GRADE 9

Mathematics

Teacher Toolkit: CAPS Planner and Tracker

2019 TERM 4

CONTENTS

A. ABOUT THE TRACKER AND RESOURCES

1. Your quick guide to using this planner and tracker

What is the NECT and where do I fit in?

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

But who will help me?

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

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

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

How do I use the planner and tracker?

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

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

1. Find the textbook that YOU are using.

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

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

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

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

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

2. Purpose of the tracker

The Grade 9 Mathematics Curriculum and Assessment Planner and Tracker is a tool to support you in your role as a professional teacher. Its main purpose is to help you to keep pace with the time requirements and the content coverage of the CAPS. The tracker provides a programme of work that should be covered each day of the term and a space for reflection on the work done.

By following the programme in the tracker, you should cover the curriculum in the allocated time, and complete the formal assessment programme. By noting the date when each lesson is completed, you can see whether or not you are on track, and if not, you can strategise with your head of department (HOD) and peers to find the best possible way to make up time and ensure that all the work for the term is completed.

In addition, the tracker encourages you to reflect on the parts of your lessons that are effective, and the areas where content coverage could be supplemented or strengthened. These reflections can be shared with colleagues. In this way, the tracker encourages continuous improvement in practice. This tracker should be kept and filed at the end of the term.

3. Links to the CAPS

The Mathematics tracker for Grade 9 is based on the requirements prescribed by the Department of Basic Education's Curriculum and Assessment Policy Statement (CAPS) for Mathematics in the Senior Phase. The topics and the sequence in which they are presented in the KwaZulu-Natal annual teaching plan are the same as those in the CAPS for this term. The tracker gives the page number in the CAPS document of the topics and subtopics being addressed in each lesson to help you refer to the curriculum document directly, should you wish to do so.

4. Links to the approved sets of Learner's Books and Teacher's Guides

There is a tracker for each set of approved Learner's Books and Teacher's Guides on the national catalogue and for the *Sasol Inzalo Mathematics Book 2* for this grade. The tracker aligns the CAPS requirements with the content set out the approved Learner's Books and Teacher's Guides. You must refer to the tracker for the book that is used by learners at your school. If you have copies of other Learner's Books, you can also refer to these trackers to give you ideas for teaching the same content in different ways – but you must ensure you cover the content systematically. For each set of Learning and Teaching Support Materials (LTSMs) in the tracker, links are given to the relevant pages in both the Learner's Book and Teacher's Guide to make it easier for you to access the correct resources.

In a few instances, when necessary, we recommend that you use only selected activities from the Learner's Book. This is when the recommended exercises have more work than can be done in the time allocated to the lesson. The activity is marked ***Select** in these cases. In other instances the Learner's Books do not have adequate activities for learners to consolidate work done on a topic, in which case we recommend that you use the relevant activities in the DBE workbooks, the *Sasol Inzalo Mathematics Book 2* or additional work from other sources. The activity is marked **#Supplement** in these cases.

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

5. Links to the DBE workbooks and the Grade 9 *Sasol Inzalo Mathematics Book 2*

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

In addition, the tracker for each of the eight approved LTSMs also gives links to relevant pages in the Grade 9 *Sasol Inzalo Mathematics Book 2* to help you find relevant

resources there. The page numbers referred to are the same for both the Learner's Book and the Teacher's Guide.

6. Managing time allocated in the tracker

The CAPS prescribes four and a half hours of Mathematics per week in Grade 9. The tracker provides a suggested plan for five lessons a week, with the first four lessons expected to be an hour long, and the fifth lesson 30 minutes long. Altogether this makes up four and a half hours. As each school organises its timetable differently, you may have to divide the lessons in the programme to accommodate the length of the lessons at your school in a way that ensures the full four and a half hours for Mathematics is used constructively.

The breakdown of work to be done each week corresponds to the annual teaching plan and programme of assessment drawn up by the provincial Department of Education. However, the tracker gives a more detailed outline of what should be taught each day.

It is important to note that a total of 45 hours is given in the CAPS to the topics for the term. This tracker has been designed for a term that is nine weeks long. In Term 4, a total of twelve hours is given for assessment and revision. In order to allow time for this, the tracker has been adjusted, with the formal teaching programme being organised to be completed in seven weeks and two weeks set aside for the formal examinations. Should you use this tracker in a fourth term of a different length, or with more or less time set aside for the end-of-year examinations, you will need to adjust the programme accordingly. It is important to check this at the start of the term.

7. Sequence adherence

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

8. Links to assessment

In Term 4 of Grade 9, the formal assessment programme specified in the CAPS requires, as a minimum, that learners complete one assignment and one investigation. The approved Learner's Books and Teacher's Guides provide exemplar assignments and investigations which you can use with your class. The Assessment Term Plan, provided in Section C of this document, shows when in the programme of work they are included in each set of materials, and on which pages in the Learner's Books or Teacher's Guides they can be found. The tracker indicates where in the series of lessons the formal assessments are to be done and when feedback should be given. The actual tasks and the dates for the assessments vary slightly from Learner's Book to Learner's Book, but are always in line with the CAPS specifications. If the LTSMs which you are using offer more than one option for an assignment or an investigation, then an option has been chosen for you and included in the tracker, but you can, of course, choose a different option if you prefer.

It is important to note that the DBE makes changes to the CAPS assessment requirements from time to time. When such changes are made, you should adjust the assessment programme provided here to accord with them.

We have provided an end-of-year examination and marking memorandum, which you could use instead of the examination in the LTSMs used by your class. If you think that this examination is too long, you may divide it into two examinations. For this purpose, the examination has been sub-divided into Section A (one and a half hours) and Section B (one hour). There is also an analysis of the examination according to the weightings of cognitive levels specified in the CAPS. You will find these resources in Section E of this tracker.

Where the end-of-year examination is in the Learner's Book, you cannot use it as part of the formal assessment programme as learners will be able to prepare for it in advance. Where this is the case, you will need to use an examination from a Teacher's Guide from a different set of LTSMs, or set your own from a range of sources and the Sasol Inzalo books (if you are not using them as your primary guide in class), or make use of the examination at the end of this booklet, as mentioned above.

A suggested mark record sheet is provided for you to copy and complete for all the learners in your class. This records the marks of the formal assessment that you carry out during the term. You may prefer to use your own mark sheet created by using your class list.

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

9. Resources

Occasionally, the tracker suggests resources that you could use for certain lessons. You are free to use any resources to enrich your Mathematics teaching.

B. LESSON PREPARATION KEY STEPS

The tracker provides a detailed programme to guide you through the daily content you need to teach to your class, and when to do formal assessments. You are still required to draw up your own lesson plans, and will still make the final professional choices about which examples and explanations to give, which activities to set for your class, and how to manage your class on a daily basis. It is a good idea that you and your colleagues who are teaching Mathematics agree on a day to get together to plan your lessons as a group and submit your plans to your HOD for quality assurance. To deliver the lessons successfully **you must do the necessary preparation yourself**. Remember that your lessons will not be successful if you have not prepared properly for them. Preparing for your lessons involves a number of key steps. We have noted some of these steps below.

1. **Review the term focus:** It is important that you are clear about the CAPS content focus, because this will frame everything you do in your Mathematics lessons during the term. Start by looking at the CAPS and *orientating* yourself to the CAPS content focus for the term. **The time allocation per term** is given in the CAPS document on page 118. This indicates how many hours should be spent on each topic.

