1 2a–l	94	72	Worksheet 80b p. 36
20	Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> linear or non-linear constant increasing or decreasing (drawing of graphs) 	Ex. 1 5	96	73	Worksheet 81 p. 38

PREMIER MATHEMATICS Week 5

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
21	Draw global graphs from given descriptions of a problem situation, by identifying features like: <ul style="list-style-type: none"> linear and non-linear (drawing of graphs) 	Ex. 2 1a–f 2a–h	98–99	73–74	Worksheet 81 p. 39
22	Draw global graphs from given descriptions of a problem situation, by identifying features like: <ul style="list-style-type: none"> constants (drawing of graphs) 	Ex. 2 3a–f	99	74	Worksheet 82 p. 40

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
23	Assignment OR catch up or revision	Task 1a–l	100–101	75–76	
24	Revision Algebraic equations, number sentences and graphs	Ex. 2 4a–f	100	75	Worksheet 83a p. 42
25	Transformations p. 65 Recognise, describe and perform rotation with geometric figures and shapes on squared paper	Ex. 1 1a–f, 2a–d	102	77	Worksheet 86 p. 50 Worksheet 88 p. 54

PREMIER MATHEMATICS Week 6

*Select

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
26	Transformations p. 65 Recognise, describe and perform reflections with geometric figures and shapes on squared paper	Ex. 2 1a–c	103	77–78	Worksheet 86 p. 51 no. b Worksheet 89 p. 56
27	Transformations p. 65 Recognise, describe and perform translations with geometric figures and shapes on squared paper	Ex. 3 1 2a–d	103–104	78	Worksheet 86 p. 51 no. a
28	Transformations p. 65 Recognise, describe and perform rotations, reflections and translations with geometric figures and shapes on squared paper	Ex. 4 1a–f 2a–b	104	78–79	Worksheet 87 p. 52
29	Transformations p. 65 Identify and draw lines of symmetry in geometric figures	Ex. 5 1, 2	105 *TG 81	79–80	Worksheet 92 p. 62
30	Remediation of assignment if done OR catch up or revision				

PREMIER MATHEMATICS Week 7

*Select

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
31	Enlargements and reductions p. 65 Draw enlargements and reductions of geometric figures on squared paper and compare them in terms of size	Ex. 6 1a–b 2a–c	106	80	Worksheet 93 p. 64
32	Enlargements and reductions p. 65 Draw enlargements and reductions of geometric figures on squared paper and find the factor of enlargement or reduction	Ex. 6 3a–c	107	80	Worksheet 94 p. 66
33	Enlargements and reductions p. 65 Draw enlargements and reductions of geometric figures on squared paper and recognise the change of size of figures by increasing or decreasing BUT keeping the same length will produce similar instead of congruent figures	Ex. 6 4a–c	107	80	Worksheet 94 p. 67
34	Classifying 3-D objects p. 66 Describe, sort and compare polyhedral in terms of: <ul style="list-style-type: none"> • shape • number of faces • number of edges • number of vertices 	Ex. 1 1a–c 2 3a–b 4a–b	108 *TG 85	82	Worksheet 99 p. 76
35	Classifying 3-D objects p. 66 Describe, sort and compare polyhedral in terms of: <ul style="list-style-type: none"> • shape • number of faces • number of edges • number of vertices 	Ex. 1 5a–c 6a–d	109–110	83	Worksheet 100 p. 78

PREMIER MATHEMATICS Week 8

*Select

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
36	Revision Use nets to create models of geometric solids: prisms; cubes; Draw sketches of nets using knowledge of shape and number of faces of solids	Ex. 2 1a–e 2a–h	110–111	84	Worksheet 101 p. 80 Worksheet 102a p. 82
37	Construction of nets is based on the number and shape of the solid and does not require measuring of internal angles of polygons	Ex. 2 3a–d	111	84	Worksheet 104 p. 88
38	Able to work out relative position of faces of the nets, using trial and error to match edges and vertices to build the 3-D object	Ex. 2 4	111 *TG 86–87	84	Worksheet 104 p. 89
39	FORMAL ASSESSMENT Project	Task	112	88	
40	Revision Numeric patterns Using formula and tables Algebraic expressions	Ex. 1 1a–c Ex. 2 1a–c Ex. 3 1–11	113	89	

PREMIER MATHEMATICS Week 9

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
41	Revision Algebra	Ex. 4 1a–c 2a–c 3a–c Ex. 5 (Graph)	114		
42	Revision Transformation geometry	Ex. 5 1a–f 2a–c 3a–c 1	114–116	89–90 (Ex. 6)	
43	Revision Geometry of 3-D objects	Ex. 6 2a–d 3a–b 1 4a–b 5	116–117	90 (Ex. 7)	
44	Remediation of project				
45	Revision				

PREMIER MATHEMATICS Week 10

Revision and test – plan your week

PREMIER MATHEMATICS Week 11

Revision and remediation of test

1.7 Sasol Inzalo Mathematics

SASOL INZALO MATHEMATICS Week 1					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
1	Numeric and geometric patterns pp. 58–61 11.1 Number patterns in sequences What comes next?	1–2	159–160	177–179	Worksheets 65, 66 pp. 2–7
2	Relationships between dependent and independent variables	1–3	160–162	179–181	Worksheet 67 pp. 6–7
3	11.2 Geometric patterns Constant quantities and variable quantities	1–6	162–163	181–182	Worksheet 68 pp. 8–9
4	Patterns with matches	1–3	163–165	182–184	Worksheet 69 pp. 10–11
5	More geometric patterns	1–7	165–166	184–186	Worksheet 70 pp. 12–13

SASOL INZALO MATHEMATICS Week 2					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
6	Squares and cubes	1–3	166–167	185–186	Worksheet 71a pp. 14–15
7	Functions and relationships p. 62 12.1 From counting to calculating	1–4	169–170	189–191	Worksheet 71b pp. 16–17
8	12.2 What to calculate and how Representing situations mathematically	1–2	170–172	191–193	Worksheet 72 pp. 18–19
9	12.3 Input and output numbers From formulae to tables From patterns to formulae	1–1 1–2	172–173	193–194	Worksheet 73 pp. 20–21
10	Algebraic expressions p. 63 13.1 Describing and doing computations	1–5	174–175	195–197	Worksheet 74 pp. 22–23

SASOL INZALO MATHEMATICS Week 3					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
11	13.1 Describing and doing computations cont.	6–10	176–177		Worksheet 75 pp. 24–25
12	13.2 Relationships represented in formulae	1–4	177–178		Worksheet 76 pp. 26–27
13	FORMAL ASSESSMENT Project Use a project from another LTSM or make up one of your own				
14	Algebraic equations p. 64 14.1 Solving by inspection Number puzzles The solution is there to see	1–3 1–2	179–180		Worksheet 77 pp. 28–29
15	14.2 Solving by trial and improvement method Solving by inspection or trial and improvement	1–5 1–2	180–181		Worksheet 78 pp. 30–31

SASOL INZALO MATHEMATICS Week 4

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
16	14.3 Describing problem situations with equations Write number sentences to describe problem situations Making sense of equations	1–9 1–3	181–182	204–205	Worksheet 79 pp. 32–33
17	Graphs p. 65 15.1 A graph can tell a story 15.2 Investigating rate of change in situations	1–2 1	183–184	207–209	Worksheets 80a, 80b pp. 34–37
18	15.2 Investigating rate of change in situations cont.	2–6	185–186	210–211	Worksheet 81 pp. 38–39
19	15.3 Interpreting graphs Reading graphs Change and rate of change	1–2 1–2	187–189	212–213	Worksheet 82 pp. 40–41
20	Project Return the project and discuss the work with the learners Allow them time to do corrections				

SASOL INZALO MATHEMATICS Week 5

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
21	Change and rate of change cont.	3–6	189–190	214–215	Worksheets 83a, 83b pp. 42–45
22	Exploring more graphs	1–4	191–192	216–217	Worksheet 84 pp. 46–47
23	15.4 Drawing graphs	1–5	192–193	217–218	Worksheet 85 pp. 48–49
24	Transformation geometry p. 65 16.1 Lines of symmetry What is the line of symmetry? Identifying lines of symmetry	1–3	194–196	219–222	Worksheets 86, 87 pp. 50–53
25	16.2 Original figures and their images 16.3 Translating figures	1–3	197–200	223–226	Worksheet 88 pp. 54–55

SASOL INZALO MATHEMATICS Week 6

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
26	16.4 Reflecting figures Investigating the properties of reflection	1–4	200–202	226–228	Worksheet 89 pp. 56–57
27	Properties of reflection Practice reflecting figures	1–2	202–204	229–230	Worksheet 90 pp. 58–59
28	16.5 Rotating figures Investigating the properties of rotation	1–4	205–207	231–233	Worksheet 91 pp. 60–61
29	Properties of rotation Practise rotating figures	1–3	207–208	234	Worksheet 92 pp. 62–63
30	16.6 Enlarging and reducing figures Investigate the properties of enlargements and reductions	1–2	209	235–236	Worksheet 93 pp. 64–65

SASOL INZALO MATHEMATICS Week 7

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
31	Similar figures Practise resizing figures	1–6	210–212	237–238	Worksheet 94 pp. 66–67
32	Geometry of 3-D objects p. 66 17.1 Classifying 3-D objects What is a polyhedron? Identifying and describing 3-D objects	1–4	213–215	239–241	Worksheet 95 pp. 68–69
33	17.2 Prisms and pyramids Difference between prisms and pyramids Identifying prisms and pyramids	1–2	215–217	242–244	Worksheets 96, 97 pp. 70–73
34	17.3 Describing, sorting and comparing 3-D objects	1–2	218–219	245–246	Worksheet 98 pp. 74–75
35	17.4 Nets of 3-D objects A cube or not a cube Identifying the nets of a cube	1–9 1	220–222	247–249	Worksheets 99, 100 pp. 76–81

SASOL INZALO MATHEMATICS Week 8

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
36	Nets of other 3-D objects	1–5	223–224	250–251	Worksheets 102a, 102b pp. 82–85
37	Using nets to construct cubes and prisms How to draw a net of a prism Practise drawing nets and constructing 3-D models	1–2 1–3	225–226	252–253	Worksheets 103, 104 pp. 86–89
38	Revision				
39	Revision				
40	Revision				

SASOL INZALO MATHEMATICS Week 9

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
41	Revision				
42	Revision				
43	Revision				
44	Revision				
45	Revision				

SASOL INZALO MATHEMATICS Week 10

Revision and test – plan your week

SASOL INZALO MATHEMATICS Week 11

Revision and remediation of test

1.8 Solutions for All Mathematics

SOLUTIONS FOR ALL MATHEMATICS Week 1					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
1	Investigate and extend patterns pp. 58–61 Relationship between numbers including patterns represented in physical or diagram form	Act. 19.1 1–7	221–222	137	
2	Relationship between numbers including patterns not limited to sequences including difference	Ex. 19.1 1a–d 2a–e	220–221	136–137	Worksheet 65 p. 2
3	Relationship between numbers including patterns not limited to sequences including ratio	Ex. 19.2 1–3	223–224	138	Worksheet 66 p. 4
4	Relationship between numbers including patterns of learners own creation	Ex. 19.2 4–5	223–224	138	
5	Relationship between numbers including patterns represented in tables	Act. 19.2 1–2	222	137	Worksheet 68 p. 8

SOLUTIONS FOR ALL MATHEMATICS Week 2					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
6	Relationship between numbers including patterns represented in diagrams, tables, difference and ratio	Ex. 19.3 1–2	227	140	Worksheet 68 p. 9
7	Input and output values p. 62 Determine rules for patterns using flow diagrams, tables and formula	Act. 20.1 1a–d	230–231	143–144	Worksheet 72 p. 18
8	Determine, interpret and justify equivalence of different descriptions of the same rule represented verbally, in flow diagrams, in tables; Formula by number sentence	Act. 20.2 1–2	231–232	144	Worksheet 73 p. 20
9	Revision <ul style="list-style-type: none"> • Numeric and geometric patterns • Input/output values 	Ex. 20.2 3–4	234	146	Worksheet 71b p. 16
10	Algebraic language p. 63 Recognise and interpret rules or relationships represented in symbolic form	Act. 21.1 1–2	239	151	Worksheet 74 p. 22

SOLUTIONS FOR ALL MATHEMATICS Week 3

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
11	Identify variables and constants in given formulae	Ex. 21.1 1–4	240	151–152	Worksheet 74 p. 23
12	Number sentences p. 64 <ul style="list-style-type: none"> Write number sentences to describe problem situations Analyse and interpret number sentences that describe a given situation 	Act. 21.1 1–5 Act. 21.3 1–4	240–241	152	Worksheet 77 p. 28
13	Solve and complete number sentences by: <ul style="list-style-type: none"> inspection trial and improvement 	Ex. 21.2 1–3	242	153	Worksheet 79 pp. 32–33
14	Algebraic language p. 63 <ul style="list-style-type: none"> Identify variables and constants in given formulae or equations Determine the numerical value of an expression by substitution 	Act. 22.1 1–3 Ex. 22.1	246 247–248	157 158	
15	Algebraic language p. 63 <ul style="list-style-type: none"> Identify variables and constants in given formulae or equations Determine the numerical value of an expression by substitution 	Ex. 22.2 1–3 Act. 22.2 1–5	249–250	158	

SOLUTIONS FOR ALL MATHEMATICS Week 4

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
16	Algebraic language p. 63 Determine the numerical value of an expression by substitution	Ex. 22.3 1–2 Ex. 22.4 1–5	252 253	159	Worksheet 76 p. 30
17	Revision Algebraic equations and number sentences	1–5	254–255	310	
18	Assignment OR catch up or revision	Task	–	308–309	
19	Interpreting graphs p. 65 Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> linear or non-linear (temperature and time graphs) constant increasing (rainfall and time graphs) 	Act. 23.1 1a–q	257	161	Worksheets 80a & b pp. 34–36
20	Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> constant decreasing (time and distance travelled) 	Act. 23.4 1–4	262–263	168	Worksheet 81 p. 38

SOLUTIONS FOR ALL MATHEMATICS Week 5

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
21	Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> linear or non-linear constant increasing or decreasing (drawing of graphs) 	Ex. 23.2 1–4	264	168–169 5	Worksheet 81 p. 39
22	Draw global graphs from given descriptions of a problem situation, by identifying features like: <ul style="list-style-type: none"> linear and non-linear (drawing of graphs) 	Act. 23.1 2 Ex. 23.2 1–2	258–259	165	Worksheet 82 p. 40
23	Draw global graphs from given descriptions of a problem situation, by identifying features like: <ul style="list-style-type: none"> constants (drawing of graphs) 	Ex. 23.1 1–4 Act. 23.3	260–261 261	165–167 168	Worksheet 83a p. 42
24	Revision Analyse, interpret and draw graphs	1–4	266–267	169–170	
25	Transformations p. 65 Recognise, describe and perform translations with geometric figures and shapes on squared paper	Ex. 24.2 1–3	271	172	Worksheet 86 p. 50 Worksheet 88 p. 54

SOLUTIONS FOR ALL MATHEMATICS Week 6

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
26	Transformations p. 65 Recognise, describe and perform reflections and rotations with geometric figures and shapes on squared paper	Act. 24.2 Ex. 24.3 1–2	272 274	173 173	Worksheet 86 p. 50 Worksheet 88 p. 54
27	Recognise, describe and perform translations, reflections and rotations with geometric figures and shapes on squared paper	Act. 24.3 1–4 Ex. 24.4 1–3	275 276	173–174 174–175	Worksheet 86 p. 51 no. a Worksheet 87 p. 52
28	Revision Transformations	1–5	277–278	175	
29	Draw enlargements of geometric figures on squared paper and compare them in terms of shape	Act. 25.1	280 281	177 178	Worksheet 92 p. 62
30	Draw enlargements and reductions of geometric figures on squared paper and compare them in terms of size	Ex. 25.2 1–2	283–284	178–179	Worksheet 93 p. 64

SOLUTIONS FOR ALL MATHEMATICS Week 7

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
31	Enlargements and reductions p. 65 Draw enlargements and reductions of geometric figures on squared paper and recognise the production of congruent figures	Ex. 25.2 2	283	178–179	Worksheet 94 p. 66
32	Revision Enlargements and reductions	1, 2	284	179	
33	Classifying 3-D objects p. 66 Describe, sort and compare polyhedral in terms of: <ul style="list-style-type: none"> shape number of faces 	Act. 26.1 1–2 Act. 26.2 1–6	286–287 287	181–182 182	Worksheet 99 p. 76

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
34	Describe, sort and compare polyhedral in terms of: <ul style="list-style-type: none"> • number of edges • number of faces • number of vertices 	Ex. 26.2 Act. 26.3	288	182–183	Worksheet 100 p. 78
35	Describe, sort and compare polyhedral in terms of: <ul style="list-style-type: none"> • number of edges • number of faces • number of vertices 	Act. 26.4 1–5 Act. 26.5 1–2	290–291 291–292		

SOLUTIONS FOR ALL MATHEMATICS Week 8

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
36	Revise using nets to create models of geometric solids: cubes; prisms; Draw sketches of nets using knowledge of shape and number of faces of solids	Act. 27.3 Ex. 27.2 Act. 27.4	298 299 299–300	189–190 191 191	Worksheet 102a p. 82
37	Use nets to create models of different geometric solids: Draw sketches of nets using knowledge of shape and number of faces of solids	Ex. 27.3 1–2	301	190–191	Worksheet 104 p. 89
38	FORMAL ASSESSMENT Project	Task	–	292–296	
39	Revision 3-D objects	1–5	302–303	192	Worksheet 101 p. 80
40	Revision Numeric and geometric patterns	1–6	304–305	192–193	

SOLUTIONS FOR ALL MATHEMATICS Week 9

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
41	Revision Functions and relationships Algebraic expressions	1–5 1–5	306–307 307–308	193 193–194	
42	Revision Algebraic equations Graphs	1–7 1–4	308–309	194–195 195–196	
43	Revision Graphs	1–4	309–310	195–196	
44	Revision Transformations (Units 24 & 25) Geometry 3-D objects	1–6 1–6	311–314 314–315	196–198 198–199	
45	Revision	Task	–	297–302	

SOLUTIONS FOR ALL MATHEMATICS Week 10

Revision and test – plan your week

SOLUTIONS FOR ALL MATHEMATICS Week 11

Revision and remediation of test

1.9 Spot on Mathematics

SPOT ON MATHEMATICS Week 1					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
1	Investigate and extend patterns pp. 58–61 Relationship between numbers including patterns represented in physical or diagram form	Act. 12.1 1, 2, 3	170	198	
2	Relationship between numbers including patterns not limited to sequences including difference	Act. 12.1 4a–f, 5a–b	170	198	Worksheet 65 p. 2
3	Relationship between numbers including patterns not limited to sequences including ratio	Act. 12.2 1–2	171	199	Worksheet 66 p. 4
4	Relationship between numbers including patterns of learners own creation	Act. 12.3 3	173	200	
5	Relationship between numbers including patterns represented in tables	Act. 12.4 1, 2 Act. 12.6 2, 3	175 178	201 203	Worksheet 68 p. 8

SPOT ON MATHEMATICS Week 2					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
6	Relationship between numbers including patterns represented in diagrams, tables, difference and ratio	Act. 12.3 1, 3 Act. 12.5	173 177	200 202	Worksheet 68 p. 9
7	Input and output values p. 62 Determine rules for patterns using flow diagrams, tables and formula	Act. 13.1 1a–b 2a–c 3	185	208	Worksheet 72 p. 18
8	Determine, interpret and justify equivalence of different descriptions of the same rule represented verbally, in flow diagrams, in tables; Formula by number sentence	Act. 13.2 1–3	187	209	Worksheet 73 p. 20
9	Revision <ul style="list-style-type: none"> Numeric and geometric patterns Input/output values 	1, 2, 3a, 6 1, 3, 7	181 189	205 210	Worksheet 71b p. 16
10	Algebraic language p. 63 Recognise and interpret rules or relationships represented in symbolic form	Act. 14.1 3 Act. 14.2 1	192 193	214 215	Worksheet 74 p. 22

SPOT ON MATHEMATICS Week 3

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
11	Identify variables and constants in given formulae	Act. 14.1 1–2	192	214	Worksheet 74 p. 23
12	Algebraic language p. 63 Recognise and interpret rules or relationships represented in symbolic form	Act. 14.2 2–8	194	215	Worksheet 77 p. 28
13	Algebraic language p. 63 Recognise and interpret rules or relationships represented in symbolic form	Act. 14.4 1–4	196	216	
14	Number sentences p. 64 <ul style="list-style-type: none"> Write number sentences to describe problem situations Analyse and interpret number sentences that describe a given situation 	Act. 15.1 1–4	201	220	Worksheet 79 p. 32
15	Solve and complete number sentences by: <ul style="list-style-type: none"> inspection trial and improvement 	Act. 15.2 1a–e 2a–c 3a–e	202–203	221	Worksheet 79 p. 33

SPOT ON MATHEMATICS Week 4

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
16	Algebraic language p. 63 <ul style="list-style-type: none"> Identify variables and constants in given formulae or equations Determine the numerical value of an expression by substitution 	Act. 15.3 1–4 Act. 15.4 1a–e	205 206	222–223 224	
17	Revision Algebraic equations and number sentences	1–7 1–3	198 208	218 226	Worksheet 76 p. 30
18	Interpreting graphs p. 65 Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> linear or non-linear 	Act. 16.1 1–2	211	228	Worksheet 80a p. 34
19	Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> constant increasing 	Act. 16.2 1	212	229	Worksheet 80b p. 36
20	Analyse and interpret global graphs of problem situations with special focus on: <ul style="list-style-type: none"> constant increasing (rainfall and time graphs) 	Act. 16.2 2	213	229	Worksheet 81 p. 38

SPOT ON MATHEMATICS Week 5					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
21	Draw global graphs from given descriptions of a problem situation, by identifying features like: <ul style="list-style-type: none"> • linear and non-linear drawing of graphs (time and distance travelled) 	Act. 16.3 1a–f 2a–b	214–215	230	Worksheet 81 p. 39
22	Draw global graphs from given descriptions of a problem situation, by identifying features like: <ul style="list-style-type: none"> • linear and non-linear (drawing of graphs) 	Act. 16.3 2a–b	215	232	Worksheet 82 p. 40
23	Draw global graphs from given descriptions of a problem situation, by identifying features like: <ul style="list-style-type: none"> • constants (drawing of graphs) 	Act. 16.3 3–4	215	231	Worksheet 83a p. 42
24	Revision Algebraic equations, number sentences and graphs	4–6 1a–j, 2	208 217–218	233	
25	Transformations p. 65 Identify and draw lines of symmetry in geometric figures	Act. 17.1 2, 3, 5	220–221	236	Worksheet 86 p. 50 Worksheet 88 p. 54

SPOT ON MATHEMATICS Week 6					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
26	Catch up or revision				
27	Recognise, describe and perform translation and rotations with geometric figures and shapes on squared paper	Act. 17.2 1, 2 Act. 17.3 1–3	222 223	239 240	Worksheet 86 p. 51 no. b Worksheet 89 p. 56 Worksheet 86 p. 51 no. a Worksheet 87 p. 52
28	Recognise, describe and perform reflections with geometric figures and shapes on squared paper	Act. 17.4 1–3	225	241	Worksheet 92 p. 62
29	Draw enlargements and reductions of geometric figures on squared paper and compare them in terms of shape	Act. 17.5 1	226	242	Worksheet 93 p. 64
30	Draw enlargements and reductions of geometric figures on squared paper and compare them in terms of size	Act. 17.5 3	227	242	

SPOT ON MATHEMATICS Week 7					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
31	Enlargements and reductions p. 65 Draw enlargements and reductions of geometric figures on squared paper and recognise the production of congruent figures	Act. 17.5 2a–b	227	242	Worksheet 94 p. 66
32	Draw enlargements and reductions of geometric figures on squared paper and recognise the change of size of figures by increasing or decreasing BUT keeping the same length will produce similar instead of congruent figures	Act. 17.5 4a–b	227	242	Worksheet 94 p. 67
33	Revision Transformations	1–7	229–230	244	

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
34	Classifying 3-D objects p. 66 Describe, sort and compare polyhedral in terms of: <ul style="list-style-type: none"> • shape • number of faces • number of edges • number of vertices 	Act. 18.1 1, 2	233	246	Worksheet 99 p. 76
35	Describe, sort and compare polyhedral in terms of: <ul style="list-style-type: none"> • number of edges • number of vertices 	Act. 18.2 1–2	235	247	Worksheet 100 p. 78

SPOT ON MATHEMATICS Week 8

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
36	Revise using nets to create models of geometric solids: cubes; prisms; Draw sketches of nets using knowledge of shape and number of faces of solids	Act. 18.3 1–2 Act. 18.4 1	237 238	248 249	Worksheet 104 p. 88 Worksheet 102a p. 82
37	Construction of nets is based on the number and shape of the solid and does not require measuring of internal angles of polygons	Act. 18.4 2	238	249	Worksheet 104 p. 89
38	Able to work out relative position of faces of the nets, using trial and error to match edges and vertices to build the 3-D object	Act. 18.4 3	238	249	Worksheet 101 p. 80
39	FORMAL ASSESSMENT Project	Task	–	252–254	
40	Revision Numeric and geometric patterns	1–6	242	256	

SPOT ON MATHEMATICS Week 9

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
41	Revision Functions and relationships	1–5	243	257	
42	Revision Algebraic expressions and equations	1–8 1–6	244 245	258 259	
43	Revision Graphs and transformation geometry	1–2 1–4	246 247	260 261	
44	Revision Geometry of 3-D objects	1–6 1–3	248 240	262 251	
45	Revision	Task	–	263	

SPOT ON MATHEMATICS Week 10 Revision and test – plan your week

SPOT ON MATHEMATICS Week 11 Revision and remediation of test

2. PLANNERS FOR TERM 4

2.1 Clever: Keeping Maths Simple

CLEVER: KEEPING MATHS SIMPLE Week 1					
*Select					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
1	Integers p. 67 Orientation – Introduction to integers	Ex. 1 1a–b, 2, 3, 6a	285 286	262	Worksheet 105 pp. 90–91
2	Counting, ordering and comparing integers p. 67 <ul style="list-style-type: none"> Count forwards and backwards in integers for any interval Recognise, order and compare integers 	Ex. 1 4a, 5a, 6b, 7a–b	286	262	Worksheet 106 pp. 92–93
3	Calculations with integers p. 67 <ul style="list-style-type: none"> Basic calculations with integers Add and subtract integers Integer calculations 	Ex. 2 1a–c, 3a Ex. 2 2a–c, 3b, 4a	289	264–265	Worksheet 107 p. 94 Worksheet 108 pp. 98–99
4	Properties of integers p. 67 Recognise and use commutative properties of addition and multiplication for integers	Ex. 3 1c–f, 2b, 3b	291 292	264–265	Worksheet 111 pp. 100–101
5	Recognise and use associative and distributive properties of addition and multiplication for integers	Ex. 3 4, 5, 7a–c, 8a	292–293	266	*Worksheet 113 pp. 104–105 *Worksheet 113 pp. 106–107

CLEVER: KEEPING MATHS SIMPLE Week 2					
*Select					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
6	Solving problems p. 67 Solving problems in contexts involving integers	Ex. 3 9–11	293	266	
7	Numeric and geometric patterns p. 68 Investigate and extend patterns Investigate and extend numeric and geometric patterns looking for relationships between numbers and including patterns: <ul style="list-style-type: none"> Represented in physical or diagram form not limited to sequences involving a constant ratio Of learner's own creation and represented in tables 	Ex. 1 1a–f, 2a–b, 4a–d Ex. 5	296 297	270 271–272	*Worksheet 114 p. 108 *Worksheet 115 p. 110
8	Functions and relationships p. 68 Input and output values <ul style="list-style-type: none"> Describe and justify the general rules for observed relationships between numbers in own words Determine input values, output values or rules for patterns and relationships using flow diagrams and tables 	Ex. 1 3a–b Ex. 1 2c–d	297	271	Worksheet 116 pp. 111–112
9	Determine, interpret and justify equivalence of different descriptions of the same relationship or rule presented: <ul style="list-style-type: none"> Verbally In flow diagrams In tables 	Ex. 1 4e–f Ex. 2 1 a–f	297 299–300	272 272–273	Worksheet 117b pp. 108–109
10	Functions and relationships p. 68 Equivalent forms Determine, interpret and justify equivalence of different descriptions of the same relationship or rule presented: <ul style="list-style-type: none"> By formulae and by number sentence 	Ex. 2 2–3	300	273–274	Worksheet 118a p. 118

CLEVER: KEEPING MATHS SIMPLE Week 3

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
11	Determine, interpret and justify equivalence of different descriptions of the same relationship or rule presented: <ul style="list-style-type: none"> Verbally In flow diagrams In tables 	Ex. 1 1–3	303–304	279–280	
12	Investigation OR catch up or revision		356	326–327	
13	Algebraic expressions p. 69 Algebraic language Recognise and interpret rules or relationships represented in symbolic form	Ex. 1 1a–d 2a–c	307	285	Worksheet 120 p. 130
14	Algebraic expressions p. 69 Algebraic language Identify variables and constants in formulae and equations	Ex. 2 2a–f	308	285 286	Worksheet 121 p. 126
15	Algebraic expressions p. 69 Algebraic language Number sentences <ul style="list-style-type: none"> Write a number sentence to describe problem situations Analyse and interpret a number sentence that describes a given situation Solve and complete number sentences by: <ul style="list-style-type: none"> Inspection Trial and improvement 	Ex. 2 4a–g, 5a–b, 6, 7	308 309	286–287	Worksheet 119 p. 122

CLEVER: KEEPING MATHS SIMPLE Week 4

*Select

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
16	Algebraic expressions p. 69 Algebraic language Describe the numerical value of an expression by substitution	Ex. 2 1a–j 8a–c 9a–c 10a–d	308–310	285–287	Worksheet 123 p. 131 Worksheet 125 p. 133
17	Algebraic equations p. 69 Number sentences <ul style="list-style-type: none"> Write a number sentence to describe problem situations Analyse and interpret a number sentence that describes a given situation Solve and complete number sentences by: <ul style="list-style-type: none"> Inspection Trial and improvement 	Ex. 1 1a–d 3a–d 5a–b 6a–d	312–313	290–291	*Worksheet 121 p. 126
18	Probability p. 73 <ul style="list-style-type: none"> Perform simple experiments where the possible outcomes are equally likely List the possible outcomes based on the conditions of the activity 	1–3	345	321–322	Worksheet 137 p. 174
19	Probability p. 73 <ul style="list-style-type: none"> Perform simple experiments where the possible outcomes are equally likely Determine the probability of each possible outcome, using the definition of probability 	Ex. 1 1–3	349 350	322	Worksheet 138 p. 176

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
20	Probability p. 73 <ul style="list-style-type: none"> Perform simple experiments where the possible outcomes are equally likely List the possible outcomes based on the conditions of the activity Determine the probability of each possible outcome, using the definition of probability 	Ex. 2 1a–d	351	322	Worksheet 139 p. 178

CLEVER: KEEPING MATHS SIMPLE Week 5

*Select

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
21	Probability p. 73 Perform simple experiments where the possible outcomes are equally likely	Ex. 2 2a–c	351–352	322	Worksheet 140 p. 180
22	Collect data p. 70 <ul style="list-style-type: none"> Select appropriate sources for the collection of data (including peers, family, newspapers, books, magazines) Distinguish between samples and populations 	Ex. 1 1a–c 2a–c	317–319	298–300	Worksheet 126a p. 136
23	Organise and summarise data p. 70 <ul style="list-style-type: none"> Organise (including grouping where appropriate) and record data using: <ul style="list-style-type: none"> Tally and tables 	Ex. 2 1, 2 Ex. 3 1–3	320 323	301	Worksheet 126b p. 138 Worksheet 127a p. 140
24	Organise and summarise data p. 70 <ul style="list-style-type: none"> Organise (including grouping where appropriate) and record data using: <ul style="list-style-type: none"> Stem and leaf displays Summarise and distinguish between ungrouped numerical data by determining mean, median and mode Identify the largest and smallest scores in a data set and determine the difference between them in order to determine the spread of data (range) 	Ex. 4 1, 2a–f	325–326	301–302	Worksheet 128a p. 144
25	Representing data p. 72 <ul style="list-style-type: none"> Draw a variety of graphs by hand/technology to display and interpret data (grouped and ungrouped included): <ul style="list-style-type: none"> Bar graphs and double bar graphs 	Ex. 1 1a–e Ex. 2 1–4	328 330	307 308–309	Worksheet 128b p. 146

CLEVER: KEEPING MATHS SIMPLE Week 6

*Select

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
26	Representing data p. 72 <ul style="list-style-type: none"> • Draw a variety of graphs by hand/technology to display and interpret data (grouped and ungrouped included): <ul style="list-style-type: none"> – Histograms with given intervals – Pie charts 	Ex. 3 1a–e 2a–d Ex. 4 1–2	332–333 333–334	309–310 310–311	Worksheet 129a pp. 147–148
27	Interpret and analyse data p. 72 <ul style="list-style-type: none"> • Interpret – Critically read and interpret data represented in: <ul style="list-style-type: none"> – Words – Bar graphs and double bar graphs – Pie charts – Histograms • Analyse – Critically analyse data by answering questions related to: <ul style="list-style-type: none"> – Data categories, including data intervals – Data sources and contexts – Central tendencies (mean, mode, median) – Scales used on graphs 	Ex. 1 1–2	338–340	315	*Worksheet 131a p. 156 *Worksheet 131b p. 158 *Worksheet 133 p. 164
28	Report data p. 72 <ul style="list-style-type: none"> • Summarise data in short paragraphs that include: <ul style="list-style-type: none"> – Drawing conclusions about the data – Making predictions based on the data • Identifying sources of error and bias in the data 	Ex. 2 1–3 Ex. 3 1–2	341 343	315 315	Worksheet 134a p. 166
29	<ul style="list-style-type: none"> • Choosing appropriate summary statistics for the data (mean, mode, median) 	Ex. 4 1–3	344	315–316	Worksheet 134b p. 168
30	Assignment OR catch up or revision		353	323–325	

CLEVER: KEEPING MATHS SIMPLE Weeks 7 and 8
Revision and end-of-year examination – plan your work

CLEVER: KEEPING MATHS SIMPLE Week 9
Review of examination, remediation and learner corrections