2. **Prepare resources:** The resources needed for each lesson are listed at the start of each CAPS topic or for each lesson, depending on the Learner's Book. It is very important that you *check what is required for each lesson ahead of time* so that you have all your resources ready for use every day. Here are a few tips to help you:
   - Use newspapers and magazines to cut out pictures that could be used in your teaching. If you have access to the internet, use Google to search for and print out pictures that you may need to use as illustrations in your lessons.
   - Make sure you have chalk or marking pens so that you can use your chalk board or whiteboard as needed. If you have digital resources, check that they are in working order.
   - Check the assessment programme so that you can prepare any resources, such as test papers assignments or investigations, needed for formal assessment to ensure that learners settle down and begin working promptly.

3. **Prepare the content:** Think carefully about the content that you will teach your learners in each lesson. Think about the prior knowledge of the content that learners should have from earlier grades. This prior knowledge will be built on in the lesson. You also need to think about how you will deal with learners who do not have adequate prior knowledge of the content being taught, and have resources ready for them to use, thus ensuring they are not disadvantaged in any way. Consider any common misconceptions, and how you will address these.

   Refer to the CAPS content and skills clarification column for further guidance while you prepare.
   - *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 topic. You need to think about how to explain new Mathematics content, new vocabulary and Mathematical 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 you will do in class and what learners will do at home. Be sure to have some enrichment and remediation activities ready to use as needed. The Teacher's Guides offer suggestions for enrichment and remediation activities that you might want to use.
   - *Consider the needs of any learners with barriers to learning in your class* and how best you can support them. The DBE has published some excellent materials to support you in working with learners with learning barriers. Two such publications are:
     – Directorate Inclusive Education, Department of Basic Education (2011) Guidelines for Responding to Learner Diversity in the Classroom Through Curriculum and Assessment Policy Statements. Pretoria. www.education.gov.za, www.thutong.doe.gov.za/InclusiveEducation

– Directorate Inclusive Education, Department of Basic Education. (2010). Guidelines for Inclusive Teaching and Learning. Education White Paper 6. Special needs education: Building an inclusive education and training system. Pretoria. www.education.gov.za, www.thutong.doe.gov.za/InclusiveEducation

4. **Plan the steps in your lesson, and think carefully about how much time to allocate to different learner activities.** Also think about how to organise the learners when they work. Most lessons should include the steps below. We have made suggestions about how much time to spend on each step (for a one-hour lesson) – but you might find that you need to work differently in some lessons, such as when a test is being written, or when the allocated lesson time is only half an hour.
   - **Homework review/reflection (15 minutes):** This is the first activity of the lesson. We recommend that you take about 15 minutes to remediate and correct the previous day's homework. Read out answers to all 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 learners struggled with, and work through these activities in class. Allow learners the opportunity to write corrections as needed.

     During this part of the lesson you may also reflect on the previous day's work.
   - **Lesson content – concept development (15 minutes):** This is the second activity of the lesson. We recommend that you actively teach your class for 15 minutes – working through examples interactively with your learners. Worked examples and suggested explanations are given in the Learner's Book or Teacher's Guide. Work through these examples with your class as a whole.

     If you need additional examples or ideas to enrich your explanations, the CAPS content clarification column elaborates on these explanations and provides additional examples if necessary.
   - **Classwork activity (25 minutes):** This is the third activity of the lesson. This part of the lesson provides an opportunity for learners to consolidate new concepts by doing activities or exercises from the Learner's Book or the DBE workbook. These activities allow them to practice their Mathematical and problem solving skills. It is important that you **work through the classwork activity beforehand** – you need to assist learners as they do the classwork.

     You might also need to select particular questions from each activity that can be used as a classwork activity to ensure that learners can manage the workload – the **exercises given in the various Learner's Books vary greatly in length** and you need to make this selection in advance (ensuring that all types of activities or concepts are covered each day) so that you can give quick and clear instructions to your learners about which numbers of each exercise they should do. (Remember not to give your learners more work than you are able to control and mark.)

     Depending on your learners and the activities, you could work through one or two of the classwork activities with the whole class before allowing the learners to work independently. Give 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. 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 the group.

     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 work through the classwork activity together and they can do corrections during the lesson.

     This is also the part of the lesson where you can assist learners who need extra support and extend those who need enrichment. Throughout the lesson, try to identify learners who need additional support or extension by paying attention to how well they managed the homework, how they respond when you develop the new content, and how they cope with the class activities.

     While the rest of the class is busy working through the classwork activities, you should spend some time with those 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 and have enrichment activities for them to complete.
   - **Allocate homework (5 minutes):** This is the fourth and final activity of the lesson. In this step you should tell the learners about the homework for the day and make sure they know what is expected of them and understand what it is that they have to do. Homework enables the learners to consolidate the Mathematics you have taught them in the class. It also promotes learner writing, development of Mathematical knowledge and the development of regular study habits.

For homework, you can select a few questions from the daily classwork in their Learner's Book and ask the learners to complete them at home, or ask them to do part, or all, of a DBE worksheet.

Encourage your learners to show their parent(s) or their guardian(s) the work they have done.

5. **After each lesson, reflect on how it went:** Each week there is a reminder for you to note your thoughts about the week's lessons. You will use these notes as you plan and prepare for your teaching and in discussions with your HOD and peers. Note that a year-end reflection is provided at the end of Week 7.

C. PLANNING FOR ASSESSMENT

1. Formal assessment

Table 1 below shows the minimum requirement for formal assessment in Grade 9 given by the CAPS (p. 155).

Table 1: NUMBER OF ASSESSMENT TASKS AND WEIGHTING

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

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

Table 2 gives an overview of how the minimum requirements of the formal assessment programme for Term 4, as specified in the CAPS, fit into the weekly planned lessons in the tracker for each set of LTSMs. The official requirements for formal assessment change from time to time. It is important that you adjust this programme to comply with changes that might not be reflected here.

The exemplar examination (in Section E) may be written towards the end of the term during the formal examination period, provided a common National or Provincial examination is not supplied. The last column in Table 2 gives the page references of end-of-year examinations in the LTSMs. Should you wish to use one of these examinations (other than one in the Learner's Book) instead of the exemplar, you may of course do so. If you set any other formal assessment for a different time, you will need to adjust the programme in the tracker accordingly.

Table 2: FORMAL ASSESSMENT PROGRAMME FOR TERM 4

LTSM	Assignment	Investigation	End-of-year examination
Premier Mathematics	**Part 1: Week 5** Day 23 **Part 2: Week 7** Day 31 LB pp. 235–236 TG p. 158	**Week 2 & 3** Day 10 & 11 LB pp. 204–205 TG pp. 147–148	TG pp. 166–169 Memo pp. 170–173
Spot On Mathematics	**Week 22** Day 5 TG p. 296	**Week 7** Day 31 TG p. 295	TG pp. 207–210 Memo pp. 211–214
Platinum Mathematics	**Week 4** Day 18 LB pp. 268–269 TG pp. 138–140	**Week 7** Day 31 LB pp. 294–295 TG p. 152	TG pp. 163–166 Memo pp. 167–168
Oxford Headstart Mathematics	**Week 6 & 7** Day 30 & 31 LB (Rev. No. 1–4) pp. 528–530 TG pp. 369–370	**Week 2** Day 9 LB (Act. 2) pp. 470–472 TG pp. 343–344	TG pp. 377–381 Memo pp. 382–387
Oxford Successful Mathematics	**Week 4** Day 18 LB p. 446 TG p. 345	**Part 1: Week 5** Day 21 **Part 2: Week 7** Day 31 LB pp. 450–451 TG p. 349	TG pp. 356–362 Memo pp. 363–367