2.2 Mathematics Today

MATHEMATICS TODAY Week 1					
*Select					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
1	Integers p. 67 Orientation – Introduction to integers	Ex. 18.1 1–3	236	93	Worksheet 105 pp. 90–91
2	Counting, ordering and comparing integers p. 67 <ul style="list-style-type: none"> Count forwards and backwards in integers for any interval Recognise, order and compare integers 	Ex. 18.2 1–5	237	93	Worksheet 106 pp. 92–93
3	Calculations with integers p. 67 <ul style="list-style-type: none"> Basic calculations with integers Add and subtract integers Integer calculations 	Ex. 18.5 1–2 Ex. 18.6 2–3	240 241	94	*Worksheet 107 pp. 94–94 *Worksheet 108 pp. 98–99
4	Properties of integers p. 67 <ul style="list-style-type: none"> Recognise and use commutative properties of addition and multiplication for integers 	Ex. 18.8 3	243	94	Worksheet 111 pp. 100–101
5	<ul style="list-style-type: none"> Recognise and use associative and distributive properties of addition and multiplication for integers 	Ex. 18.10 1–4	246	95	*Worksheet 113 pp. 104–105

MATHEMATICS TODAY Week 2					
*Select					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
6	Solving problems p. 67 Solving problems in contexts involving integers	Ex. 18.9 3	244	94	
7	Numeric and geometric patterns p. 68 Investigate and extend patterns Investigate and extend numeric and geometric patterns looking for relationships between numbers and including patterns: <ul style="list-style-type: none"> Represented in physical or diagram form not limited to sequences involving a constant ratio Of learner's own creation represented in tables 	Ex. 19.1 2, 3, 5 Ex. 19.2 1–3	250–251 253	97 98	*Worksheet 114 p. 108 *Worksheet 115 p. 110
8	Functions and relationships p. 68 <ul style="list-style-type: none"> Describe and justify the general rules for observed relationships between numbers in own words Determine input values, output values or rules for patterns and relationships using flow diagrams 	Ex. 20.1 1.1–1.10 2.1–2.6	258	101–102	Worksheet 116 pp. 111–112
9	Determine, interpret and justify equivalence of different descriptions of the same relationship or rule presented: <ul style="list-style-type: none"> Verbally In flow diagrams In tables 	Ex. 20.2 1, 2, 3	259–260	102	*Worksheet 114 pp. 108–109
10	Equivalent forms Determine, interpret and justify equivalence of different descriptions of the same relationship or rule presented: <ul style="list-style-type: none"> By formulae and number sentence 	Ex. 20.3 1, 2	262	102	Worksheet 118a p. 118

MATHEMATICS TODAY Week 3

*Select

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
11	Revision Functions and relationships graphs	1, 2, 3	263	103	
12	Algebraic expressions p. 69 Algebraic language Recognise and interpret rules or relationships represented in symbolic form Identify variables and constants in formulae and equations	Ex. 21.1 1, 2, 3, 4 Ex. 21.2 1–3	266 267	105	Worksheet 120 p. 130
13	Algebraic equations p. 69 Number sentences • Write a number sentence to describe problem situations	Ex. 22.1 1–3	273–274	108	Worksheet 121 p. 126
14	Algebraic equations p. 69 Number sentences • Write a number sentence to describe problem situations • Analyse and interpret a number sentence that describes a given situation • Solve and complete number sentences by: – Inspection – Trial and improvement	Ex. 22.3 1, 2 Ex. 22.4 1, 2	276–278	109	Worksheet 119 p. 122 *Worksheet 121 p. 126
15	Assignment OR catch up or revision	Task 1	281	111	

MATHEMATICS TODAY Week 4

*Select

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
16	Describe the numerical value of an expression by substitution	Ex. 22.6 1–4	279	109	Worksheet 123 p. 131 Worksheet 125 p. 133
17	Probability p. 73 • Perform simple experiments where the possible outcomes are equally likely • List the possible outcomes based on the conditions of the activity • Determine the probability of each possible outcome, using the definition of probability	Ex. 24.1 1–3	311	122	Worksheet 137 p. 174
18	Probability p. 73 • Perform simple experiments where the possible outcomes are equally likely • Determine the probability of each possible outcome, using the definition of probability	Ex. 24.2 1–3	313	122	Worksheet 138 p. 176
19	Probability p. 73 • Perform simple experiments where the possible outcomes are equally likely • List the possible outcomes based on the conditions of the activity • Determine the probability of each possible outcome, using the definition of probability	Ex. 24.3 1–5	315	123	Worksheet 139 p. 178
20	Remediate assignment if done Revise: Probability OR catch up or revision	1–4	316	124	

MATHEMATICS TODAY Week 5

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
21	Collect data p. 70 <ul style="list-style-type: none"> Select appropriate sources for the collection of data (including peers, family, newspapers, books, magazines) Distinguish between samples and populations 	Ex. 23.1 1, 2, 3	285	112	Worksheet 126a p. 136
22	Organise and summarise data p. 70 <ul style="list-style-type: none"> Organise (including grouping where appropriate) and record data using: <ul style="list-style-type: none"> Tally and tables Stem and leaf displays Data intervals 	Ex. 23.2 1, 2 Ex. 23.3 1, 2 Ex. 23.4 1–2	287–288	113	Worksheet 126b p. 138
23	Collect, organise and summarise data p. 71 <ul style="list-style-type: none"> Group data into intervals Summarise and distinguish between ungrouped numerical data by determining mean, median and mode Identify the largest and smallest scores in a data set and determine the difference between them in order to determine the spread of data (range) 	Ex. 23.5 1 Ex. 23.6 1–5 Ex. 23.7 2 Ex. 23.8 2	290 291 292 293	113 114 115	Worksheet 127b p. 142 Worksheet 128a p. 144 Worksheet 128b p. 146
24	Representing data p. 72 <ul style="list-style-type: none"> Draw a variety of graphs by hand/technology to display and interpret data (grouped and ungrouped included): <ul style="list-style-type: none"> Bar graphs and double bar graphs 	Ex. 23.9 1–4 Ex. 23.10 1–2	295 296–297	115 116	Worksheet 129a pp. 147–148
25	Representing data p. 72 <ul style="list-style-type: none"> Draw a variety of graphs by hand/technology to display and interpret data (grouped and ungrouped included): <ul style="list-style-type: none"> Histograms with given intervals Pie charts 	Ex. 23.11 1–2 Ex. 23.12 1–2	298 299	116–117	*Worksheet 131a p. 156 *Worksheet 131b p. 158

MATHEMATICS TODAY Week 6

*Select

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
26	Interpret and analyse data p. 72 <ul style="list-style-type: none"> • Interpret – Critically read and interpret data represented in: <ul style="list-style-type: none"> – Words – Bar graphs and double bar graphs – Pie charts – Histograms • Analyse – Critically analyse data by answering questions related to: <ul style="list-style-type: none"> – Data categories, including data intervals – Data sources and contexts – Central tendencies (mean, mode, median) – Scales used on graphs • Analyse – Critically analyse data by answering questions related to: <ul style="list-style-type: none"> – Data categories, including data intervals – Data sources and contexts – Central tendencies (mean, mode, median) – Scales used on graphs 	Ex. 23.13 1	301	117–118	*Worksheet 131a p. 156
		Ex. 23.14 1	303	118	*Worksheet 131b p. 158
		Ex. 23.14 2–3	303–304	118	*Worksheet 133 p. 164
27	Report data p. 72 <ul style="list-style-type: none"> • Summarise data in short paragraphs that include: <ul style="list-style-type: none"> – Drawing conclusions about the data – Making predictions based on the data 	Ex. 23.15 1	305	118	Worksheet 134a p. 166 Worksheet 134b p. 168
28	<ul style="list-style-type: none"> • Identifying sources of error and bias in the data 	Ex. 23.14	305	118	
29	Revision: Data Handling	1, 2, 3	306	119	
30	Investigation OR catch up or revision	Task 2	307	120–121	

MATHEMATICS TODAY Weeks 7 and 8
Revision and end-of-year examination – plan your work

MATHEMATICS TODAY Week 9
Review of examination, remediation and learner corrections

2.3 Oxford Headstart Mathematics

OXFORD HEADSTART MATHEMATICS Week 1					
*Select					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
1	Integers p. 67 Orientation – Introduction to integers	Act. 1 1–4	293	236	Worksheet 105 pp. 90–91
2	Counting, ordering and comparing integers p. 67 <ul style="list-style-type: none"> Count forwards and backwards in integers for any interval Recognise, order and compare integers 	Act. 3 1 Act. 4 1, 2, 4	294 295	237 298	Worksheet 106 pp. 92–93
3	Calculations with integers p. 67 <ul style="list-style-type: none"> Basic calculations with integers Add and subtract integers Integer calculations 	Act. 1 1–8 Act. 2 2 Act. 3	298 300 301	239 241	Worksheet 107 pp. 94–94 Worksheet 108 pp. 98–99
4	Properties of integers p. 67 Recognise and use commutative properties of addition and multiplication for integers	Act. 1 1–5	302	242	Worksheet 111 pp. 100–101
5	Recognise and use associative and distributive properties of addition and multiplication for integers	Act. 1 6–11	302	242	*Worksheet 113 pp. 104–105

OXFORD HEADSTART MATHEMATICS Week 2					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
6	Solving problems p. 67 Solving problems in contexts involving integers	Act. 2 1a–e, 3	303	243	
7	Numeric and geometric patterns p. 68 Investigate and extend patterns Investigate and extend numeric and geometric patterns looking for relationships between numbers and including patterns: <ul style="list-style-type: none"> Represented in physical or diagram form not limited to sequences involving a constant ratio Represented in tables 	Act. 1 1a–j Act. 2 1–5 Act. 3 1, 2	306 308	246 247	*Worksheet 114 p. 108 *Worksheet 115 p. 110
8	Numeric and geometric patterns p. 68 Investigate and extend patterns Investigate and extend numeric and geometric patterns looking for relationships between numbers and including patterns: <ul style="list-style-type: none"> Represented in physical or diagram form not limited to sequences involving a constant ratio Of learner's own creation Represented in tables 	Act. 3 3, 4, 7	309	247	Worksheet 116 pp. 111–112
9	Functions and relationships p. 68 Input and output values <ul style="list-style-type: none"> Determine input values, output values or rules for patterns and relationships using tables Determine, interpret and justify equivalence of different descriptions of the same relationship or rule presented: <ul style="list-style-type: none"> Verbally In flow diagrams In tables 	Act. 1 1–5 Act. 2 1, 3, 5, 7	314 315	254 255	Worksheet 117a p. 114 Worksheet 117b pp. 108–109
10	Equivalent forms <ul style="list-style-type: none"> Determine, interpret and justify equivalence of different descriptions of the same relationship or rule presented: <ul style="list-style-type: none"> By formulae and number sentence 	Act. 3 1–3 Act. 1 1–4	315–316 318	255–258	Worksheet 118a p. 118

OXFORD HEADSTART MATHEMATICS Week 3

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
11	Algebraic expressions p. 69 Algebraic language <ul style="list-style-type: none"> Identify variables and constants in formulae and equations Recognise and interpret rules or relationships represented in symbolic form 	Act. 1 1a, b, e, f 2a–j	322	262	Worksheet 120 p. 130
12	Algebraic expressions p. 69 Algebraic language <ul style="list-style-type: none"> Write algebraic expression from words 	Act. 2 1–8	322	261	Worksheet 121 p. 126
13	Algebraic equations p. 69 Number sentences <ul style="list-style-type: none"> Write a number sentence to describe problem situations Analyse and interpret a number sentence that describes a given situation 	Act. 1 1–5	323	262	Worksheet 119 p. 122
14	<ul style="list-style-type: none"> Solve and complete number sentences by: <ul style="list-style-type: none"> Inspection Trial and improvement 	Act. 2 1–5	324	263	Worksheet 121 p. 126
15	Investigation OR catch up or revision	Task 1	310–311	252	

OXFORD HEADSTART MATHEMATICS Week 4

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
16	Algebraic equations p. 69 Number sentences Describe the numerical value of an expression by substitution	Act. 3 1, 2, 3 Act. 4 1–3	325	263	Worksheet 123 p. 131 Worksheet 125 p. 133
17	Probability p. 73 Perform simple experiments where the possible outcomes are equally likely and <ul style="list-style-type: none"> List the possible outcomes based on the conditions of the activity Determine the probability of each possible outcome, using the definition of probability 	Act. 1 1–12	368–369	296	Worksheet 137 p. 174
18	Probability p. 73 Perform simple experiments where the possible outcomes are equally likely and <ul style="list-style-type: none"> Determine the probability of each possible outcome, using the definition of probability 	Act. 2 1–11	370	296–297	Worksheet 138 p. 176
19	Probability p. 73 Perform simple experiments where the possible outcomes are equally likely and <ul style="list-style-type: none"> List the possible outcomes based on the conditions of the activity Determine the probability of each possible outcome, using the definition of probability 	Act. 3 1–11	371	297	Worksheet 139 p. 178
20	Probability p. 73 Perform simple experiments where the possible outcomes are equally likely and <ul style="list-style-type: none"> List the possible outcomes based on the conditions of the activity Determine the probability of each possible outcome, using the definition of probability 	Act. 4 1–2	372	297	

OXFORD HEADSTART MATHEMATICS **Week 5**

*Select

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
21	Probability p. 73 <ul style="list-style-type: none"> • Perform simple experiments where the possible outcomes are equally likely • List the possible outcomes based on the conditions of the activity • Determine the probability of each possible outcome, using the definition of probability 	Act. 5 Act. 6 1–3	373–274	297–298	Worksheet 140 p. 180
22	Collect data p. 70 <ul style="list-style-type: none"> • Select appropriate sources for the collection of data (including peers, family, newspapers, books, magazines) 	Act. 1 Act. 2 Act. 3	329 330	267–269	Worksheet 126a p. 136
23	Collect data p. 70 <ul style="list-style-type: none"> • Distinguish between samples and populations • Design and use a questionnaire 	Act. 4 Act. 5	332–334	270–271	
24	Organise and summarise data p. 70 <ul style="list-style-type: none"> • Organise (including grouping where appropriate) and record data using: <ul style="list-style-type: none"> – Tally and tables – Stem and leaf displays – Data intervals 	Act. 1 Act. 2 Act. 3	337 339 340	273–276	Worksheet 126b p. 138 *Worksheet 127a p. 140
25	<ul style="list-style-type: none"> • Summarise and distinguish between ungrouped numerical data by determining mean, median and mode • Identify the largest and smallest scores in a data set and determine the difference between them in order to determine the spread of data (range) 	Act. 1 Act. 2 1, 2, 3	342 344	277 278	Worksheet 128a p. 144 Worksheet 128b p. 146

OXFORD HEADSTART MATHEMATICS Week 6

*Select

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
26	Representing data p. 72 <ul style="list-style-type: none"> • Draw a variety of graphs by hand/technology to display and interpret data (grouped and ungrouped included): <ul style="list-style-type: none"> – Bar graphs and double bar graphs – Histograms with given intervals – Pie charts 	Act. 1 1–2 Act. 2 2–3	347 349	280–284	Worksheet 129a pp. 147–148
27	Representing data p. 72 <ul style="list-style-type: none"> • Draw a variety of graphs by hand/technology to display and interpret data (grouped and ungrouped included): <ul style="list-style-type: none"> – Pie charts 	Act. 3 1–2 Act. 4 1–2 Act. 5 1–4	351–353	284–286	
28	Interpret and analyse data p. 72 <ul style="list-style-type: none"> • Interpret – Critically read and interpret data represented in: <ul style="list-style-type: none"> – Words – Bar graphs and double bar graphs – Pie charts – Histograms • Analyse – Critically analyse data by answering questions related to: <ul style="list-style-type: none"> – Data categories, including data intervals – Data sources and contexts – Central tendencies (mean, mode, median) – Scales used on graphs 	Act. 1 1–3 Act. 2 1–4	354–356 357–358	287 289	Worksheet 131a p. 156 Worksheet 131b p. 158 Worksheet 133 p. 164
29	Analyse data p. 72 <ul style="list-style-type: none"> • Analyse – Critically analyse data by answering questions related to: <ul style="list-style-type: none"> – Identifying sources of error and bias in the data 	Act. 3 1a–c Act. 4 1a–d Act. 5 1–2	360	291–292	*Worksheet 134a p. 166 *Worksheet 134b p. 168
30	Report data p. 72 <ul style="list-style-type: none"> • Summarise data in short paragraphs that include: <ul style="list-style-type: none"> – Drawing conclusions about the data – Making predictions based on the data 	Act. 6 1–6 Act. 7 1–4	364 365	292	

OXFORD HEADSTART MATHEMATICS Weeks 7 and 8
Revision and end-of-year examination – plan your work

OXFORD HEADSTART MATHEMATICS Week 9
Review of examination, remediation and learner corrections

2.4 Oxford Successful Mathematics

OXFORD SUCCESSFUL MATHEMATICS Week 1

*Select

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
1	Integers p. 67 Orientation – Introduction to integers	Ex. 1 2, 3	301	194	Worksheet 105 pp. 90–91
2	Counting, ordering and comparing integers p. 67 <ul style="list-style-type: none"> Count forwards and backwards in integers for any interval Recognise, order and compare integers 	Ex. 1 1–3	303	195	Worksheet 106 pp. 92–93
3	Calculations with integers p. 67 <ul style="list-style-type: none"> Basic calculations with integers Add and subtract integers Integer calculations 	Ex. 1 1, 5, 9 Ex. 1 2, 6, 10, 12 Ex. 2 1, 2	307 309	197 198	*Worksheet 107 p. 94 *Worksheet 108 pp. 98–99 *Worksheet 109 p. 98
4	Properties of integers p. 67 Recognise and use commutative properties of addition and multiplication for integers	Ex. 1	312	200	Worksheet 111 pp. 100–101
5	Recognise and use associative and distributive properties of addition and multiplication for integers	Ex. 2 Ex. 3	313 314	200	*Worksheet 113 pp. 104–105

OXFORD SUCCESSFUL MATHEMATICS Week 2

*Select

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
6	Solving problems p. 67 Solving problems in contexts involving integers	Ex. 1	316	201	
7	Numeric and geometric patterns p. 68 Investigate and extend patterns Investigate and extend numeric and geometric patterns looking for relationships between numbers and including patterns: <ul style="list-style-type: none"> Of learner's own creation Represented in tables Represented in physical or diagram form not limited to sequences involving a constant ratio 	Ex. 1 1, 2, 3 Ex. 1 1, 3, 4	322 324	206 208	*Worksheet 114 p. 108 *Worksheet 115 p. 110
8	Functions and relationships p. 68 Input and output values <ul style="list-style-type: none"> Describe and justify the general rules for observed relationships between numbers in own words Determine input values, output values or rules for patterns and relationships using flow diagrams and tables 	Ex. 1 3, 4, 5, 6	327–328	209–210	Worksheet 116 pp. 111–112 Worksheet 117a p. 114
9	Functions and relationships p. 68 Equivalent forms <ul style="list-style-type: none"> Determine, interpret and justify equivalence of different descriptions of the same relationship or rule presented: By formulae and by number sentence 	Ex. 1 1, 2, 4	330	215	Worksheet 118a p. 118
10	Determine, interpret and justify equivalence of different descriptions of the same relationship or rule presented: <ul style="list-style-type: none"> Verbally In flow diagrams In tables 	Ex. 1 3, 5	330–331	215	Worksheet 118b p. 120

OXFORD SUCCESSFUL MATHEMATICS Week 3

*Select

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
11	Revision: Functions and relationships graphs	1, 3, 4, 5	333	213	
12	Assignment (Option 1) OR catch up or revision	Option 1	390	271	
13	Algebraic expressions p. 69 Algebraic language Recognise and interpret rules or relationships represented in symbolic form	Ex. 1 1, 3, 5	335	215	Worksheet 120 p. 130
14	Algebraic expressions p. 69 Algebraic language Identify variables and constants in formulae and equations	Ex. 1 2, 4, 6	335	215	Worksheet 121 p. 126
15	Algebraic equations p. 69 Number sentences <ul style="list-style-type: none"> • Write a number sentence to describe problem situations • Analyse and interpret a number sentence that describes a given situation 	Ex. 1 1, 3, 5	338	217	Worksheet 119 p. 122

OXFORD SUCCESSFUL MATHEMATICS Week 4

*Select

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
16	<ul style="list-style-type: none"> • Solve and complete number sentences by: <ul style="list-style-type: none"> – Inspection – Trial and improvement 	Ex. 1 2, 4, 6, 8	338	217	Worksheet 121 p. 126
17	Describe the numerical value of an expression by substitution	Ex. 1 7	338	217	Worksheet 123 p. 131 Worksheet 125 p. 133
18	Assignment (Option 2) OR catch up or revision	Option 2	391	272	
19	Probability p. 73 <ul style="list-style-type: none"> • Perform simple experiments where the possible outcomes are equally likely • List the possible outcomes based on the conditions of the activity 	Ex. 1 1–2	369	240–241	Worksheet 137 p. 174
20	Probability p. 73 <ul style="list-style-type: none"> • Perform simple experiments where the possible outcomes are equally likely • Determine the probability of each possible outcome, using the definition of probability 	Ex. 2 1	369	241–242	Worksheet 138 p. 176

OXFORD SUCCESSFUL MATHEMATICS Week 5

*Select

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
21	Probability p. 73 <ul style="list-style-type: none"> • Perform simple experiments where the possible outcomes are equally likely • List the possible outcomes based on the conditions of the activity • Determine the probability of each possible outcome, using the definition of probability 	Ex. 2 2.1–2.9	369	242	Worksheet 139 p. 178

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
22	Investigation OR catch up or revision	Option 1	394–395	275	
23	Collect data p. 70 <ul style="list-style-type: none"> Select appropriate sources for the collection of data (including peers, family, newspapers, books, magazines) Distinguish between samples and populations 	Ex. 1	344	222	Worksheet 126a p. 136
24	Organise and summarise data p. 70 <ul style="list-style-type: none"> Organise (including grouping where appropriate) and record data using: <ul style="list-style-type: none"> Tally and tables Stem and leaf displays Data intervals 	Ex. 1 1, 2, 3 Ex. 2	350 352	226 228	Worksheet 126b p. 138 *Worksheet 127a p. 140
25	<ul style="list-style-type: none"> Summarise and distinguish between ungrouped numerical data by determining mean, median and mode Identify the largest and smallest scores in a data set and determine the difference between them in order to determine the spread of data (range) 	Ex. 3 Ex. 4	353 354	229–230	Worksheet 128a p. 144 Worksheet 128b p. 146

OXFORD SUCCESSFUL MATHEMATICS Week 6

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
26	Representing data p. 72 <ul style="list-style-type: none"> Draw a variety of graphs by hand/technology to display and interpret data (grouped and ungrouped included): <ul style="list-style-type: none"> Bar graphs and double bar graphs Histograms with given intervals Pie charts 	Ex. 1 1–2 Ex. 2 1–4 Ex. 3 1–5	356 358 359	232 233 234	
27	Interpret and analyse data p. 72 <ul style="list-style-type: none"> Interpret – Critically read and interpret data represented in: <ul style="list-style-type: none"> Words Bar graphs and double bar graphs Pie charts Histograms Analyse – Critically analyse data by answering questions related to: <ul style="list-style-type: none"> Data categories, including data intervals Data sources and contexts Central tendencies (mean, mode, median) Scales used on graphs 	Ex. 1 1–3	362–363	236–237	Worksheet 131a p. 156 Worksheet 131b p. 158 Worksheet 133 p. 164
28	Report data p. 72 <ul style="list-style-type: none"> Summarise data in short paragraphs that include: <ul style="list-style-type: none"> Drawing conclusions about the data Making predictions based on the data 	Ex. 2 1–2	364–365	238–239	Worksheet 134a p. 166
29	<ul style="list-style-type: none"> Identifying sources of error and bias in the data Choosing appropriate summary statistics for the data (mean, mode, median) 	Ex. 1	368	240	Worksheet 134b p. 168
30	Revision: Data Handling and Probability				

OXFORD SUCCESSFUL MATHEMATICS Weeks 7 and 8 Revision and end-of-year examination – plan your work

OXFORD SUCCESSFUL MATHEMATICS Week 9 Review of examination, remediation and learner corrections

2.5 Platinum Mathematics

PLATINUM MATHEMATICS Week 1					
*Select					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
1	Integers p. 67 Orientation – Introduction to integers	Ex. 18.1 1a–d	211	109	Worksheet 105 pp. 90–91
2	Counting, ordering and comparing integers p. 67 <ul style="list-style-type: none"> Count forwards and backwards in integers for any interval Recognise, order and compare integers 	Ex. 18.1 2, 3, 4, 5, 6	211	109	*Worksheet 106 pp. 92–93
3	Calculations with integers p. 67 <ul style="list-style-type: none"> Basic calculations with integers Add and subtract integers Integer calculations 	Ex. 18.2 1, 2, 3 Ex. 18.3 1, 4	213 214	110 110	*Worksheet 107 pp. 94–94 *Worksheet 108 pp. 98–99
4	Properties of integers p. 67 Recognise and use commutative properties of addition and multiplication for integers	Ex. 18.4 3	215	112	Worksheet 111 pp. 100–101
5	Recognise and use associative and distributive properties of addition and multiplication for integers	Ex. 18.4 4, 5	215	112	*Worksheet 113 pp. 104–106

PLATINUM MATHEMATICS Week 2					
*Select					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
6	Solving problems p. 67 Solving problems in contexts involving integers	Ex. 18.5 1, 3, 5	216	113	
7	Numeric and geometric patterns p. 68 Investigate and extend patterns Investigate and extend numeric and geometric patterns looking for relationships between numbers and including patterns: <ul style="list-style-type: none"> Represented in physical or diagram form not limited to sequences involving a constant ratio 	Ex. 19.1 3, 4, 5	219	114	*Worksheet 114 p. 108
8	Investigate and extend numeric and geometric patterns looking for relationships between numbers and including patterns: <ul style="list-style-type: none"> Of learner's own creation and represented in tables 	Ex. 19.1 1a–d, 3a–c	219	114	*Worksheet 115 p. 110
9	<ul style="list-style-type: none"> Describe and justify the general rules for observed relationships between numbers in own words Determine input values, output values or rules for patterns and relationships using tables 	Ex. 19.1 1e–g Ex. 19.2 1, 3, 5	219 220	114 115	Worksheet 116 pp. 111–112
10	Functions and relationships p. 68 Input and output values <ul style="list-style-type: none"> Determine input values, output values or rules for patterns and relationships using tables and flow diagrams 	Ex. 20.4 1	226	118	Worksheet 117a p. 114

PLATINUM MATHEMATICS Week 3

*Select

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
11	Functions and relationships p. 68 Equivalent forms Determine, interpret and justify equivalence of different descriptions of the same relationship or rule presented: <ul style="list-style-type: none"> • In flow diagrams and tables • By formulae • By number sentence 	1–5	235	126	Worksheet 118a p. 118
12	Revision: Number Patterns Functions and relationships graphs	1–6 1–6	223 227	116 119	
13	Assignment OR catch up or revision	Task 1	228–229	122	
14	Algebraic expressions p. 69 Algebraic language Recognise and interpret rules or relationships represented in symbolic form	Ex. 21.1 1, 2	230	124	Worksheet 120 p. 130
15	Algebraic expressions p. 69 Algebraic language Identify variables and constants in formulae and equations	Ex. 21.2 1 Ex. 21.3 1	232 233	122 125	Worksheet 121 p. 126

PLATINUM MATHEMATICS Week 4

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
16	Algebraic equations p. 69 Number sentences <ul style="list-style-type: none"> • Write a number sentence to describe problem situations • Analyse and interpret a number sentence that describes a given situation 	Ex. 22.1 1–2	237	128–129	Worksheet 119 p. 122
17	<ul style="list-style-type: none"> • Solve and complete number sentences by: <ul style="list-style-type: none"> – Inspection – Trial and improvement 	Ex. 22.1 4a–c, 5a–c	238	129	Worksheet 121 p. 126
18	Describe the numerical value of an expression by substitution	Ex. 22.2 3, 4	239–240	130	Worksheet 123 p. 131 Worksheet 125 p. 133
19	Investigation OR catch up or revision		242–243	131–132	
20	Probability p. 73 <ul style="list-style-type: none"> • Perform simple experiments where the possible outcomes are equally likely • List the possible outcomes based on the conditions of the activity 	Ex. 26.1 1–2	272	148	Worksheet 137 p. 174

PLATINUM MATHEMATICS Week 5

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
21	Probability p. 73 <ul style="list-style-type: none"> Perform simple experiments where the possible outcomes are equally likely List the possible outcomes based on the conditions of the activity 	Ex. 26.1 3–4	272	148	Worksheet 139 p. 178
22	Probability p. 73 <ul style="list-style-type: none"> Perform simple experiments where the possible outcomes are equally likely Determine the probability of each possible outcome, using the definition of probability 	Revision 1–5	273		Worksheet 140 p. 180
23	Collect data p. 70 <ul style="list-style-type: none"> Select appropriate sources for the collection of data (including peers, family, newspapers, books, magazines) Distinguish between samples and populations 	Ex. 23.1 1–3	246	134	Worksheet 126a p. 136
24	Organise and summarise data p. 70 <ul style="list-style-type: none"> Organise (including grouping where appropriate) and record data using: <ul style="list-style-type: none"> Tally and tables Stem and leaf displays Data intervals 	Ex. 23.2 1, 2, 3, 4	249	135–136	Worksheet 126b p. 138 Worksheet 127a p. 140
25	Organise and summarise data p. 70 <ul style="list-style-type: none"> Summarise and distinguish between ungrouped numerical data by determining mean, median and mode Identify the largest and smallest scores in a data set and determine the difference between them in order to determine the spread of data (range) 	Ex. 23.3 1–6	251–252	136–137	Worksheet 128a p. 144 Worksheet 128b p. 146

PLATINUM MATHEMATICS Week 6

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
26	Representing data p. 72 <ul style="list-style-type: none"> Draw a variety of graphs by hand/technology to display and interpret data (grouped and ungrouped included): <ul style="list-style-type: none"> Bar graphs and double bar graphs Histograms with given intervals Pie charts 	Ex. 24.1 1–2 Ex. 24.2 1–2	255 257	140 141	Worksheet 129a pp. 147–148
27	Representing data p. 72 <ul style="list-style-type: none"> Draw a variety of graphs by hand/technology to display and interpret data (grouped and ungrouped included): <ul style="list-style-type: none"> Histograms with given intervals Pie charts 	Ex. 24.2 3 Ex. 24.3 1–2	257 258	141 142–143	Worksheet 128a p. 144 Worksheet 128b p. 146
28	Interpret and analyse data p. 72 <ul style="list-style-type: none"> Interpret – Critically read and interpret data represented in: <ul style="list-style-type: none"> Words Bar graphs and double bar graphs Pie charts Histograms 	Ex. 25.1 1–3	250	144	Worksheet 131a p. 156 Worksheet 131b p. 158

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
29	Interpret and analyse data p. 72 <ul style="list-style-type: none"> • Analyse – Critically analyse data by answering questions related to: <ul style="list-style-type: none"> – Data categories, including data intervals – Data sources and contexts – Central tendencies (mean, mode, median) – Scales used on graphs 	Ex. 25.2 1–4	263–265	145–146	Worksheet 133 p. 164
30	Report data p. 72 <ul style="list-style-type: none"> • Summarise data in short paragraphs that include: <ul style="list-style-type: none"> – Drawing conclusions about the data – Making predictions based on the data – Identifying sources of error and bias in the data – Choosing appropriate summary statistics for the data (mean, mode, median) 	Ex. 25.3 1, 2	266	147	Worksheet 134a p. 166 Worksheet 134b p. 168

PLATINUM MATHEMATICS Weeks 7 and 8
Revision and end-of-year examination – plan your work

PLATINUM MATHEMATICS Week 9
Review of examination, remediation and learner corrections

2.6 Premier Mathematics

PREMIER MATHEMATICS Week 1					
*Select					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
1	Integers p. 67 Orientation – Introduction to integers	Ex. 1 1a–e	118	96	Worksheet 105 pp. 90–91
2	Counting, ordering and comparing integers p. 67 <ul style="list-style-type: none"> Count forwards and backwards in integers for any interval Recognise, order and compare integers 	Ex. 1 2, 5	119	96	Worksheet 106 pp. 92–93
3	Calculations with integers p. 67 <ul style="list-style-type: none"> Basic calculations with integers Add and subtract integers Integer calculations 	Ex. 2 1, 2a, c, e Ex. 3 1	120 121	97 98	Worksheet 107 pp. 94–94 Worksheet 108 pp. 98–99
4	Properties of integers p. 67 Recognise and use commutative properties of addition and multiplication for integers	Ex. 4 1a–h	122	98	Worksheet 111 pp. 100–101
5	Recognise and use associative and distributive properties of addition and multiplication for integers	Ex. 4 2a–j 2a–h	122	98	*Worksheet 113 pp. 104–105 *Worksheet 113 pp. 106–107

PREMIER MATHEMATICS Week 2					
*Select					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
6	Solving problems p. 67 Solving problems in contexts involving integers	Ex. 5 1, 2	123–124	99	
7	Numeric and geometric patterns p. 68 Investigate and extend patterns Investigate and extend numeric and geometric patterns looking for relationships between numbers and including patterns: <ul style="list-style-type: none"> Of learner's own creation and represented in tables Represented in physical or diagram form not limited to sequences involving a constant ratio 	Ex. 1 1a–e, 2a–b, 3b	126	100	*Worksheet 114 p. 108
8	Numeric and geometric patterns p. 68 Investigate and extend patterns Investigate and extend numeric and geometric patterns looking for relationships between numbers and including patterns: <ul style="list-style-type: none"> Of learner's own creation and represented in tables <ul style="list-style-type: none"> Represented in physical or diagram form not limited to sequences involving a constant ratio 	Ex. 2 1–2 Ex. 3 1–4	127–128		
9	Functions and relationships p. 68 Input and output values <ul style="list-style-type: none"> Describe and justify the general rules for observed relationships between numbers in own words Determine input values, output values or rules for patterns and relationships using: <ul style="list-style-type: none"> Verbally Flow diagrams Tables 	Ex. 1 1–3	130–131	102–103	Worksheet 116 pp. 111–112 Worksheet 117a p. 114 Worksheet 117b pp. 108–109

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
10	Functions and relationships p. 68 Equivalent forms Determine, interpret and justify equivalence of different descriptions of the same relationship or rule presented: <ul style="list-style-type: none"> • By formulae • By number sentence 	Ex. 2 1–3	131–132	103	Worksheet 118a p. 118

PREMIER MATHEMATICS Week 3

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
11	Algebraic expressions p. 69 Algebraic language Recognise and interpret rules or relationships represented in symbolic form Identify variables and constants	Ex. 1 1–3	133	104	Worksheet 121 p. 126
12	Algebraic expressions p. 69 Algebraic language Recognise and interpret rules or relationships represented in symbolic form	Ex. 2 1–2	134	104	Worksheet 120 p. 124
13	Algebraic equations p. 69 Number sentences <ul style="list-style-type: none"> • Write a number sentence to describe problem situations 	Ex. 1 1–10	135	105	Worksheet 119 p. 122
14	Algebraic equations p. 69 Number sentences <ul style="list-style-type: none"> • Analyse and interpret a number sentence that describes a given situation 	Ex. 2 1–10	136	105–106	
15	<ul style="list-style-type: none"> • Solve and complete number sentences by: <ul style="list-style-type: none"> – Inspection – Trial and improvement 	Ex. 3 1–3	137	106–107	Worksheet 121 p. 126