LTSM	Assignment	Investigation	End-of-year examination
Clever: Keeping Maths Simple	**Week 2** Day 9 LB p. 358 TG p. 356	**Week 7** Day 31 LB pp. 360–362 TG p. 358	TG pp. 359–364 Memo pp. 365–369
Solutions for All Mathematics	**Week 6** Day 27 TG pp. 447–448	**Week 7** Day 32 TG pp. 449–451	TG pp. 144–146 Memo pp. 147–148
Mathematics Today	**Week 6 & 7** Day 30 & 31 LB pp. 305–308 TG pp. 134–137	**Week 4** Day 18 LB p. 277 TG p. 119	TG pp. 144–146 Memo pp. 147–148
Sasol Inzalo Mathematics Book 2	**Week 5** Day 23 *Assignment must be sourced from another set of LTSMs*	**Week 2 & 3** Day 10 & 11 *Investigation must be sourced from another set of LTSMs*	

2. Informal assessment

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

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

- *Premier Mathematics* provides revision exercises of the units at the end of the term with full solutions provided in the Teacher's Guide.
- *Spot On Mathematics* provides a revision activity at the end of each module with full solutions in the Teacher's Guide.
- *Platinum Mathematics* provides comprehensive revision exercises at the end of each topic in the Learner's Book with full solutions in the Teacher's Guide. In addition there are Basic Target and Advanced Target worksheets at the back of the Teacher's Guide. An Extension and Remediation Worksheet Book is also provided.
- *Oxford Headstart Mathematics* gives revision exercises at the end of each chapter with solutions in the Teacher's Guide. Extension and remedial activities are also suggested throughout the Teacher's Guide.
- *Oxford Successful Mathematics* has a consolidation exercise at the end of each chapter in the Learner's Book with full solutions in the Teacher's Guide.
- *Clever: Keeping Maths Simple* does not have revision exercises but there is more enough material in many of the exercises available for revision purposes.
- *Solutions for All Mathematics* has a revision exercise (Check what you know) at the end of each unit. The final unit of each term comprises revision of all the units done during the term. Comprehensive solutions are provided in the Teacher's Guide. Enrichment is provided occasionally and is indicated by an enrichment icon.
- *Mathematics Today* provides a revision test at the end of each topic with full solutions in the Teacher's Guide. For each topic, remedial support and extension exercises are provided in the Teacher's Guide. There is also a separate photocopiable Worksheet Book covering all the topics.

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

D. TRACKERS FOR EACH SET OF APPROVED LTSMs

Premier Mathematics

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

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

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

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

Weekly reflection

The tracker provides a space that you can use to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and peers, and together think of ways of improving on the daily work that the learners in your class are doing.

When you reflect you could think about things such as:

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

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

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

The reflection should be based on the daily lessons you have taught each week. It will provide you with a record for the next time you implement the same lesson and also forms the basis for collegial conversations with your HOD and peers. Note that a year-end reflection is provided at the end of Week 7.

Premier Mathematics Week 1													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
1	**Transformation geometry:** Recognise, describe and perform transformations with points, line segments and simple geometric figures, focusing on reflection in the Y-axis or X-axis	147	1	187–190	141–142	No. 105 (pp. 108–109)	No. 6.1 (pp. 91–92)						
2	Recognise, describe and perform translations within and across quadrants	147	2	190–193	142–143	No. 109 (pp. 116–117)	No. 6.3 (pp. 96–99)						
3	Recognise, describe and perform reflections about the straight line $y = x$	147	3	193–195	144	No. 106–107 (pp. 110–113)	No. 6.2 (pp. 92–96)						
4	Identify the transformation given the co-ordinates of the image	147	4	196–198	144–145								
5	Use proportion to describe the effect of enlargement or reduction on area and perimeter of geometric figures	147	5	198–200	145		No. 6.4 (pp. 100–103)						

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

Premier Mathematics Week 2 *Select													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
6	Investigate the co-ordinates of the vertices of figures that have been enlarged or reduced by a given scale factor	147	Challenge	201	145		No. 6.4 (pp. 103–105)						
7	Revise enlargements and reductions (use *DBE workbook* or *Sasol Inzalo book*)	147				No. 112a–113b* (pp. 124–131)	No. 6.4 (pp. 105–108)						
8	Revise rotations (Grade 8) and other transformations (use *DBE workbook*)	147				No. 108 (pp. 114–115) No. 110–111b* (pp. 118–123)							
9	**Geometry of 3-D objects:** Classify 3-D objects; Revise the properties and definitions of the 5 Platonic solids	148	1	202–204	146–147	No. 114–115 (pp. 132–135)	No. 7.1 (pp. 111–113) No. 7.3 (pp. 115–118)						
10	**Formal assessment: Investigation**		Inv.	204–205	147–148								
Note: Refer to Day 9: Models of 3-D objects should be provided.													

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

Premier Mathematics Week 3 #Supplement												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
11	**Formal assessment: Investigation** cont.		Inv.	204–205	147–148							
12	Recognise and describe properties of spheres and cylinders	148	2#	206	148	No. 116–117 (pp. 136–139)	No. 7.5–7.6 (pp. 121–125)					
13	Build 3-D models: Use nets to create models of geometric solids	148	3	207–208	148–149	No. 118–119 (pp. 140–143)	No. 7.2 (pp. 113–115)					
14	Construct nets; Use nets to explore properties of cylinders	148	4 (no. 1–4)	210–211	149–150	No. 120a–120c (pp. 144–149)						
15	Use nets to explore properties of cylinders cont.	148	4 (no. 5–6)	211–212	150–151							
Note: Refer to Day 13: Learners should bring 3-D objects from home. Learners require paper/cardboard, scissors, glue/sticky tape.												
Reflection												
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?						
						HOD:		**Date:**				

Premier Mathematics Week 4												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
16	Revise geometry of 3-D objects: Construct nets (use *DBE workbook*)	148				No. 121a–121b (pp. 150–152						
17	Revise geometry of 3-D objects: Construct nets cont. (use *DBE workbook*)	148				No. 122a–122c (pp. 154–159)	Rev. worksheet (p. 126)					
18	**Review investigation done in previous week;** Investigate Euler's formula (use *Sasol Inzalo book*))						No. 7.4 (pp. 119–120)					
19	**Collect, organise and summarise data:** Collect data	149	1	213–214	152	No. 123a–123b (pp. 160–163)	No. 8.1 (pp. 129–132)					
20	Organise and summarise data	149	2 (no. 1)	215–216	152	No. 124a (pp. 164–165)	No. 8.2 (pp. 133–136)					

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

Premier Mathematics Week 5												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
21	Organise and summarise data cont.	149	2 (no. 2–4)	216–217	153	No. 124b (pp. 166–167)						
22	Revise summarising data (use *Sasol Inzalo book*)	149				No. 125a–125b (pp. 168–171)	No. 8.3 (pp. 136–140)					
23	**Formal assessment: Assignment – Part 1**		Ass.	235–236	158							
24	**Represent data:** Display and interpret data using bar graphs, double bar graphs and histograms	150	3 (no. 1–4)	217–220 224–226	153–155	126a–129b (pp. 172–187)	No. 9.1–9.2 (pp. 143–148)					
25	Display and interpret data using pie charts	150	3 (no. 5–6)	220–222 226–227	155	No. 130a–130b (pp. 188–191)	No. 9.3 (pp. 149–150)					

Reflection

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

What will you change next time? Why?