PREMIER MATHEMATICS Week 4

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
16	Determine the numerical value of an expression by substitution	Ex. 4 1–2	137–138	107	Worksheet 121 p. 126
17	Assignment Selected topics only OR catch up or revision		157–164	115–120	
18	Probability p. 73 <ul style="list-style-type: none"> • Perform simple experiments where the possible outcomes are equally likely • List the possible outcomes based on the conditions of the activity 	Ex. 1 1–2	150–151	114	Worksheet 137 p. 174
19	Probability p. 73 <ul style="list-style-type: none"> • Perform simple experiments where the possible outcomes are equally likely • Determine the probability of each possible outcome, using the definition of probability 	Ex. 2 1–2	152–153	114	Worksheet 139 p. 178
20	Probability p. 73 <ul style="list-style-type: none"> • Perform simple experiments where the possible outcomes are equally likely • List the possible outcomes based on the conditions of the activity • Determine the probability of each possible outcome, using the definition of probability 	Ex. 2 3–4	155	114	Worksheet 140 p. 180

PREMIER MATHEMATICS Week 5

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
21	Probability p. 73 <ul style="list-style-type: none"> • Perform simple experiments where the possible outcomes are equally likely • List the possible outcomes based on the conditions of the activity • Determine the probability of each possible outcome, using the definition of probability 	Ex. 3 1–4	154–156	115	
22	Collect data p. 70 <ul style="list-style-type: none"> • Select appropriate sources for the collection of data (including peers, family, newspapers, books, magazines) • Distinguish between samples and populations 	Ex. 1 1–5	138–139	108	Worksheet 126a p. 136
23	Organise and summarise data p. 70 <ul style="list-style-type: none"> • Organise (including grouping where appropriate) and record data using: <ul style="list-style-type: none"> – Tally tables – Stem and leaf displays 	Ex. 2 1, 4, 5	141–142	108–109	Worksheet 126b p. 138 Worksheet 127a p. 140
24	Collect, organise and summarise data p. 71 <ul style="list-style-type: none"> • Group data into intervals • Summarise and distinguish between ungrouped numerical data by determining mean, median and mode • Identify the largest and smallest scores in a data set and determine the difference between them in order to determine the spread of data (range) 	Ex. 2 2a–d, 3, 6	141–142	109–110	Worksheet 128a p. 144 Worksheet 128b p. 146
25	Representing data p. 72 <ul style="list-style-type: none"> • Draw a variety of graphs by hand/technology to display and interpret data (grouped and ungrouped included) <ul style="list-style-type: none"> – Bar graphs and double bar graphs – Histograms with given intervals – Pie charts 	Ex. 3 1–4	144	110–112	Worksheet 129a pp. 147–148

PREMIER MATHEMATICS Week 6

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
26	Interpret and analyse data p. 72 <ul style="list-style-type: none"> • Interpret – Critically read and interpret data represented in: <ul style="list-style-type: none"> – Words – Bar graphs and double bar graphs – Pie charts – Histograms • Analyse – Critically analyse data by answering questions related to: <ul style="list-style-type: none"> – Data categories, including data intervals – Data sources and contexts – Central tendencies (mean, mode, median) – Scales used on graphs 	Ex. 4 1, 2	146–148	112	Worksheet 131a p. 156 Worksheet 131b p. 158 Worksheet 133 p. 164
27	Report data p. 72 <ul style="list-style-type: none"> • Summarise data in short paragraphs that include: <ul style="list-style-type: none"> – Drawing conclusions about the data – Making predictions based on the data 	Ex. 4 3–4	148	112–113	Worksheet 134a p. 166
28	<ul style="list-style-type: none"> • Identifying sources of error and bias in the data • Choosing appropriate summary statistics for the data (mean, mode, median) 	Ex. 4 5	151	112	Worksheet 134b p. 168
29	Investigation OR catch up or revision		149–150	113	
30	Revision	Ex. 1–11	166–171	121–123	

PREMIER MATHEMATICS Weeks 7 and 8
Revision and end-of-year examination – plan your work

PREMIER MATHEMATICS Week 9
Review of examination, remediation and learner corrections

2.7 Sasol Inzalo Mathematics

SASOL INZALO MATHEMATICS Week 1					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
1	Integers pp. 67–68 18.1 The need for numbers called integers Saying how cold it is	1–4	227–229	257–260	Worksheets 105, 106 pp. 90–93
2	Saying how much money it is	1–11	229–231	260–262	Worksheets 107, 108 pp. 94–97
3	Ordering and comparing integers 18.2 Finding numbers that make statements true	1–4 1–4	231–232	262–263	Worksheet 109 pp. 98–99
4	18.2 Finding numbers that make statements true cont.	5–12	232–234	264–265	Worksheet 110 pp. 100–101
5	18.3 Adding and subtracting integers Properties of integers	1–5	234–235	265–266	Worksheet 111 pp. 102–103

SASOL INZALO MATHEMATICS Week 2					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
6	Properties of integers cont.	6–9	235–237	266–268	Worksheet 112 pp. 104–105
7	Properties of operations	1–5	237	268	Worksheet 113 pp. 106–107
8	Numeric patterns p. 68 19.1 Investigating and extending numeric patterns	1–7	238–239	269–271	Worksheets 114, 115 pp. 108–111
9	19.2 Making patterns from rules 19.3 Making patterns from expressions	1–8 1–4	239–240	271–272	Worksheet 116 pp. 112–113
10	Functions and relationships p. 68 20.1 Relationships between variables Different ways to represent the rule for a relationship	1–6	242–243	275–277	Worksheets 117a, 117b pp. 114–117

SASOL INZALO MATHEMATICS Week 3					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
11	Formulae for tables 20.2 Integers in the rules for relationships	1–4 1–7	243–246	277–280	Worksheets 118a, 118b pp. 118–121
12	Algebraic expressions p. 69 21.1 Interpret rules to calculate values of a variable Rules in verbal and symbolic form	1–5	247–248	281–283	Worksheets 119, 120 pp. 122–125
13	21.2 Slightly different kinds of rules Subtract positive and negative quantities	1–7	249–250	284–285	Worksheet 121 pp. 126–127
14	Algebraic equations p. 69 22.1 Describing problem situations	1–5	252	287–288	Worksheet 122 pp. 128–129
15	22.2 Analysing and interpreting equations	1–5	253	289	Worksheet 123 pp. 130–131

SASOL INZALO MATHEMATICS Week 4

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
16	22.3 Solving and completing equations Solve by inspection	1–6	253–254	289–290	Worksheet 124 pp. 132–133
17	22.4 Identifying variables and constants 22.5 Numerical values of expressions	1–2 1–2	256–257	292–293	Worksheet 125 pp. 134–135
18	Probability p. 73 26.1 Possible and actual outcomes, and frequencies	1–4	294–295	337–339	Worksheets 137, 138 pp. 174–175
19	26.2 Relative frequencies	1–3	295–296	339–340	Worksheets 138, 139 pp. 176–177
20	Collect, organise and summarise data pp. 70–71 23.1 Collecting data Populations and samples: from whom to collect data Thinking about populations and samples	1–4	258–260	295–298	Worksheets 126a, 126b pp. 136–139

SASOL INZALO MATHEMATICS Week 5

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
21	23.2 Organising data Different types of data	1–5	262–263	300–301	Worksheets 127a, 127b pp. 140–143
22	Organising categorical data	1–4	263–265	301–303	Worksheets 128a, 128b pp. 144–147
23	Introducing stem-and-leaf displays	1–3	266–268	304–306	Worksheets 129a, 129b pp. 148–151
24	Grouping data into intervals	1–2	269–270	307–308	Worksheets 130a, 130b pp. 152–155
25	23.3 Summarising data	1–6	270–273	308–311	Worksheets 131a, 131b pp. 156–157

SASOL INZALO MATHEMATICS Week 6

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
26	Represent data p. 72 24.1 Bar graphs and double bar graphs	1–2	274–276	313–316	Worksheets 132a, 132b pp. 160–163
27	24.2 Histograms A situation where data has to be organised	1–5	277–280	317–319	Worksheet 133 pp. 164–165
28	Interpreting a histogram Drawing more histograms	1–3	280–283	320–323	Worksheets 134a, 134b pp. 166–169
29	24.3 Pie charts Estimating sizes of slices in a pie chart	1–2	284–286	324–326	Worksheet 135 pp. 170–171
30	Representing data as fractions and percentages in pie charts	1–2	286–287	326–327	Worksheet 136 pp. 172–173

SASOL INZALO MATHEMATICS Weeks 7 and 8 Revision and end-of-year examination – plan your work

SASOL INZALO MATHEMATICS Week 9 Review of examination, remediation and learner corrections

2.8 Solutions for All Mathematics

SOLUTIONS FOR ALL MATHEMATICS Week 1					
*Select					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
1	Integers p. 67 Orientation – Introduction to integers	1–4	316	201	Worksheet 105 pp. 90–91
2	Counting, ordering and comparing integers p. 67 <ul style="list-style-type: none"> Count forwards and backwards in integers for any interval Recognise, order and compare integers 	Ex. 29.1 1–3	320	202	Worksheet 106 pp. 92–93
3	Calculations with integers p. 67 <ul style="list-style-type: none"> Basic calculations with integers Add and subtract integers Integer calculations 	Ex. 29.2 1, 3, 5 Ex. 29.3 1, 5, 7	323 324 327	203 204	Worksheet 107 pp. 94–94 Worksheet 108 pp. 98–99
4	Properties of integers p. 67 Recognise and use commutative properties of addition and multiplication for integers	Ex. 29.4 1, 2	330 331	205	Worksheet 111 pp. 100–101
5	Recognise and use associative and distributive properties of addition and multiplication for integers	Ex. 29.4 3a–c	330 331	205	*Worksheet 113 pp. 104–106

SOLUTIONS FOR ALL MATHEMATICS Week 2					
*Select					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
6	Solving problems p. 67 Solving problems in contexts involving integers	6a–d	333	206	
7	Numeric and geometric patterns p. 68 Investigate and extend patterns <ul style="list-style-type: none"> Investigate and extend numeric and geometric patterns looking for relationships between numbers and including patterns: <ul style="list-style-type: none"> Of learner's own creation and represented in tables Represented in physical or diagram form not limited to sequences involving a constant ratio 	Ex. 30.1 1, 3, 4	336–337	210	*Worksheet 114 p. 108 *Worksheet 115 p. 110
8	Numeric and geometric patterns p. 68 Investigate and extend patterns <ul style="list-style-type: none"> Investigate and extend numeric and geometric patterns looking for relationships between numbers and including patterns: <ul style="list-style-type: none"> Of learner's own creation and represented in tables Represented in physical or diagram form not limited to sequences involving a constant ratio 	Ex. 30.2 1–3	339–340	211–212	Worksheet 116 pp. 111–112
9	<ul style="list-style-type: none"> Determine input values, output values or rules for patterns and relationships using tables Determine, interpret and justify equivalence of different descriptions of the same relationship or rule presented: <ul style="list-style-type: none"> Verbally In flow diagrams In tables 	1–3	343–344	215–216	Worksheet 117a p. 114
10	Equivalent forms <ul style="list-style-type: none"> Determine, interpret and justify equivalence of different descriptions of the same relationship or rule presented: <ul style="list-style-type: none"> By formulae Number sentence 	Ex. 31.1 1–4	345–347	216–218	Worksheet 118a p. 118

SOLUTIONS FOR ALL MATHEMATICS Week 3

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
11	Revision: Functions and relationships graphs	1, 2	348 349	219	
12	Assignment Select 1 of 2 options OR catch up or revision	Act. 30.3 or <i>Check what you know</i>	340–341 or 341–342	212 or 213	
13	Algebraic expressions p. 69 Algebraic language Recognise and interpret rules or relationships represented in symbolic form	1, 2, 3	350 351	221–222	Worksheet 120 p. 130
14	Identify variables and constants in formulae and equations	Ex. 32.1 1–3	351–353	222	Worksheet 121 p. 126
15	Algebraic equations p. 69 Number sentences <ul style="list-style-type: none"> • Write a number sentence to describe problem situations • Analyse and interpret a number sentence that describes a given situation 	Ex. 33.1 1–3	360	227	Worksheet 119 p. 122

SOLUTIONS FOR ALL MATHEMATICS Week 4

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
16	<ul style="list-style-type: none"> • Solve and complete number sentences by: <ul style="list-style-type: none"> – Inspection – Trial and improvement 	Ex. 33.2 1–3	362	229	Worksheet 121 p. 126
17	<ul style="list-style-type: none"> • Describe the numerical value of an expression by substitution 	Ex. 33.3 1–3	363–364	229–230	Worksheet 123 p. 131 Worksheet 125 p. 133
18	Remediate assignment if done OR catch up or revision Revision: Algebra	1–5	365	230–231	
19	Probability p. 73 <ul style="list-style-type: none"> • Perform simple experiments where the possible outcomes are equally likely • List the possible outcomes based on the conditions of the activity 	Act. 37.1 1–4	414–415	263–264	Worksheet 137 p. 174
20	Probability p. 73 <ul style="list-style-type: none"> • Perform simple experiments where the possible outcomes are equally likely • Determine the probability of each possible outcome, using the definition of probability 	Act. 37.2 1–7	416–417	264–265	Worksheet 139 p. 178

SOLUTIONS FOR ALL MATHEMATICS Week 5

*Select

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
21	Probability p. 73 <ul style="list-style-type: none"> Perform simple experiments where the possible outcomes are equally likely List the possible outcomes based on the conditions of the activity Determine the probability of each possible outcome, using the definition of probability 	Act. 37.3 1–6	418–419	265	Worksheet 140 p. 180
22	Collect data p. 70 <ul style="list-style-type: none"> Select appropriate sources for the collection of data (including peers, family, newspapers, books, magazines) Investigation or catch up work 	1, 2	366–367	234	Worksheet 126a p. 136
23	Collect data p. 70 <ul style="list-style-type: none"> Select appropriate sources for the collection of data (including peers, family, newspapers, books, magazines) Distinguish between samples and populations 	Act. 34.1 1–4	367	234–236	
24	Organise and summarise data p. 70 <ul style="list-style-type: none"> Organise (including grouping where appropriate) and record data using: <ul style="list-style-type: none"> Tally tables Stem and leaf displays 	Ex. 34.1 1–5 Ex. 34.3 1 Ex. 34.4 1a–b	371 375 376	238 240 241	Worksheet 126b p. 138 Worksheet 127a p. 140
25	Collect, organise and summarise data p. 71 <ul style="list-style-type: none"> Group data into intervals Summarise and distinguish between ungrouped numerical data by determining mean, median and mode Identify the largest and smallest scores in a data set and determine the difference between them in order to determine the spread of data (range) 	Ex. 34.5 1–2 1, 3, 4, 5	382–383 385–387	242	Worksheet 127b p. 142 *Worksheet 128a–b p. 144

SOLUTIONS FOR ALL MATHEMATICS Week 6

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
26	Representing data p. 72 <ul style="list-style-type: none"> Draw a variety of graphs by hand/technology to display and interpret data (grouped and ungrouped included) <ul style="list-style-type: none"> Bar graphs and double bar graphs Histograms with given intervals Pie charts 	Ex. 35.1 1–2 Ex. 35.2 1–2	389–390 393	248–249 251	Worksheet 129a pp. 147–148
27	Representing data p. 72 <ul style="list-style-type: none"> Draw a variety of graphs by hand/technology to display and interpret data (grouped and ungrouped included) <ul style="list-style-type: none"> Histograms with given intervals 	Ex. 35.3 1–2	396	252–253	
28	Interpret and analyse data p. 72 <ul style="list-style-type: none"> Interpret – Critically read and interpret data represented in: <ul style="list-style-type: none"> Words Bar graphs and double bar graphs Pie charts Histograms Analyse – Critically analyse data by answering questions related to: <ul style="list-style-type: none"> Data categories, including data intervals Data sources and contexts Central tendencies (mean, mode, median) Scales used on graphs 	Ex. 36.1 1–2 Ex. 36.2 1–4	403 404 406 407	258 259	Worksheet 131a p. 156 Worksheet 131b p. 158 Worksheet 133 p. 164

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
29	Report data p. 72 <ul style="list-style-type: none"> • Summarise data in short paragraphs that include: <ul style="list-style-type: none"> – Drawing conclusions about the data – Making predictions based on the data – Identifying sources of error and bias in the data – Choosing appropriate summary statistics for the data (mean, mode, median) 	Ex. 36.3 1–2	409 410	260	Worksheet 134a p. 166 Worksheet 134b p. 168
30	Revision: TERM 4 TOPICS	Unit 38	423–433	267–272	

SOLUTIONS FOR ALL MATHEMATICS Weeks 7 and 8
Revision and end-of-year examination – plan your work

SOLUTIONS FOR ALL MATHEMATICS Week 9
Review of examination, remediation and learner corrections

2.9 Spot on Mathematics

SPOT ON MATHEMATICS Week 1					
*Select					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
1	Integers p. 67 Orientation – Introduction to integers	Act. 20.1 1, 2, 4, 5	251	270	Worksheet 105 pp. 90–91
2	Counting, ordering and comparing integers p. 67 <ul style="list-style-type: none"> Count forwards and backwards in integers for any interval Recognise, order and compare integers 	Act. 20.1 3, 6, 7	251	270	Worksheet 106 pp. 92–93
3	Calculations with integers p. 67 <ul style="list-style-type: none"> Basic calculations with integers Add and subtract integers Integer calculations 	Act. 20.2 1, 2 Act. 20.3 1, 4, 5	253 255	271 274	Worksheet 107 pp. 94–94 Worksheet 108 pp. 98–99
4	Properties of integers p. 67 Recognise and use commutative properties of addition and multiplication for integers	Act. 20.4a 1–3	256	275	Worksheet 111 pp. 100–101
5	Recognise and use associative and distributive properties of addition and multiplication for integers	Act. 20.4b 1–2	257	275	*Worksheet 113 pp. 104–106

SPOT ON MATHEMATICS Week 2					
*Select					
Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
6	Solving problems p. 67 Solving problems in contexts involving integers	Act. 20.5 1, 3, 5, 7	258–259	276	
7	Multiplication of integers p.67 Using the distributive property with integers Solving more problems	Inves. Act. 20.5 2, 4, 6	260 258	277 276	
8	Numeric and geometric patterns p. 68 Investigate and extend patterns <ul style="list-style-type: none"> Investigate and extend numeric and geometric patterns looking for relationships between numbers and including patterns of learners, own creation and represented in tables Represented in physical or diagram form not limited to sequences involving a constant ratio 	Act. 21.1 1a, 3a, 3c Act. 21.2 1, 3	265 266	282 283	*Worksheet 114 p. 108 *Worksheet 115 p. 110
9	<ul style="list-style-type: none"> Describe and justify the general rules for observed relationships between numbers in own words Determine input values, output values or rules for patterns and relationships using flow diagrams 	Act. 21.2 2, 4	266	283	Worksheet 116 pp. 111–112
10	Functions and relationships p. 68 Input and output values Determine input values, output values or rules for patterns and relationships using flow diagrams	Act. 22.1 1a–c, 2a–c	270	288	Worksheet 117a p. 114

SPOT ON MATHEMATICS Week 3

*Select

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
11	Determine, interpret and justify equivalence of different descriptions of the same relationship or rule presented: <ul style="list-style-type: none"> – In formula – In flow diagrams – In tables 	Act. 22.2 1–4	272	289	Worksheet 117b pp. 108–109
12	Equivalent forms Determine, interpret and justify equivalence of different descriptions of the same relationship or rule presented: <ul style="list-style-type: none"> • By formulae • Number sentence • Verbally • In flow diagrams 	Act. 22.3 1–3	273	288	Worksheet 118a p. 118
13	Revision: Functions and relationships graphs	Act. 22 1–4	276	292	
14	Algebraic expressions p. 69 Algebraic language <ul style="list-style-type: none"> • Recognise and interpret rules or relationships represented in symbolic form • Identify variables and constants in formulae and equations 	Act. 23.1 1, 2 Act. 23.2 1, 2	278 280	294 295	*Worksheet 120 p. 130
15	Algebraic equations p. 69 Number sentences <ul style="list-style-type: none"> • Write a number sentence to describe problem situations • Analyse and interpret a number sentence that describes a given situation 	Act. 23.2 3, 5	280	296	Worksheet 119 p. 122

SPOT ON MATHEMATICS Week 4

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
16	• Solve and complete number sentences by: <ul style="list-style-type: none"> – Inspection – Trial and improvement 	Act. 23.3a 1a–e 2a–e 3a–c	282	295	Worksheet 121 p. 126
17	• Solve and complete number sentences by: <ul style="list-style-type: none"> – Inspection – Trial and improvement 	Act. 23.3b 1a–e 2a–e 3a–b	283	298	
18	• Describe the numerical value of an expression by substitution	Act. 23.4 1–5	284	299	Worksheet 123 p. 131 Worksheet 125 p. 133
19	Revision: ALGEBRA	Act. 22 1–4 Act. 23 1–5	276 286	292 301	
20	Probability p. 73 <ul style="list-style-type: none"> • Perform simple experiments where the possible outcomes are equally likely • List the possible outcomes based on the conditions of the activity 	Act. 27.1 1–2	321	332–333	

SPOT ON MATHEMATICS Week 5

*Select

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
21	Probability p. 73 <ul style="list-style-type: none"> Perform simple experiments where the possible outcomes are equally likely Determine the probability of each possible outcome, using the definition of probability 	Act. 27.2 1–2	323	334	
22	Collect data p. 70 <ul style="list-style-type: none"> Select appropriate sources for the collection of data (including peers, family, newspapers, books, magazines) Distinguish between samples and populations 	Act. 24.1a 1–3	289	304 328	Worksheet 126a p. 136
23	Collect data p. 70 <ul style="list-style-type: none"> Distinguish between samples and populations 	Act. 24.1b 1–2	290	305	Worksheet 126b p. 138
24	Organise and summarise data p. 70 <ul style="list-style-type: none"> Organise (including grouping where appropriate) and record data using: <ul style="list-style-type: none"> Tally tables Stem and leaf displays 	Act. 24.2 1–3	293	307	*Worksheet 127a p. 140
25	Collect, organise and summarise data p. 71 <ul style="list-style-type: none"> Group data into intervals 	Act. 24	298	308	Worksheet 127b p. 142

SPOT ON MATHEMATICS Week 6

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
26	<ul style="list-style-type: none"> Summarise and distinguish between ungrouped numerical data by determining mean, median and mode Identify the largest and smallest scores in a data set and determine the difference between them in order to determine the spread of data (range) 	Act. 24.4 1–4	296	309	Worksheet 128a p. 144 Worksheet 128b p. 146
27	Representing data p. 72 <ul style="list-style-type: none"> Draw a variety of graphs by hand/technology to display and interpret data (grouped and ungrouped included) <ul style="list-style-type: none"> Bar graphs and double bar graphs 	Act. 25.1 1–3	301	315–316	Worksheet 129a pp. 147–148
28	<ul style="list-style-type: none"> Draw a variety of graphs by hand/technology to display and interpret data (grouped and ungrouped included) <ul style="list-style-type: none"> Histograms with given intervals Pie charts 	Act. 25.2 1–3	304	319–320	
29	Interpret and analyse data p. 72 <ul style="list-style-type: none"> Interpret – Critically read and interpret data represented in: <ul style="list-style-type: none"> Words Bar graphs and double bar graphs Pie charts Histograms Analyse – Critically analyse data by answering questions related to: <ul style="list-style-type: none"> Data categories, including data intervals Data sources and contexts Central tendencies (mean, mode, median) Scales used on graphs 	Act. 26.1 1–6 Act. 26.3 1–2	308–309 312	324 325	Worksheet 131a p. 156 Worksheet 131b p. 158 Worksheet 133 p. 164

Day	CAPS concepts and skills	LB ex.	LB pp.	TG pp.	DBE workbook
30	Report data p. 72 <ul style="list-style-type: none"> • Summarise data in short paragraphs that include: <ul style="list-style-type: none"> – Drawing conclusions about the data – Making predictions based on the data – Identifying sources of error and bias in the data – Choosing appropriate summary statistics for the data (mean, mode, median) 	Act. 26.4 1–3 Act. 26.2 1–2	314 310	327 325	Worksheet 134a p. 166 Worksheet 134b p. 168

SPOT ON MATHEMATICS Weeks 7 and 8
Revision and end-of-year examination – plan your work

SPOT ON MATHEMATICS Week 9
Review of examination, remediation and learner corrections

3. Guidelines for preparing a Mathematics lesson

1. **Review the term focus:** Start by looking at the CAPS and *familiarising* yourself with 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 in the planner. 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 (e.g. counters, number boards, paper cut-outs, examples of shapes, etc.).
 - If you do not have all the necessary resources readily available, see how best you can improvise, e.g. ask learners to collect bottle tops or small stones to be used for counting or make your own flard cards/number boards using pieces of cardboard and a marker pen.
 - Collect necessary items from home (e.g. bottles, bottle tops, etc.) long in advance so that you have all the necessary resources for your lesson.
 - 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.
 - Also 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 you can prepare any resources, such as test papers, needed for formal assessment so that learners can settle down and begin working promptly.
3. **Prepare the content:** Think carefully about what it is that you will teach your learners in this lesson. Think about the prior knowledge of the content that learners should have learned in earlier grades that will be built on in this lesson. You should refer to the CAPS content and skills clarification column for further guidance while you prepare. Consider any common misconceptions, and how you will address these. 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 Learner's Book and Teacher's Guide will assist you. Also think about how learners will develop an understanding of the main concepts of the lesson topic. You need to think about how to explain new Mathematics content and skills to your learners.
 - **Make sure you have prepared for the teaching of the concepts before you teach.** Prepare yourself to assist learners with any questions they might have during the lesson. Look at the activities in the Learner's Book and in the DBE workbook, and think about how best to help your learners engage with them. Consider what will be done in class and what at home. Be sure to have some enrichment and remediation activities ready to use as needed. The Teacher's Guides offer suggestions for remediation and enrichment activities that you might want to use, and you will also find useful resources in the *Remediation and Enrichment Activities* book.
 - Consider the needs of any learners with barriers to learning in your class, and how best you can support them.
 - You will also find helpful information and resources in the *Remediation and Enrichment Activities* book. The work in this book is related to the Grade 4 to 6 curriculum, but it has also been provided to Grade 7 teachers as many activities in this book will benefit learners who have not mastered certain concepts introduced in previous grades.
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 – but you might find that you need to work differently in some lessons, such as when a test is being written.

Step 1: Mental Mathematics (5–10 minutes): This is the start-up activity for each lesson and should not take more than five to ten minutes. The purpose of this activity is to focus on numeracy and to drill basic numeric concepts so that they can be easily recalled in other higher level work. *Each day you need to prepare for the Mental Mathematics activities.* Learners should do Mental Mathematics orally most lessons, but they could do it in written form once a week so that there is some record of your daily Mental Mathematics activities.

You will find many ideas for Mental Mathematics activities in the book: *Mental Maths Activities and Printable Resources* which is part of the Mathematics toolkit. Although developed for Grades 4 to 6, many activities in this book will be useful for Grade 7 learners who have not mastered all the skills introduced in previous grades.

Learners should not use concrete material to work out the answers in Mental Mathematics. If learners need to, let them use their fingers as a concrete aid during Mental Mathematics, but make a note of which learners are doing this and then spend time with them during remediation to help them with the basic skills.

Mental Mathematics skills improve hugely through repeated activity and enable learners to perform higher level tasks with greater ease. It is important that learners develop awareness of and competence and fluency in a range of Mental Maths strategies so that they can choose and use effectively the most efficient method for a given calculation.

Step 2: Homework review/reflection (10 minutes): This is the second activity of the lesson. We recommend that you take about ten minutes to remediate and correct the previous lesson'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 lesson's work. Allow learners the opportunity to write corrections as needed.

Step 3: Lesson content – concept development (15 minutes): This is the third activity of the lesson. We recommend that you should actively teach your class for 15 minutes – going through examples interactively with your learners. Go through worked examples and suggested explanations given in the Learner's Book or Teacher's Guide with your class as a whole. The CAPS content clarification column will 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.

Step 4: Classwork activity (20 minutes): This part of the lesson provides an opportunity for learners to consolidate new concepts by doing activities or exercises from the Learner's Book or DBE workbook. These activities allow them to practise their Mathematics 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 LTSMs vary greatly in length* and you need to make this selection in advance. Ensure that all types of activities or concepts are covered each lesson so that you can give quick and clear instructions to your learners about which exercises 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 cope with the Mental Mathematics activities, how they manage 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 are 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.

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

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

5. **After each lesson, reflect on how it went:** You should note your thoughts about the day's lesson. You will use these notes as you plan and prepare for your teaching. The tracking template (Resource 12) has useful prompts to assist you here.

4. Assessment term plans

Term 3 and Term 4: Formal assessment tasks included in each set of LTSMs

LTSM	TERM 3		TERM 4
	Project	Test *Useful for practice, not for formal assessment	Examination Use the examinations noted in this column for revision NOT for formal assessment
Clever: Keeping Maths Simple		Week 10 *LB pp. 279–280 TG pp. 256–258 Also see exemplar test in Section C of this planner	TG Questions pp. 328–332 TG Memo pp. 333–336 Also see revision examination in Section C of this planner
Mathematics Today	Week 7 Golden Ratio LB p. 222 TG p. 85	Week 10 TG pp. 90–91 Memo p. 92 Also see exemplar test in Section C of this planner	LB pp. 317–318 TG p. 125 TG Questions pp. 126–128 TG Memo p. 129 Also see revision examination in Section C of this planner
Oxford Headstart Mathematics	Week 6 Geometry LB p. 289 TG p. 228	Week 10 TG pp. 230–232 Also see exemplar test in Section C of this planner	*LB pp. 376–383 TG pp. 300–303 TG Questions pp. 303–307 TG Memo pp. 308–311 Also see revision examination in Section C of this planner
Oxford Successful Mathematics	Week 6 Functions and Relationships LB pp. 386–387 TG p. 267 OR Transformations LB pp. 388–389 TG p. 268	Week 10 TG pp. 269–270 Memo pp. 270–271 Also see exemplar test in Section C of this planner	LB pp. 399–402 TG pp. 276–277 TG Questions pp. 278–281 TG Memo pp. 282–284 Also see revision examination in Section C of this planner
Platinum Mathematics	Week 7 Graphs LB p. 192 TG p. 96	Week 10 *LB p. 206 TG p. 105 Also see exemplar test in Section C of this planner	LB pp. 274–277 TG Memo p. 150 TG Questions pp. 153–155 TG Memo p. 157 Also see revision examination in Section C of this planner
Premier Mathematics	Week 8 3-D Models LB p. 112 TG p. 88	Week 10 LB – only in TG TG pp. 91–93 Memo pp. 94–95 Also see exemplar test in Section C of this planner	TG Questions pp. 124–132 TG Memo pp. 133–137 Also see revision examination in Section C of this planner
Sasol Inzalo Mathematics	Week 3 Use a project from another LTSM or make up one of your own	Week 10 Use the test in another LTSM Also see exemplar test in Section C of this planner	Use exams in another LTSM Also see revision examination in Section C of this planner
Solutions for All Mathematics	Week 7 3-D Models LB – only in TG TG pp. 292–296	Week 10 LB – only in TG TG pp. 297–300 Memo pp. 301–302 Also see exemplar test in Section C of this planner	TG Questions pp. 315–319 TG Memo pp. 320–323 Also see revision examination in Section C of this planner
Spot On Mathematics	Week 8 Nets of 3-D objects LB – only in TG TG p. 253 Guidelines p. 252 Memo p. 254	Week 10 TG pp. 263–265 Memo pp. 266–267 Also see exemplar test in Section C of this planner	LB pp. 337–342 TG Memo pp. 345–350 TG Questions pp. 351–356 TG Memo pp. 357–361 Also see revision examination in Section C of this planner

5. The exemplar Term 3 test

Surname:		
Name:		
Date of birth:	Date: _____	_____
		55

INSTRUCTIONS TO LEARNERS:

1. Answer all the questions in the spaces provided.
2. No calculators may be used.
3. Show ALL calculations where necessary.
4. Time: 60 minutes.
5. Total: 55 marks.

SECTION A: MULTIPLE CHOICE

(3 marks)

Circle the letter of the correct answer.

Example: $7 \times 15 =$ _____

- (A) 105 B 110 C 115 D 120

1. A rectangular room is p metres long and q metres wide. Which of the following formulas **cannot be used** to determine the perimeter of the room?

A. $p + p + q + q$

B. $2 \times p + 2 \times q$

C. $(p + q) \times 2$

D. $p \times q + p \times q$

(1)

2. Which one of these is **not true**?

A. $1 \times 1 \div 1 \times 1 = 1$

B. $2 \div 2 + 2 \div 2 = 2$

C. $3 \times 3 - 3 + 3 = 3$

D. $(4 - 4) \div 4 + 4 = 4$

(1)

3. What is the value of ' a ' in the table?

1	2	3	4	...	a
4	6	8	10	...	64

A. 31

B. 16

C. 5

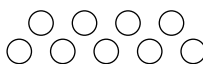
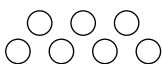
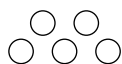
D. 57

(1)

SECTION B: NUMERIC AND GEOMETRIC PATTERNS

(7 marks)

4. Rosy uses counters to form the following patterns:



Pattern 1

Pattern 2

Pattern 3

Pattern 4

Complete the table that gives the number of counters for certain terms:

Pattern no.	1	2	3	4	5	10	100
No. of counters	3	5	7	9	a) _____	b) _____	c) _____

(3)

d) Describe the rule used in the sequence.

(1)

5. Continue the following number patterns for two more terms:

a) 1; 1; 2; 3; 5; 8; _____; _____

(2)

b) Explain the pattern you used to continue the sequence.

(1)

SECTION C: FUNCTIONS AND RELATIONSHIPS

(6 marks)

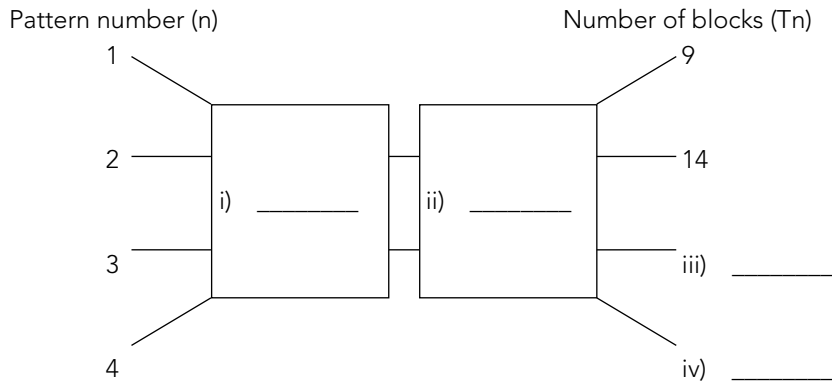
6. Study the following table:

a) Complete the table below by filling in Pattern 4 and writing down the number of shaded blocks for Pattern 3 and Pattern 4.