HOD: **Date:**

Premier Mathematics Week 6 *Select #Supplement													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
26	Display and interpret data using broken line graphs and scatter plots	150	3 (no. 7–8)#	222–224 227	155–156	No. 131a–133 (pp. 192–201)	No. 9.4–9.5 (pp. 151–160)						
27	**Interpret, analyse and report on data:** Interpret data	151	4	228–231	156		No. 10.1 (pp. 163–166)						
28	Analyse data	151	5	231–233	157	No. 134a (pp. 202–203)	No. 10.2 (pp. 167–168)						
29	Report on data	151	6	233–234	157	No. 134b (pp. 204–205)	No. 10.3–10.4 (pp. 168–176)						
30	Revise the Data Cycle (use *DBE workbook*)	151				No. 135–137b* (pp. 206–213)							

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

Premier Mathematics Week 7												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
31	**Formal assessment: Assignment – Part 2**		Ass.	235–236	158							
32	**Probability:** Revise probability of simple events (use *DBE workbook* and/or *Sasol Inzalo book*)	152–153				No. 138 (pp. 214–215)	No. 11.1 (pp. 179–183)					
33	Determine probabilities of compound events using two-way tables and tree diagrams	152–153	1	237–239	159–160	No. 139a–139b (pp. 216–219)	No. 11.2 (pp. 184–186)					
34	Predict the relative frequency of an event in simple experiments; Compare relative frequency with probability	152–153	2 (no. 1–5)	239–240	160	No. 140–141 (pp. 220–223)						
35	Probability	152–153	2 (no. 6–9)	241	160–161	No. 142–143 (pp. 224–227)						

Reflect on the year

Think about and make a note of:

1. Did you complete the curriculum according to the CAPS requirements? If not, why not and what could you do to cover all of the work next year?
2. Did the tracker help with curriculum planning and coverage? How could you use it even more effectively next year?
3. What concepts and skills did learners grasp well this year? What good practice could you use again next year?
4. What did learners struggle with? How can you help your group next year understand these concepts and develop these skills better?
5. What needs to be communicated to the teacher who will teach this group of learners next year?
6. What aspects of your teaching and assessment practices would you like to develop further next year? How will you go about this?

HOD: **Date:**

Premier Mathematics Week 8 and 9: Examination period

Spot On Mathematics

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

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

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

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

Weekly reflection

The tracker provides a space that you can use to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and peers, and together think of ways of improving on the daily work that the learners in your class are doing.

When you reflect you could think about things such as:

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

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

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

The reflection should be based on the daily lessons you have taught each week. It will provide you with a record for the next time you implement the same lesson and also forms the basis for collegial conversations with your HOD and peers. Note that a year-end reflection is provided at the end of Week 7.

Spot On Mathematics Week 1												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
1	**Transformation geometry:** Recognise, describe and perform transformations with points, line segments and simple geometric figures, focusing on translations within and across quadrants	147	7.1	228–232	163–165	No. 109 (pp. 116–117)	No. 6.1 (pp. 91–92)					
2	Recognise, describe and perform reflections in the Y-axis, the X-axis, the straight line $y = x$ or $y = -x$	147	7.2	233–236	166–167	No. 105–107 (pp. 108–113)	No. 6.3 (pp. 96–99)					
3	Recognise, describe and perform rotations around a fixed point	147	7.3	237–240	168	No. 108 (pp. 114–115)	No. 6.2 (pp. 92–96)					
4	Use proportion to describe the effect of enlargement or reduction on area and perimeter of geometric figures; Scale factors	147	7.4	241–244	169		No. 6.4 (pp. 100–103)					
5	Investigate the co-ordinates of the vertices of figures that have been enlarged or reduced by a given scale factor (use *DBE workbook*)	147				No. 113a–113b (pp. 128–131)	No. 6.4 (pp. 103–105)					

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

Spot On Mathematics Week 2 *Select													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
6	Revise enlargements and reductions (use *DBE workbook*)	147				No. 112a–112b (pp. 124–127)	No. 6.4 (pp. 105–108)						
7	Revise other transformations (use *DBE workbook*)	147				No. 110–111b* (pp. 118–123)							
8	Revise transformation geometry	147	Rev.	246–248	171–172								
9	**Geometry of 3-D objects:** Classify 3-D objects; Revise the properties and definitions of the 5 Platonic solids	148	8.1	250–254	173–175	No. 114–115 (pp. 132–135)	No. 7.1 (pp. 111–113)						
10	Classify Platonic solids: Euler's formula	148	8.2 (no. 1–4)	255–256	176	No. 116–117 (pp. 136–139)	No. 7.4 (pp. 119–120)						
Note: Refer to Day 9: Models of 3-D objects should be provided. Learners require string and 10 plastic straws.													
Reflection													
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?							
						HOD:				**Date:**			

Spot On Mathematics Week 3												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
11	Construct the Platonic solids	148	8.2 (no. 5–6)	257	176		No. 7.3 (pp. 115–118)					
12	Build 3-D models: Use nets to create models of geometric solids	148	8.3	258–260	177	No. 118–119 (pp. 140–143)	No. 7.2 (pp. 113–115)					
13	Construct nets; Use nets to explore properties of cylinders (use *Sasol Inzalo book*)	148					No. 7.5 (pp. 121–123)					
14	Recognise and describe properties of spheres (use *Sasol Inzalo book*)	148				No. 120a–120c (pp. 144–149)	No. 7.6 (pp. 124–125)					
15	Revise geometry of 3-D objects: Construct nets (use *DBE workbook*)	148				No. 121a–121b (pp. 150–152						
Note: Refer to Day 11–13: Learners require string and plastic straws, cardboard/paper and glue/sticky tape.												

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

Spot On Mathematics Week 4												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
16	Revise geometry of 3-D objects: Construct nets cont. (use *DBE workbook*)	148				No. 122a–122c (pp. 154–159)						
17	Revise geometry of 3-D objects	148	Rev.	262–264	179–180		Rev. worksheet (p. 126)					
18	**Collect, organise and summarise data:** Collect data	149	9.1	266–269	181–182	No. 123a–123b (pp. 160–163)	No. 8.1 (pp. 129–132)					
19	Organise and summarise data	149	9.2 (no. 1–3)	270–276	183	No. 124a (pp. 164–165)	No. 8.2 (pp. 133–136)					
20	Organise and summarise data cont.	149	9.2 (no. 4–7)	277–278	184–185	No. 124a (pp. 164–165)						

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

Spot On Mathematics Week 5 #Supplement												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
21	Revise summarising data (use *Sasol Inzalo book*)	149				No. 124b (pp. 166–167)	No. 8.3 (pp. 136–140)					
22	**Formal assessment: Assignment**		Ass.	296		No. 125a–125b (pp. 168–171)						
23	**Represent data:** Display and interpret data using bar graphs, double bar graphs and histograms	150	9.3	279–283	186–188	126a–129b (pp. 172–187)	No. 9.1–9.2 (pp. 143–148)					
24	Display and interpret data using pie charts	150	9.4 (no. 1, 3)#	284 288	189–190	No. 130a–130b (pp. 188–191)	No. 9.3 (pp. 149–150)					
25	Display and interpret data using broken line graphs	150	9.4 (no. 5)#	285 289	190	No. 131a–131b (pp. 192–195)	No. 9.4 (pp. 151–153)					

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

Spot On Mathematics Week 6 *Select #Supplement													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
26	Display and interpret data using scatter plots; Review assignment done in previous week	150	9.4 (no. 2,4,6)#	286–290	189–190	No. 132a–133 (pp. 196–201)	No. 9.5 (pp. 154–160)						
27	**Interpret, analyse and report on data:** Critically read, interpret, compare sets of data, analyse sources of bias, draw conclusions	151	9.5 (no. 1–2)#	291–294	191		No. 10.1 (pp. 163–166)						
28	Interpret, analyse and report on data cont.	151	9.5 (no. 3–4)#	294	191–192		No. 10.2 (pp. 167–168)						
29	Interpret, analyse and report on data cont. (use *DBE workbook* and *Sasol Inzalo book*)	151				No. 134a–134b (pp. 202–205)	No. 10.3–10.4 (pp. 168–176)						
30	Revise the Data Cycle (use *DBE workbook*)	151				No. 135–137b* (pp. 206–213)							