Pattern number	1	2	3	4 i)
Pattern				
Number of shaded blocks	9	14	ii) _____	iii) _____

(3)

b) Using the table, complete the spidergram below.



v) Write out the rule for this number pattern.

(2)

(1)

SECTION D: ALGEBRAIC EQUATIONS AND NUMBER SENTENCES

(4 marks)

7. Solve each of the following equations by trial-and-improvement.

Write your answers as, for example, $p = \dots$

Check your solution by substituting your answer in the equation.

a) $y - 3 = -13$

(2)

b) $3p = 9$

(2)

SECTION E: ALGEBRAIC EXPRESSIONS

(2 marks)

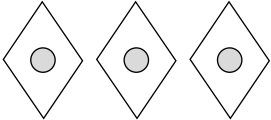
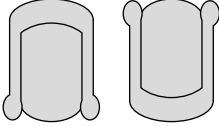
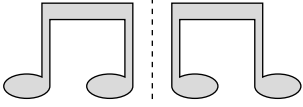
8. Write an expression for the total mass in kilograms of m bags of cauliflower and b bags of gem squash if the mass of one bag of cauliflower is 12 kg and the mass of one bag of gem squash is 2 kg.

(2)

SECTION F: TRANSFORMATION GEOMETRY

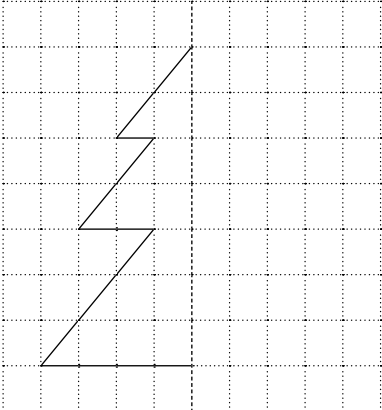
(13 marks)

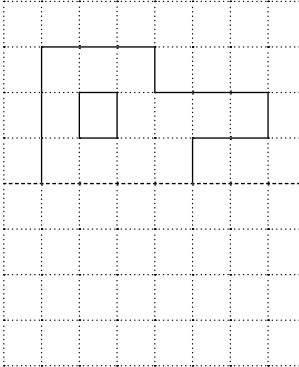
9. Use the words **translation**, **reflection** and **rotation** to describe each pattern.

	a) _____
	b) _____
	c) _____

(3)

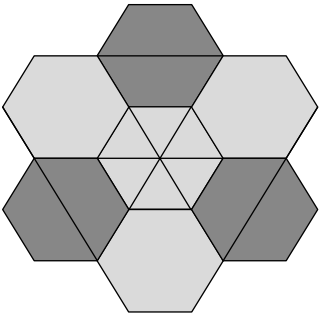
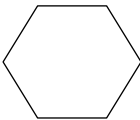

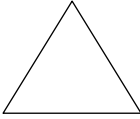
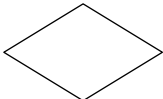
10. Copy these figures and draw the mirror image to form a symmetrical figure.

a) 

b) 

(2)

11. How many of the following can you find on the diagram?

Study the following diagram 	a) Regular hexagons		
	b) Trapeziums		
	c) Triangles		
	d) Diamond shapes (rhombuses)		

(2)

(2)

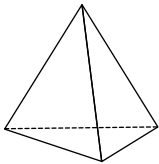
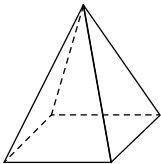
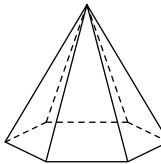
(2)

(2)

SECTION G: GEOMETRY OF 3-D OBJECTS

(10 marks)

12. Complete the table.

	A triangular pyramid	A square-based pyramid	A hexagonal pyramid
			
a) Shape of base			Hexagon
b) Number of faces		5	
c) Number of vertices	4		
d) Number of edges			12
e) Shape of lateral faces	All triangles		

(2)
(2)
(2)
(2)
(2)

SECTION H: GRAPHS

(10 marks)

13. a) Use the graph paper on the next page to draw a graph showing the average minimum temperature in our town over one year as listed in the following table:

(6)

Month	Average minimum temperature in our town in degrees centigrade
Jan	17
Feb	17
Mar	15
Apr	12
May	9
Jun	6
Jul	5
Aug	6
Sep	9
Oct	11
Nov	13
Dec	15

Make sure that your graph has a heading.

(1)

Make sure that you label the *x*-axis.

(1)

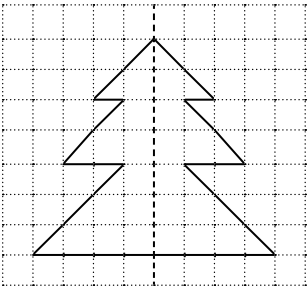
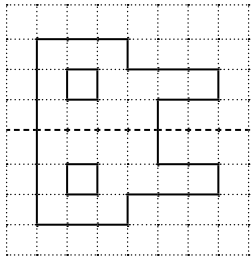
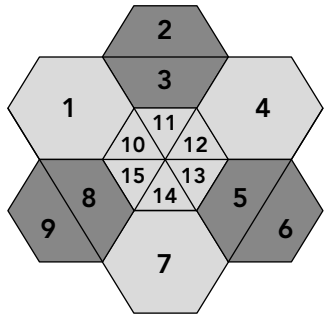
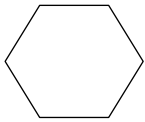

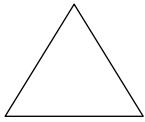
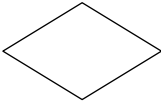
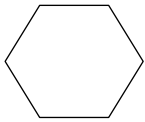

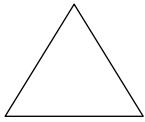
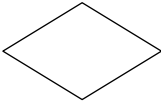
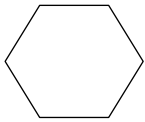

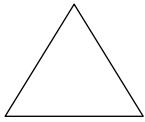
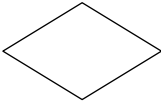
Make sure you label the *y*-axis.

(1)

b) Describe what your graph shows you about the average minimum temperature in our town.

(1)

TOTAL: 55 MARKS

Question	Expected answer	Marks	Cognitive level																				
SECTION D																							
7. a)	$y - 3 = -13$; $y - 3 + 3 = -13 + 3$; $y = -10$ ✓ Check: LHS = $-10 - 3 = -13 =$ RHS ✓	2	RP																				
b)	$3p = 9$; $p = 3$ ✓ Check: LHS = $3 \times 3 = 9 =$ RHS ✓	2	RP																				
SECTION E																							
8.	Total mass = $12m + 2b$ ✓✓	2	CP																				
SECTION F																							
9. a)	Translation ✓	3	RP																				
b)	Rotation ✓																						
c)	Reflection ✓																						
10. a)		2	CP																				
b)																							
11.	<p>Study the following diagram</p>  <p>How many of the following can you find on the diagram?</p> <table border="1"> <tbody> <tr> <td>a) Regular hexagons</td> <td></td> <td>7 ✓✓ (1; 2+3; 4; 5+6; 7; 8+9; 10+11+12+13+14+15)</td> <td>2</td> <td>CP</td> </tr> <tr> <td>b) Trapeziums</td> <td></td> <td>12 ✓✓ (2; 3; 5; 6; 8; 9; 10+11+12; 11+12+13; 12+13+14; 13+14+15; 14+15+10; 15+10+11)</td> <td>2</td> <td>PS</td> </tr> <tr> <td>c) Triangles</td> <td></td> <td>9 ✓✓ (10; 11; 12; 13; 14; 15; 11+3; 13+5; 15+8)</td> <td>2</td> <td>PS</td> </tr> <tr> <td>d) Diamond shapes (rhombuses)</td> <td></td> <td>6 ✓✓ (10+11; 11+12; 12+13; 13+14; 14+15; 15+10)</td> <td>2</td> <td>PS</td> </tr> </tbody> </table>	a) Regular hexagons		7 ✓✓ (1; 2+3; 4; 5+6; 7; 8+9; 10+11+12+13+14+15)	2	CP	b) Trapeziums		12 ✓✓ (2; 3; 5; 6; 8; 9; 10+11+12; 11+12+13; 12+13+14; 13+14+15; 14+15+10; 15+10+11)	2	PS	c) Triangles		9 ✓✓ (10; 11; 12; 13; 14; 15; 11+3; 13+5; 15+8)	2	PS	d) Diamond shapes (rhombuses)		6 ✓✓ (10+11; 11+12; 12+13; 13+14; 14+15; 15+10)	2	PS		
a) Regular hexagons		7 ✓✓ (1; 2+3; 4; 5+6; 7; 8+9; 10+11+12+13+14+15)	2	CP																			
b) Trapeziums		12 ✓✓ (2; 3; 5; 6; 8; 9; 10+11+12; 11+12+13; 12+13+14; 13+14+15; 14+15+10; 15+10+11)	2	PS																			
c) Triangles		9 ✓✓ (10; 11; 12; 13; 14; 15; 11+3; 13+5; 15+8)	2	PS																			
d) Diamond shapes (rhombuses)		6 ✓✓ (10+11; 11+12; 12+13; 13+14; 14+15; 15+10)	2	PS																			

Question	Expected answer	Marks	Cognitive level
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SECTION G

12.		A triangular pyramid	A square-based pyramid	A hexagonal pyramid	2	K	
	a) Shape of base	Triangle ✓	Square ✓	Hexagon			
	b) Number of faces	4 ✓	5	7 ✓			2
	c) Number of vertices	4	5 ✓	7 ✓			2
	d) Number of edges	6 ✓	8 ✓	12 ✓			2
	e) Shape of lateral faces	All triangles	All triangles ✓	All triangles ✓			2

SECTION H

13. a) ½ mark for each point plotted correctly (6) 1 mark for the graph heading ✓ 1 mark for the label for the horizontal axis ✓ 1 mark for the label for the vertical axis ✓	6	RP																										
	3	CP																										
<p style="text-align: center;">Average minimum temperature for our Town</p> <table border="1"> <caption>Data for Average minimum temperature for our Town</caption> <thead> <tr> <th>Month</th> <th>Temperature (°C)</th> </tr> </thead> <tbody> <tr><td>Jan</td><td>17</td></tr> <tr><td>Feb</td><td>17</td></tr> <tr><td>Mar</td><td>15</td></tr> <tr><td>Apr</td><td>12</td></tr> <tr><td>May</td><td>9</td></tr> <tr><td>Jun</td><td>6</td></tr> <tr><td>Jul</td><td>5</td></tr> <tr><td>Aug</td><td>6</td></tr> <tr><td>Sep</td><td>9</td></tr> <tr><td>Oct</td><td>11</td></tr> <tr><td>Nov</td><td>13</td></tr> <tr><td>Dec</td><td>15</td></tr> </tbody> </table>			Month	Temperature (°C)	Jan	17	Feb	17	Mar	15	Apr	12	May	9	Jun	6	Jul	5	Aug	6	Sep	9	Oct	11	Nov	13	Dec	15
Month	Temperature (°C)																											
Jan	17																											
Feb	17																											
Mar	15																											
Apr	12																											
May	9																											
Jun	6																											
Jul	5																											
Aug	6																											
Sep	9																											
Oct	11																											
Nov	13																											
Dec	15																											
b) The graph shows that the minimum temperature drops considerably in winter and is highest in summer. ✓ OR Minimum temperature is highest in December and January, and much lower in June and July.	1	PS																										

TOTAL: 55

7. Weighting of cognitive levels and content areas in the Term 3 test

Table 1: Weighting of marks across the cognitive levels in the Term 3 test compared with weighting required by the CAPS (p. 157)				
	Knowledge (K)	Routine procedures (RP)	Complex procedures (CP)	Problem solving (PS)
1	1			
2	1			
3		1		
4		4		
5		3		
6		3	3	
7		4		
8			2	
9		3		
10			2	
11			2	6
12	10			
13		6	3	1
TOTAL	12	24	12	7
%	22	44	22	13
CAPS %	25	45	20	10

Table 2: Weighting of marks for different content areas in the Term 3 test as compared with the CAPS (p. 11) weighting							
	Numeric & geometric patterns	Functions & relationships	Algebraic expressions	Algebraic equations	Transformation geometry	3-D objects	Graphs
1			1				
2				1			
3		1					
4	4						
5	3						
6		6					
7				4			
8			2				
9					3		
10					2		
11					8		
12						10	
13							10
Term 3 test marks Total = 55	7	7	3	5	13	10	10
Term 3 marks as a %	13	13	5	9	24	18	18
CAPS %	15	8	8	8	23	23	15

8. The revision end-of-year examination

Surname:	Date: _____ 60
Name:	
Date of birth:	

INSTRUCTIONS TO LEARNERS:

1. Answer all questions in the spaces provided.
2. Write neatly and show all calculations.
3. No calculators or cell phones allowed.

DURATION: 90 MINUTES

SECTION A: MULTIPLE CHOICE

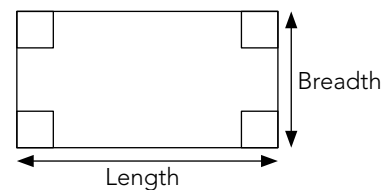
(5 marks)

There are **five** multiple choice questions in Section A. For each question **four** possible answers are given and only **one** answer is correct. For each multiple choice question **circle the letter of the correct answer** to indicate your choice.

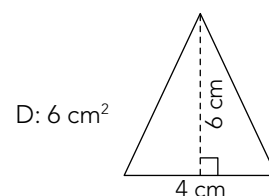
Example: $7 \times 15 =$ _____

- A 105 B 110 C 115 D 120

1. Which list shows ALL the factors of 52?
A. 1; 2; 3; 4; 13; 52 B. 1; 2; 4; 13; 26; 52
C. 1; 2; 3; 13; 26; 52 D. 1; 2; 5; 52
2. Which one is the formula for finding the perimeter of a rectangle?
A: Perimeter = length x breadth
B: Perimeter = length + breadth
C: Perimeter = 2 x length + breadth
D: Perimeter = 2 x (length + breadth)



3. The area of this triangle is
A: 24 cm^2 B: 12 cm^2 C: 10 cm^2



D: 6 cm^2

4. This table shows a relationship between t and p .
Which of the equations below shows the same relationship?

p	1	2	3	4
t	6	8	10	12

- A: $t = 6p$ B: $t = 5p$ C: $t = 2p + 4$ D: $t = 2p + 6$

5. What is a parallelogram with at least one angle equal to 90° called?
A: kite B: rhombus C: trapezium D: rectangle

SECTION B: ANSWER ALL THE QUESTIONS

NUMBERS AND OPERATIONS

(17 marks)

6. Complete the table below

(2)

Common fraction	Decimal fraction	Percentage
$\frac{23}{100}$	a) _____	23%
$\frac{6}{10}$	0,6	b) _____

7. What is the place value of the underlined digit in 534,86? _____ (1)

8. Write down the integer which is: (2)

a) 7 greater than -3

b) 8 less than 3

9. Calculate

a) $6,5 - 2,34$

(2) b) $3,7 \times 1,4$

(3)

10. Calculate

a) $-18 - 13$

(1) b) $8 + (-27)$

(1)

11. Find the value Δ of in the following equations:

a) $24 = 3 \times \Delta$

(1) b) $14 + \Delta = 16 - 8$

(2)

12. Simplify the following and show all your steps of working. Do not use a calculator.

$2^3 - 9^2$

(2)

PATTERNS, FUNCTIONS AND ALGEBRA

(13 marks)

13. Find the rule that describes the relationship between the numbers in the top row and the bottom row.

(2)

Input number	1	2	3	4	10
Output number	4	7	10	13	31

Rule: _____



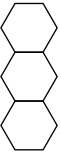
14. Shapes 1, 2 and 3 are shown in the table below.

a) Draw Shape 4 in the space provided.

(2)

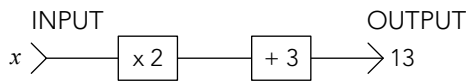
b) Fill in the number of sides for Shape 4.

(1)

SHAPE 1	SHAPE 2	SHAPE 3	SHAPE 4
			
6 sides	11 sides	16 sides	

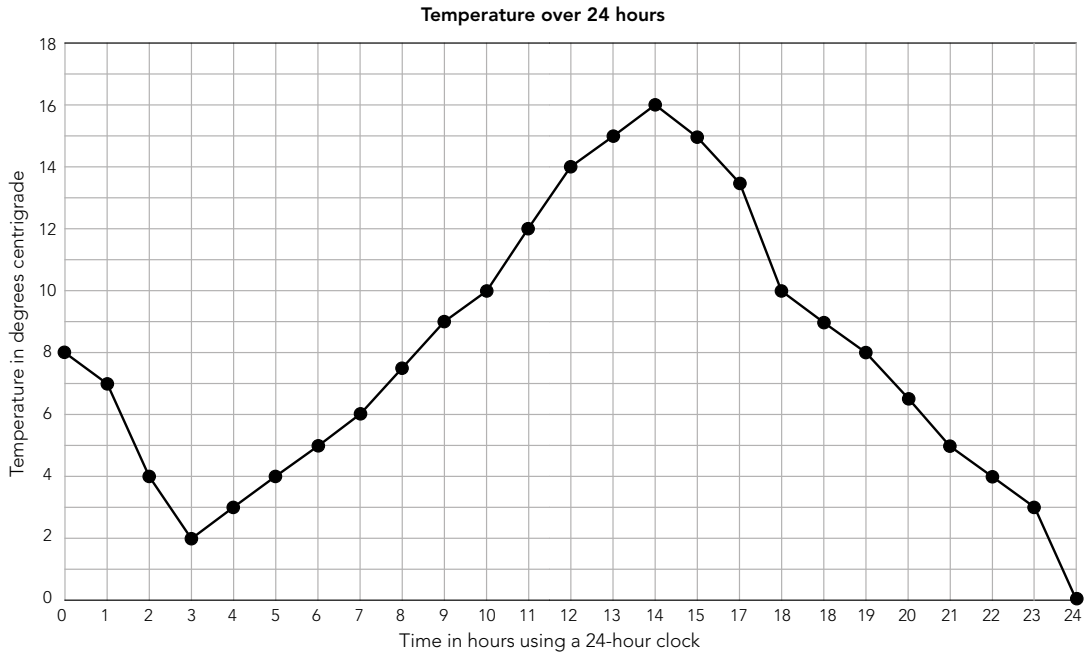
15. Write the values in the following flow diagram as an equation.

(2)



The equation is:

16. The following graph shows the change in temperature during a day in Vryheid in KwaZulu-Natal.



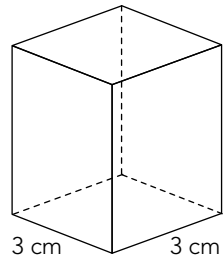
- a) What was the highest temperature on the day? (2)

- b) At what time(s) was the temperature 10 °C (10 degrees Centigrade)? (2)

- c) Was this a winter day or a summer day? Give a reason for your answer. (2)

MEASUREMENT

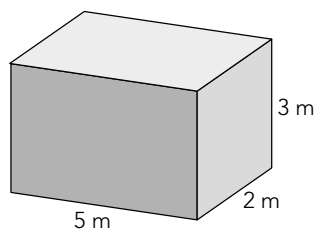
17. The volume of this square-based prism is 54 cm^3 .
The sides of the square base are both 3 cm.
Calculate the length of the third side of the prism.



(4 marks)
(2)

18. How many kilolitres of water are there in a tank that is 5 m long, 2 m wide and 3 m high?

(2)



PROBABILITY

(6 marks)

19. John rolls a regular dice once.



- a) What is the probability of getting a 6 when rolling this dice?

(2)

- b) What is the probability (WRITTEN AS A FRACTION IN SIMPLEST FORM) of getting A FACTOR OF 6 when rolling this dice?

(2)

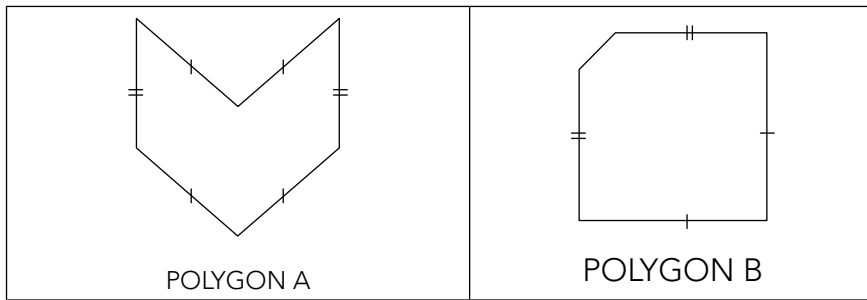
- c) What is the probability (WRITTEN AS A PERCENTAGE) of getting AN ODD NUMBER when rolling this dice?

(2)

SHAPE AND SPACE

(15 marks)

20. Study the two polygons and then answer the questions.



- a) What type of polygon is Polygon A? _____ (1)
- b) What type of polygon is Polygon B? _____ (1)
- c) Is Polygon A a regular or irregular polygon? _____ (1)
- d) Is Polygon B a regular or irregular polygon? _____ (1)
- e) Use a ruler to draw in all line(s) of symmetry on each polygon. _____ (2)

21. Give the names of the following geometric shapes:

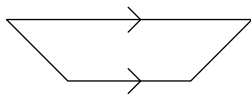


Fig A

a) _____ (1)

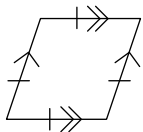


Fig B

b) _____ (1)

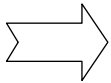
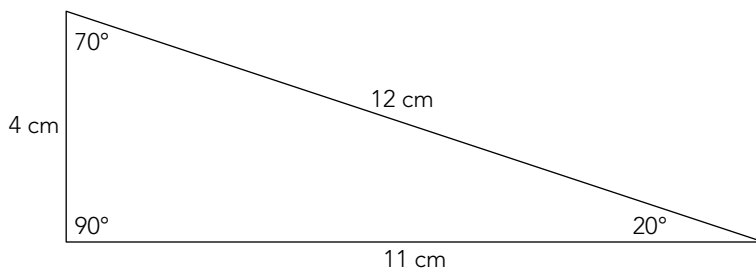


Fig C

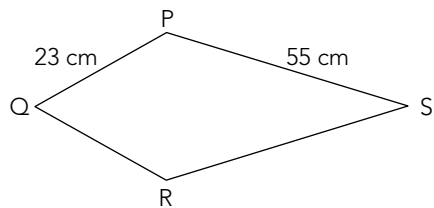
c) _____ (1)

22. Study the following triangle:



- a) Name the triangle according to the sizes of its angles _____ (1)
- b) Name the triangle according to the lengths of its sides _____ (1)

23. PQRS is a KITE. $PQ = 23$ mm and $PS = 55$ mm.



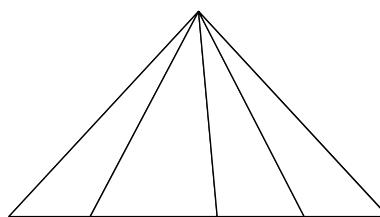
a) What is the length of QR?

QR = _____ (1)

b) What is the length of RS?

RS = _____ (1)

24. How many triangles are in the figure? (2)



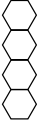
TOTAL: 60 MARKS

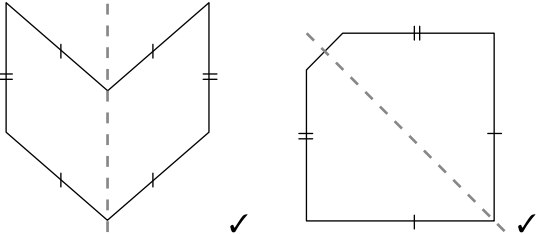
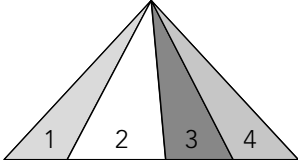
9. Memorandum and analysis of cognitive levels in the revision end-of-year examination

Note: The last column in the memorandum shows the cognitive level for each question in the examination. The levels are:

K	Knowledge: straight recall; use of mathematical facts and vocabulary; rounding off
RP	Routine procedure: perform well known procedures; simple applications
CP	Complex procedure: problems involving complex calculations and/or higher order reasoning
PS	Problem solving: non-routine problems; higher order understanding and processes
<i>More information about these levels can be found in the CAPS (p. 157).</i>	

Question	Marks	Cognitive level									
SECTION A:											
MULTIPLE CHOICE											
1. B ✓	(1)	K									
2. D ✓	(1)	K									
3. B ✓	(1)	RP									
4. C ✓	(1)	RP									
5. D ✓	(1)	PS									
SECTION B:											
NUMBER AND OPERATIONS											
6.											
	<table border="1"> <thead> <tr> <th>Common fraction</th> <th>Decimal fraction</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>$\frac{23}{100}$</td> <td>a) 0,23 ✓</td> <td>23%</td> </tr> <tr> <td>$\frac{6}{10}$</td> <td>0,6</td> <td>b) 60% ✓</td> </tr> </tbody> </table>	Common fraction	Decimal fraction	Percentage	$\frac{23}{100}$	a) 0,23 ✓	23%	$\frac{6}{10}$	0,6	b) 60% ✓	
Common fraction	Decimal fraction	Percentage									
$\frac{23}{100}$	a) 0,23 ✓	23%									
$\frac{6}{10}$	0,6	b) 60% ✓									
	(1)	K									
	(1)	K									
7. 8 tenths or 8 t or 0,8 ✓	(1)	K									
8. a) 4 ✓ (because $-3 + 7 = 4$)	(1)	K									
b) -5 ✓ (because $3 - 8 = -5$)	(1)	K									
9. a) $\begin{array}{r} 6,50 \\ - 2,35 \\ \hline 4,15 \end{array}$ ✓ correct method 4,15 ✓ correct answer	(2)	RP									
b) $\begin{array}{r} 37 \\ \times 14 \\ \hline 148 \\ + 370 \\ \hline 518 \end{array}$ ✓ correct multiplication 518 ✓ correct answer So $3,7 \times 1,4 = 5,18$ ✓ correct answer OR $37 \times 14 = 37 \times (10 + 4)$ $= 370 + 148$ ✓ correct multiplication $= 518$ ✓ correct answer So $3,7 \times 1,4 = 5,18$ ✓ correct answer	(3)	CP									

Question	Marks	Cognitive level
10. a) $-18 - 13 = -31$ ✓ b) $8 + (-27) = 8 - 27 = -19$ ✓	(1) (1)	K K
11. a) $\Delta = 8$ ✓ b) $14 + \Delta = 16 - 8$ $14 + \Delta = 8$ ✓ $\therefore \Delta = -6$ ✓	(1) (2)	RP CP
12. $2^3 - 9^2$ $= 8 - 81$ ✓ $= -73$ ✓	(2)	RP
PATTERNS, FUNCTIONS AND ALGEBRA		
13. Rule: <u>multiply by 3 and add 1</u> ✓✓ (for getting the rule correct) OR Output number = (input number \times 3) + 1 ✓✓	(2)	PS
14.  ✓✓ for drawing Shape 4 correctly b) 21 sides ✓	(2) (1)	K RP
15. $x \times 2 + 3 = 13$ ✓ for getting the left hand side correct ✓ for adding an equals sign	(2)	RP
16. a) The highest temperature is 16 degrees Centigrade. ✓ for 16 ✓ for the units (degrees Centigrade or °C) b) The temperature is 10 °C at 10:00 ✓ and 18:00 ✓ c) This was a winter day. ✓ The maximum temperature is 16 °C which is too cold for it to be a summer day. ✓	(2) (2) (2)	K RP PS
MEASUREMENT		
17. $3 \text{ cm} \times 3 \text{ cm} \times 3^{\text{rd}} \text{ side} = 54 \text{ cm}^3$ The length of the 3 rd side $\text{cm} = \frac{54}{9} = 6 \text{ cm}$ ✓✓	(2)	RP
18. Volume of tank = $5 \text{ m} \times 2 \text{ m} \times 3 \text{ m} = 30 \text{ m}^3$ ✓ Capacity = 30 kl ✓	(2)	RP
PROBABILITY		
19. a) Probability = $\frac{1}{6}$ ✓ b) Factors of 6 are 1; 2; 3 and 6 Probability = $\frac{4}{6}$ ✓ = $\frac{2}{3}$ ✓ c) Odd numbers are 1; 3 and 5 Probability = $\frac{3}{6}$ ✓ = 50% ✓	(2) (2) (2)	K RP RP

Question	Marks	Cognitive level
SPACE AND SHAPE		
20. a) Hexagon ✓ b) Pentagon ✓ c) Irregular ✓ d) Irregular ✓ e)  ✓	(1) (1) (1) (1) (2)	RP RP RP RP CP
21. a) Figure A is a trapezium ✓ b) Figure B is a rhombus ✓ c) Figure C is a octagon ✓	(1) (1) (1)	RP RP RP
22. a) Right angled triangle ✓ b) Scalene triangle ✓	(1) (1)	CP CP
23. a) QR = 23 mm ✓ b) RS = 55 mm ✓	(1) (1)	CP CP
24.  There are 4 single triangles (1; 2; 3; 4) There are 3 triangles made up of 2 triangles (1+2; 2+3; 3+4) There are 2 triangles made up of 3 triangles (1+2+3; 2+3+4) There is 1 triangle made up of 4 triangles (1+2+3+4) Altogether there are $4 + 3 + 2 + 1 = 10$ triangles ✓✓	(2)	PS
TOTAL: 60		

10. Weighting of cognitive levels and content areas in the revision end-of-year examination

Table 1: Weighting of marks across the content areas and cognitive levels in the revision end-of-year examination

	Number and Operations	Pattern, Functions & Algebra	Measurement	Space and Shape	Probability	Knowledge (K)	Routine Procedures (RP)	Complex Procedures (CP)	Problem Solving (PS)
1	1					1			
2			1			1			
3			1				1		
4		1					1		
5				1					1
6a	1					1			
6b	1					1			
7	1					1			
8a	1					1			
8b	1					1			
9a	2						2		
9b	3							3	
10a	1					1			
10b	1					1			
11a	1						1		
11b	2							2	
12	2						2		
13		2							2
14a		2				2			
14b		1					1		
15		2					2		
16a		2				2			
16b		2					2		
16c		2							2
17			2				2		
18			2				2		
19a					2	2			
19b					2		2		
19c					2		2		
20a				1			1		
20b				1			1		
20c				1			1		
20d				1			1		
20e				2				2	
21a				1			1		
21b				1			1		
21c				1			1		
22a				1				1	
22b				1				1	
23a				1				1	
23b				1				1	
24				2					2
Totals	18	14	6	16	6	15	27	11	7
CAPS unamended requirements	18	15	6	15	6	15	27	12	6

11. An exemplar formal assessment mark record sheet

MARK RECORDING SHEET SUBJECT: Mathematics GRADE: 7 YEAR:		SCHOOL:												CLASS:				
		GRADE 7 MATHEMATICS FORMAL ASSESSMENT TASKS												SBA TOTAL 40%	EXAMINATION 60%			
No.	SURNAME	NAME	TERM 1			TERM 2			TERM 3			TERM 4			40%	60%	100%	COMMENT
			ASSIGNMENT	TEST 1	TOTAL TERM 1	INVESTIGATION	EXAMINATION	TOTAL TERM 2	PROJECT	TEST 2	TOTAL TERM 3	PAPER 1	PAPER 2	TOTAL EXAMINATION				
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
DH signature																		
Date																		
TEACHER signature																		
Date																		

12. Templates for tracking, reflecting on and reporting curriculum coverage

12.1 Conventional schools¹

NAME OF TEACHER: _____ SUBJECT/GRADE: _____

Week no. in planner _____				
Week no. in term when work planned for week started _____				
Refer to the planner ² for details of the week's work (or the ATP for subjects without planners)				
Class (or subject for FP)				
On track by end of week? (Yes/no)				
How many learners are working confidently? ³ (Rough estimate)				
How many learners in this class?				
BRIEF NOTES ON THE DAY'S WORK: Consider such things as: <i>What concepts/skills did the learners struggle with or manage well in this lesson? What could be the reasons for this? Did the class complete the work you had planned? Do you need to change your plans for the next lesson? What changes will you make?</i>				
DAY⁴				
1				
2				
3				
4				
5				
Reflection on the week: Think about and make a note of:				
What concepts and skills for the week did learners struggle with? What could you do differently next time to better support or extend learning? What good practice could you share?			Did you cover the curriculum for the week? If not, what were some of the challenges? What can you do to catch up? What help do you need? How will your progress this week affect your plan for next week?	
DH:			Date:	

¹ Please amend this draft template to suit the needs of your school.

² You can use any planning document (such as the CAPS planner, the ATP or printed lesson plans) as the basis for your tracking.

³ Estimate of learners in that grade that are working confidently at Level 4 (adequate achievement) or above.

⁴ This can also be lessons if there are more than five lessons a week.

12.2 Multigrade schools¹

NAME OF TEACHER: _____

Week no. in planner _____

Week no. in term when work planned for week started _____

Refer to the planner² for details of the week's work (or the ATP for subjects without planners)

Subjects							
GRADE	On track this week? ³						
	Est. learners > Level 4 ⁴						
	# learners in grade						
GRADE	On track this week?						
	Est. learners > Level 4						
	# learners in grade						
GRADE	On track this week?						
	Est. learners > Level 4						
	# learners in grade						
DAY	BRIEF NOTES ON THE DAY'S WORK: Consider such things as: <i>What concepts/skills did the learners struggle with or manage well in this lesson? What could be the reasons for this? Did the class complete the work you had planned? Do you need to change your plans for the next lesson? What changes will you make?</i>						
	1						
	2						
	3						
	4						
5							
Reflection on the week: Think about and make a note of:							
SUBJECT	What concepts and skills for the week did learners struggle with? What could you do differently next time to better support or extend learning? What good practice could you share?			Did you cover the curriculum for the week? If not, what were some of the challenges? What can you do to catch up? What help do you need? How will your progress this week affect your plan for next week?			
Principal:				Date:			

¹ Please amend this draft template to suit the needs of your school.

² You can use any planning document (such as the CAPS planner, the ATP or printed lesson plans) as the basis for your tracking.

³ Yes/no?

⁴ Estimate of learners in that grade that are working confidently at Level 4 (adequate achievement) or above.



Jika iMfundo
what I do matters

Jik'iMfundo is a programme to improve learning outcomes, funded by the National Education Collaboration Trust, the KwaZulu-Natal Department of Education and others.

THE PROGRAMME TO IMPROVE LEARNING OUTCOMES

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