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

Spot On Mathematics Week 7

*Select

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	*Sasol Inzalo*	Class				
								Date completed				
31	**Formal assessment: Investigation**		Inv.	295								
32	**Probability:** Determine probabilities of simple events	152–153	10.1a–10.1b*	304–307	197–199	No. 138 (pp. 214–215)	No. 11.1 (pp. 179–183)					
33	Determine probabilities of compound events using two-way tables and tree diagrams	152–153	10.2	308–311	200–202	No. 139a–139b (pp. 216–219)	No. 11.2 (pp. 184–186)					
34	Predict the relative frequency of an event in simple experiments; Compare relative frequency with probability	152–153	10.3	312–313	203	No. 140–141 (pp. 220–223)						
35	Revise probability	152–153	Rev.	315–316	205–206	No. 142–143 (pp. 224–227)						

Reflect on the year

Think about and make a note of:

1. Did you complete the curriculum according to the CAPS requirements? If not, why not and what could you do to cover all of the work next year?
2. Did the tracker help with curriculum planning and coverage? How could you use it even more effectively next year?
3. What concepts and skills did learners grasp well this year? What good practice could you use again next year?
4. What did learners struggle with? How can you help your group next year understand these concepts and develop these skills better?
5. What needs to be communicated to the teacher who will teach this group of learners next year?
6. What aspects of your teaching and assessment practices would you like to develop further next year? How will you go about this?

HOD: **Date:**

Spot On Mathematics Week 8 and 9: Examination period

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

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

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

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

Weekly reflection

The tracker provides a space that you can use to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and peers, and together think of ways of improving on the daily work that the learners in your class are doing.

When you reflect you could think about things such as:

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

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

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

The reflection should be based on the daily lessons you have taught each week. It will provide you with a record for the next time you implement the same lesson and also forms the basis for collegial conversations with your HOD and peers. Note that a year-end reflection is provided at the end of Week 7.

Platinum Mathematics Week 1												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
1	**Transformation geometry:** Recognise, describe and perform transformations with points, line segments and simple geometric figures, focusing on reflections and translations	147	20.1 (no. 1)	236–240	120–121	No. 105–106 (pp. 108–111)	No. 6.1–6.2 (pp. 91–96)					
2	Recognise, describe and perform reflections and translations cont.	147	20.1 (no. 2–5)	241	121	No. 107 (pp. 112–113) No. 109 (pp. 116–117)	No. 6.3 (pp. 96–99)					
3	Rotations about the origin	147	20.2 (no. 1–2)	242–245	121–122	No. 108 (pp. 114–115)						
4	Rotations about the origin cont.	147	20.2 (no. 3–5)	245	122							
5	Use proportion to describe the effect of enlargement or reduction on area and perimeter of geometric figures; Scale factor	147	20.3 (no. 1–2)	246–248	122–124		No. 6.4 (pp. 100–103)					

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

Platinum Mathematics Week 2 #Supplement													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
6	Enlargements and reductions cont.	147	20.3 (no. 3–4)	248	124–126	No. 112a–112b (pp. 124–127)	No. 6.4 (pp. 103–105)						
7	Enlargements and reductions cont.	147	20.4#	249–250	126	No. 113a–113b (pp. 128–131)	No. 6.4 (pp. 105–108)						
8	Revise transformation geometry	147	Rev.	251	126–127	No. 110–111b (pp. 118–123)							
9	**Geometry of 3-D objects:** Classify 3-D objects; Revise the properties and definitions of the 5 Platonic solids; Construct nets	148	21.1	252–255	128–130	No. 114–115 (pp. 132–135)	No. 7.1 (pp. 111–113) No. 7.3–7.4 (pp. 115–120)						
10	Construct nets to create models of prisms	148	21.2	256–259	130–133	No. 116 (pp. 136–137)							
Note: Refer to Day 9: Models of 3-D objects should be provided. Learners require cardboard/coloured paper, scissors, compass, protractor, glue/sticky tape.													
Reflection													
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?							What will you change next time? Why?						
							HOD: **Date:**						

Platinum Mathematics Week 3 #Supplement													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
11	Construct nets to create models of pyramids		21.3 (no. 1–4)	260–263	133–134	No. 117 (pp. 138–139)	No. 7.2 (pp. 113–115)						
12	Construct nets to create models of pyramids		21.3 (no. 5–9)	263	134–135	No. 118 (pp. 140–141)							
13	Use and construct nets to explore properties of cylinders and other 3-D objects; Investigate properties of spheres		21.4 (no. 1)	264–265	135–136	No. 119 (pp. 142–143)							
14	Use nets to explore properties of 3-D objects		21.4 (no. 2)#	265	136	No. 120a–120c (pp. 144–149)	No. 7.5–7.6 (pp. 121–125)						
15	Build 3-D models: Use nets to create models of geometric solids (use *DBE workbook*)					No. 121a–121b (pp. 150–152							
Note: Refer to Day 13: Cylinders such as tennis ball containers, canned food cans.													
Reflection													
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?							
						HOD:				**Date:**			

Platinum Mathematics Week 4													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
16	Revise geometry of 3-D objects	148	Rev. (no. 1–2)	266	136–137	No. 122a (pp. 154–155)							
17	Revise geometry of 3-D objects cont.	148	Rev. (no. 3–5)	266–267	137–138	No. 122b–122c (pp. 156–159)	Rev. worksheet (p. 126)						
18	**Formal assessment: Assignment**		Ass.	268–269	138–140								
19	**Collect, organise and summarise data:** Collect data	149	22.1	270–272	141–142	No. 123a–123b (pp. 160–163)	No. 8.1 (pp. 129–132)						
20	Organise and summarise data	149	22.2 (no. 1)	273–276	142–143	No. 124a (pp. 164–165)	No. 8.2 (pp. 133–136)						
Note: Resources required – newspapers, books, magazines.													

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

Platinum Mathematics Week 5 #Supplement												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
21	Organise and summarise data cont.	149	22.2 (no. 2–3)#	276	143	No. 124b (pp. 166–167)	No. 8.3 (pp. 136–140)					
22	Revise collect, organise and summarise data	149	Rev.	277	144	No. 125a–125b (pp. 168–171)						
23	**Represent data:** Display and interpret data using bar graphs, double bar graphs and histograms	150	23.1#	278–280	145–146	126a–129b (pp. 172–187)	No. 9.1–9.2 (pp. 143–148)					
24	Display and interpret data using pie charts; Review assignment done in previous week	150	23.2 (no. 1)#	280 282	146	No. 130a–130b (pp. 188–191)	No. 9.3 (pp. 149–150)					
25	Display and interpret data using broken line graphs and scatter plots	150	23.2 (no. 2)#	281–282	146	No. 131a–133 (pp. 192–201)	No. 9.4–9.5 (pp. 151–160)					

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

Platinum Mathematics Week 6 *Select													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
26	Revise represent data	150	Rev.	283	146–147								
27	**Interpret, analyse and report on data:** Interpret data	151	24.1	284–287	148–149		No. 10.1 (pp. 163–166)						
28	Analyse data	151	24.2	288–290	149–150	No. 134a (pp. 202–203)	No. 10.2 (pp. 167–168)						
29	Report on data	151	24.3	291–292	150–151	No. 134b (pp. 204–205)	No. 10.3–10.4 (pp. 168–176)						
30	Revise the Data Cycle (use *DBE workbook*); Revise interpret, analyse and report on data	151	Rev.	293	151	No. 135–137b* (pp. 206–213)							

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

Platinum Mathematics Week 7
#Supplement

Day	CAPS concepts and skills	CAPS pp.	LB ex.	LB pp.	TG pp.	DBE workbook	*Sasol Inzalo*	Class				
								Date completed				
31	**Formal assessment: Investigation**		Inv.	294–295	152							
32	**Probability:** Predict the relative frequency of an event in simple experiments; Compare relative frequency with probability	152–153	25.1	296–298	153	No. 138 (pp. 214–215)	No. 11.1 (pp. 179–183)					
33	Determine probabilities of compound events using two-way tables and tree diagrams	152–153	25.2 (no. 1–2)	299–302	154	No. 139a–139b (pp. 216–219)	No. 11.2 (pp. 184–186)					
34	Determine probabilities of compound events using two-way tables and tree diagrams cont.	152–153	25.2 (no. 3–5)#	302	154	No. 140–141 (pp. 220–223)						
35	Revise probability	152–153	Rev.	303	154–155	No. 142–143 (pp. 224–227)						

Reflect on the year

Think about and make a note of:

1. Did you complete the curriculum according to the CAPS requirements? If not, why not and what could you do to cover all of the work next year?
2. Did the tracker help with curriculum planning and coverage? How could you use it even more effectively next year?
3. What concepts and skills did learners grasp well this year? What good practice could you use again next year?
4. What did learners struggle with? How can you help your group next year understand these concepts and develop these skills better?
5. What needs to be communicated to the teacher who will teach this group of learners next year?
6. What aspects of your teaching and assessment practices would you like to develop further next year? How will you go about this?

HOD: **Date:**

Platinum Mathematics Week 8 and 9: Examination period

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

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

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

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

Weekly reflection

The tracker provides a space that you can use to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and peers, and together think of ways of improving on the daily work that the learners in your class are doing.

When you reflect you could think about things such as:

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

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

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

The reflection should be based on the daily lessons you have taught each week. It will provide you with a record for the next time you implement the same lesson and also forms the basis for collegial conversations with your HOD and peers. Note that a year-end reflection is provided at the end of Week 7.

Oxford Headstart Mathematics Week 1												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
1	**Transformation geometry:** Recognise, describe and perform transformations with points, focusing on translations within and across quadrants	147	1–3	444–450	330–334	No. 109 (pp. 116–117)	No. 6.1 (pp. 91–92)					
2	Recognise, describe and perform reflections in the Y-axis, X-axis or the straight line $y = x$	147	4	451–453	334	No. 105 (pp. 108–109)	No. 6.2 (pp. 92–96)					
3	Recognise, describe and perform translations and reflections with line segments and simple geometric figures	147	1	454–456	335–336	No. 106–107 (pp. 110–113)	No. 6.3 (pp. 96–99)					
4	Rotate geometric figures about the origin	147	2	456–458	336	No. 108 (pp. 114–115)						
5	Use proportion to describe the effect of enlargement or reduction on area and perimeter of triangles	147	1–2	459–463	337–339		No. 6.4 (pp. 100–103)					

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

Oxford Headstart Mathematics Week 2 *Select #Supplement													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
6	Use proportion to describe the effect of enlargement or reduction on area and perimeter of quadrilaterals; Scale factor	147	3	463–465	339–340		No. 6.4 (pp. 103–105)						
7	Revise enlargements and reductions (use *DBE workbook*)	147				No. 112a–113b* (pp. 124–131)	No. 6.4 (pp. 105–108)						
8	Revise transformation geometry	147	Rev.#	466	340	No. 110–111b (pp. 118–123)							
9	**Formal assessment: Investigation** (use Activity 2 in LB as a guideline – to investigate Euler's Formula – rubric must be created)		2	470–472	343–344								
10	**Geometry of 3-D objects:** Revise the properties and definitions of the 5 Platonic solids	148	1	468–470	341–342	No. 114–115 (pp. 132–135)	No. 7.1 (pp. 111–113) No. 7.3 (pp. 115–118)						
Notes: 1. Refer to Day 9: The investigation must be photocopied beforehand for the learners. 2. Refer to Day 10: Models of 3-D objects should be provided. Learners require cardboard/coloured paper, compass, scissors, sticky tape/glue.													
Reflection													
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?							What will you change next time? Why? **HOD:** **Date:**						

Oxford Headstart Mathematics Week 3 #Supplement												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
11	Work with polyhedrons; Review investigation done (even if not marked)	148	3	471–473	344		No. 7.4 (pp. 119–120)					
12	Recognise and describe properties of spheres and cylinders	148	1–2#	474–476	345–346	No. 116–117 (pp. 136–139)	No. 7.5–7.6 (pp. 121–125)					
13	Build 3-D models: Use nets to create models of geometric solids, focusing on cubes	148	1–2	477–478	347–348	No. 118–119 (pp. 140–143)						
14	Use and construct nets to build models of prisms	148	3	479–480	349	No. 120a–120c (pp. 144–149)	No. 7.2 (pp. 113–115)					
15	Use and construct nets to build models of pyramids	148	4	480–481	349	No. 121a (pp. 150–151)						

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

Oxford Headstart Mathematics Week 4												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
16	Use and construct nets to build models of cylinders	148	5	481	349	No. 121b (pp. 152–153						
17	Revise geometry of 3-D objects	148	Rev.	482	349	No. 122a–122c (pp. 154–159)	Rev. worksheet (p. 126)					
18	**Collect, organise and summarise data:** Collect data	149	1–4	484–490	351–354	No. 123a–123b (pp. 160–163)	No. 8.1 (pp. 129–132)					
19	Organise data	149	1–4	491–496	354–357	No. 124a–124b (pp. 164–167)	No. 8.2 (pp. 133–136)					
20	Summarise data	149	5–6	496–499	358	No. 125a (pp. 168–169)						

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

Oxford Headstart Mathematics Week 5 #Supplement													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
21	Revise summarising data (use *Sasol Inzalo book*)	149				No. 125b (pp. 170–171)	No. 8.3 (pp. 136–140)						
22	**Represent data:** Display and interpret data using pie charts	150	1–2#	500–503	359–360	No. 130a–130b (pp. 188–191)	No. 9.3 (pp. 149–150)						
23	Display and interpret data using bar graphs, double bar graphs and histograms	150	3–4#	503–508	360–361	126a–129b (pp. 172–187)	No. 9.1–9.2 (pp. 143–148)						
24	Display and interpret data using broken line graphs and scatter plots	150	5–6#	508–513	361–363	No. 131a–133 (pp. 192–201)	No. 9.4–9.5 (pp. 151–160)						
25	**Interpret, analyse and report on data:** Identify sources of bias and error; Compare different representations	151	1	514–516	363–364		No. 10.1 (pp. 163–166)						

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

Oxford Headstart Mathematics Week 6 *Select													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
26	Compare and choose between measures of central tendency; Outliers	151	2	516–519	364–365		No. 10.2 (pp. 167–168)						
27	Analyse data	151	3–4	519–521	365		No. 10.3–10.4 (pp. 168–176)						
28	Report on data (use *DBE workbook*)	151				No. 134a–134b (pp. 202–205)							
29	Revise the Data Cycle (use *DBE workbook*)	151				No. 135–137b* (pp. 206–213)							
30	**Formal assessment: Assignment** (use Revision Exercise)		Rev. (no. 1–4)	528–530	369–370								

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

Oxford Headstart Mathematics Week 7 #Supplement												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
31	**Formal assessment: Assignment** cont.		Rev. (no. 1–4)	528–530	369–370							
32	**Probability:** Determine probabilities of simple events	152–153	1–2#	522–523	366–367		No. 11.1 (pp. 179–183)					
33	Compare relative frequency with probability	152–153	3#	524–526	367–368	No. 138 (pp. 214–215)						
34	Determine probabilities of compound events using two-way tables and tree diagrams	152–153	4#	526–527	368	No. 139a–141 (pp. 216–223)	No. 11.2 (pp. 184–186)					
35	Revise probability	152–153	Rev. (no. 5–7)	530–531	370	No. 142–143 (pp. 224–227)						

Reflect on the year

Think about and make a note of:

1. Did you complete the curriculum according to the CAPS requirements? If not, why not and what could you do to cover all of the work next year?
2. Did the tracker help with curriculum planning and coverage? How could you use it even more effectively next year?
3. What concepts and skills did learners grasp well this year? What good practice could you use again next year?
4. What did learners struggle with? How can you help your group next year understand these concepts and develop these skills better?
5. What needs to be communicated to the teacher who will teach this group of learners next year?
6. What aspects of your teaching and assessment practices would you like to develop further next year? How will you go about this?

HOD: **Date:**

Oxford Headstart Mathematics Week 8 and 9: Examination period

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

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5. Page reference in the Learner's Book (LB page reference).
6. Page reference in your Teacher's Guide for the day's activities (TG page reference).
7. DBE workbook link to related content (worksheet and page numbers are referenced).
8. *Sasol Inzalo Mathematics Book* link to related content (exercise and page numbers are referenced). These are the same for both the Learner's Book and the Teacher's Guide.
9. Date completed.

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

Weekly reflection

The tracker provides a space that you can use to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and peers, and together think of ways of improving on the daily work that the learners in your class are doing.

When you reflect you could think about things such as:

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

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

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

The reflection should be based on the daily lessons you have taught each week. It will provide you with a record for the next time you implement the same lesson and also forms the basis for collegial conversations with your HOD and peers. Note that a year-end reflection is provided at the end of Week 7.

Oxford Successful Mathematics Week 1													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
1	**Transformation geometry:** Recognise, describe and perform transformations with points focusing on reflections in the Y-axis, X-axis or the line $y = x$ and translations within and across quadrants	147	1–2	345–350	256–259	No. 105 (pp. 108–109)	No. 6.1 (pp. 91–92)						
2	Identify the transformation given the co-ordinates of the image; Predict the co-ordinates of the image	147	3–4	350–352	259–261	No. 109 (pp. 116–117)							
3	Recognise, describe and perform translations and reflections with line segments	147	1–2	353–356	261–263	No. 106–107 (pp. 110–113)	No. 6.2 (pp. 92–96)						
4	Recognise, describe and perform translations and reflections with simple geometric figures	147	3 (no. 1–3)	356–360	264–265	No. 110–111b (pp. 118–123)	No. 6.3 (pp. 96–99)						
5	Rotate geometric figures about the origin	147	3 (no. 4–5)	360–361	265–266	No. 108 (pp. 114–115)							

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

Oxford Successful Mathematics Week 2 *Select													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
6	Investigate the co-ordinates of the vertices of figures that have been enlarged or reduced by a given scale factor	147	1	362–365	266–267	No. 112a–112b (pp. 124–127)	No. 6.4 (pp. 100–103)						
7	Use proportion to describe the effect of enlargement or reduction on area and perimeter of geometric figures	147	2	365–367	268–269	No. 113a–113b (pp. 128–131)	No. 6.4 (pp. 103–105)						
8	Revise transformation geometry (Consolidation)	147	*	369–372	269–272		No. 6.4 (pp. 105–108)						
9	**Geometry of 3-D objects:** Revise the properties and definitions of the 5 Platonic solids; Euler's formula	148	1	374–376	273–275	No. 114–115 (pp. 132–135)	No. 7.1 (pp. 111–113) No. 7.3–7.4 (pp. 115–120)						
10	Build 3-D models: Use nets to create models of 3-D objects	148	1 (no. 1)	377–383	276	No. 116 (pp. 136–137)							
Note: Refer to Day 9: Models of 3-D objects should be provided. Learners require cardboard/coloured paper, scissors, protractor, compass, glue/sticky tape.													
Reflection													
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?							What will you change next time? Why?						
							HOD: **Date:**						

Oxford Successful Mathematics Week 3												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
11	Build 3-D models: Use nets to create models of 3-D objects	148	1 (no. 2–4)	383	276–277	No. 117 (pp. 138–139)	No. 7.2 (pp. 113–115)					
12	Recognise and describe properties of spheres and cylinders; Construct nets of cylinders	148	1	384–386	277–278	No. 118 (pp. 140–141)	No. 7.6 (pp. 124–125)					
13	Construct nets; Use nets to explore properties of cylinders (use *Sasol Inzalo book*)	148				No. 119 (pp. 142–143)	No. 7.5 (pp. 121–122)					
14	Revise geometry of 3-D objects: Construct nets (use *DBE workbook*)	148				No. 121a–121b (pp. 150–152						
15	Revise geometry of 3-D objects: Construct nets cont. (use *DBE workbook*)	148				No. 122a (pp. 154–155)						

Reflection

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

What will you change next time? Why?

HOD: **Date:**

Oxford Successful Mathematics Week 4												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
16	Revise geometry of 3-D objects: Construct nets cont. (use *DBE workbook*)	148				No. 122b–122c (pp. 156–159)						
17	Revise geometry of 3-D objects (Consolidation)	148		388–389	279		Rev. worksheet (p. 126)					
18	**Formal assessment: Assignment**		Ass.	446	345							
19	**Collect, organise and summarise data:** Collect data	149	1–2	391–393	280–283	No. 123a–123b (pp. 160–163)	No. 8.1 (pp. 129–132)					
20	Organise and summarise data	149	Rev.	394	284	No. 124a (pp. 164–165)	No. 8.2 (pp. 133–136)					

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

Oxford Successful Mathematics Week 5 #Supplement												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
21	Organise and summarise data cont.; **Formal assessment: Investigation – Part 1**		1 Inv.	395–397 450–451	284–288 349	No. 124b (pp. 166–167)						
22	Revise summarising data (use *Sasol/Inzalo workbook*)	149				No. 125a–125b (pp. 168–171)	No. 8.3 (pp. 136–140)					
23	**Represent data:** Display and interpret data using bar graphs, double bar graphs and histograms	150	1 (no. 2–4)#	398 400–401	288–291	126a–129b (pp. 172–187)	No. 9.1–9.2 (pp. 143–148)					
24	Display and interpret data using scatter plots and broken line graphs	150	1 (no. 1, 6)#	398–400	290 292	No. 131a–132a (pp. 192–199)						
25	Display and interpret data using pie charts	150	1 (no. 7)#	402	292–293	No. 130a–130b (pp. 188–191)	No. 9.3 (pp. 149–150)					

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

Oxford Successful Mathematics Week 6 *Select													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
26	Revise representing data (use *Sasol Inzalo book*); Review assignment done previously	150					No. 9.4–9.5 (pp. 151–160)						
27	**Interpret, analyse and report on data:** Interpret data	151	1 (no. 1–3)	403–405	293–295	No. 133 (pp. 200–201)	No. 10.1 (pp. 163–166)						
28	Analyse and report on data	151	1.4 (no. 4)	406	295	No. 134a (pp. 202–203)	No. 10.2 (pp. 167–168)						
29	Revise interpreting, analysing and reporting on data (consolidation)	151	Cons.*	408–409	295–297	No. 134b (pp. 204–205)	No. 10.3–10.4 (pp. 168–176)						
30	Revise the Data Cycle (use *DBE workbook*)	151				No. 135–137b* (pp. 206–213)							

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

Oxford Successful Mathematics Week 7												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
31	**Formal assessment: Investigation – Part 2**		Inv.	450–451	349							
32	**Probability:** Revise probability of simple events	152–153	Rev.	411	298–300	No. 138 (pp. 214–215)	No. 11.1 (pp. 179–183)					
33	Determine probabilities of compound events using two-way tables	152–153	1	412–414	301–303	No. 139a–139b (pp. 216–219)	No. 11.2 (pp. 184–186)					
34	Determine probabilities of compound events using tree diagrams	152–153	1	415–418	303–306	No. 140–141 (pp. 220–223)						
35	Predict the relative frequency of an event in simple experiments; Compare relative frequency with probability	152–153	1	419–422	307–309	No. 142–143 (pp. 224–227)						

Reflect on the year

Think about and make a note of:

1. Did you complete the curriculum according to the CAPS requirements? If not, why not and what could you do to cover all of the work next year?
2. Did the tracker help with curriculum planning and coverage? How could you use it even more effectively next year?
3. What concepts and skills did learners grasp well this year? What good practice could you use again next year?
4. What did learners struggle with? How can you help your group next year understand these concepts and develop these skills better?
5. What needs to be communicated to the teacher who will teach this group of learners next year?
6. What aspects of your teaching and assessment practices would you like to develop further next year? How will you go about this?

HOD: **Date:**

Oxford Successful Mathematics Week 8 and 9: Examination period

Clever: Keeping Maths Simple

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

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

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

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

Weekly reflection

The tracker provides a space that you can use to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and peers, and together think of ways of improving on the daily work that the learners in your class are doing.

When you reflect you could think about things such as:

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

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

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

The reflection should be based on the daily lessons you have taught each week. It will provide you with a record for the next time you implement the same lesson and also forms the basis for collegial conversations with your HOD and peers. Note that a year-end reflection is provided at the end of Week 7.

Clever: Keeping Maths Simple Week 1													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
1	**Transformation geometry:** Recognise, describe and perform transformations with points, line segments and simple geometric figures, focusing on translations within and across quadrants	147	*What you…* 1 (no. 1)	278–282	277–281	No. 109 (pp. 116–117)	No. 6.1 (pp. 91–92)						
2	Recognise, describe and perform translations cont.	147	1 (no. 2–4)	282	281–282	No. 110 (pp. 118–119)	No. 6.3 (pp. 96–99)						
3	Recognise, describe and perform reflections in the Y-axis, the X-axis or the straight line $y = x$	147	2 (no. 1–4)	283–286	282–286	No. 105 (pp. 108–109)	No. 6.2 (pp. 92–96)						
4	Recognise, describe and perform reflections in the Y-axis, the X-axis or the straight line $y = x$ cont.	147	2 (no. 5–8)	286	286–288	No. 106–107 (pp. 110–113)							
5	Recognise, describe and perform rotations about the origin	147	3 (no. 1–2)	286–288	288–295	No. 108 (pp. 114–115)							
Note: Resources required – compass, protractor, cardboard examples of triangles, GeoGebra (geometry software).													
Reflection													
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?							
						HOD:				**Date:**			

Clever: Keeping Maths Simple Week 2													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
6	Recognise, describe and perform rotations about the origin cont.	147	3 (no. 3–5)	289	295–297								
7	Use proportion to describe the effect of enlargements or reductions on area and perimeter of geometric figures; Scale factors	147	4 (no. 1–3)	289–293	297–302	No. 112a–113b (pp. 124–131)	No. 6.4 (pp. 100–105)						
8	Use proportion to describe the effect of enlargements or reductions on area and perimeter of geometric figures; Scale factors cont.	147	4 (no. 4–10)	293–294	302	No. 111a–111b (pp. 120–123)	No. 6.4 (pp. 105–108)						
9	**Formal assessment: Assignment**		Ass.	358	356								
10	**Geometry of 3-D objects:** Classify 3-D objects; Revise the properties and definitions of the 5 Platonic solids	148	*What you…* 1	295–298	303–307	No. 114–115 (pp. 132–135)	No. 7.1 (pp. 111–113) No. 7.3 (pp. 115–118)						
Note: Refer to Day 10: Models of 3-D objects, cardboard/coloured paper, compass, protractor, sticky tape/glue/Prestik, toothpicks/straws.													
Reflection													
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?							What will you change next time? Why?						
							HOD: **Date:**						

Clever: Keeping Maths Simple Week 3 #Supplement												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
11	Euler's formula; Recognise and describe the properties of spheres (use *Sasol Inzalo book*)	148	2	299–300	307	No. 116 (pp. 136–137)	No. 7.4 (pp. 119–120) No. 7.6 (pp. 124–125)					
12	Investigate the properties of cylinders	148	Inv. 1#	300–301	308–309	No. 117 (pp. 138–139)	No. 7.5 (pp. 121–123)					
13	Build 3-D models: Use nets to create models of geometric solids	148	3	301–302	309–310	No. 118–119 (pp. 140–143)	No. 7.2 (pp. 113–115)					
14	Build 3-D models: Use nets to create models of geometric solids cont.	148	4 (no. 1–3)	302–304	310–311	No. 120a–120c (pp. 144–149)						
15	Explore the properties of 3-D geometric solids using nets and Euler's formula; Review assignment done in previous week	148	4 (no. 4–5)	305–307	311–312							

Reflection

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

What will you change next time? Why?

HOD: **Date:**

Clever: Keeping Maths Simple Week 4												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
16	Revise geometry of 3-D objects: Construct nets (use *DBE workbook*)	148				No. 121a–121b (pp. 150–152						
17	Revise geometry of 3-D objects: Construct nets cont. (use *DBE workbook*)	148				No. 122a–122c (pp. 154–159)	Rev. worksheet (p. 126)					
18	**Collect, organise and summarise data:** Collect data	149	*What you…* 1–2	308–313	313–318	No. 123a–123b (pp. 160–163)	No. 8.1 (pp. 129–132)					
19	Organise data	149	3–4	314–318	319–320	No. 124a–124b (pp. 164–167)	No. 8.2 (pp. 133–136)					
20	Summarise data	149	5–6	319–322	320	No. 125a (pp. 168–169)						

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

Clever: Keeping Maths Simple Week 5 #Supplement												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
21	Revise summarising data (use *Sasol Inzalo book*)	149				No. 125b (pp. 170–171)	No. 8.3 (pp. 136–140)					
22	**Represent data:** Display and interpret data using bar graphs, double bar graphs and histograms	150	*What you…* 1 (no. 1, 4–6)	323–326 328–331	321–330	126a–129b (pp. 172–187)	No. 9.1–9.2 (pp. 143–148)					
23	Display and interpret data using pie charts and broken line graphs	150	1 (no. 2–3)#	326–328 330	327	No. 130a–131b (pp. 188–195)	No. 9.3–9.4 (pp. 149–153)					
24	Display and interpret data using scatter plots	150	2	331–334	331–332	No. 132a–133 (pp. 196–201)						
25	Revise representing data using scatter plots (*use Sasol Inzalo book*)	150					No. 9.5 (pp. 151–160)					

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

Clever: Keeping Maths Simple Week 6 *Select													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
26	**Interpret, analyse and report on data:** Interpret data	151	*What you…* 1	335–338	333–341		No. 10.1 (pp. 163–166)						
27	Analyse data	151	2	338–341	341–342		No. 10.2 (pp. 167–168)						
28	Analyse data: misleading graphs, outliers or extremes in data	151	3–4	341–344	342–343	No. 134a (pp. 202–203)	No. 10.3–10.4 (pp. 168–176)						
29	Report on data	151	5	345–346	343	No. 134b (pp. 204–205)							
30	Revise the Data Cycle (use *DBE workbook*)	151				No. 135–137b* (pp. 206–213)							

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

Clever: Keeping Maths Simple Week 7												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
31	**Formal assessment: Investigation**		Inv.	360–362	358							
32	**Probability:** Revise probability of simple events	152–153	*What you…* 1	347–351	344–351	No. 138 (pp. 214–215)	No. 11.1 (pp. 179–183)					
33	Predict the relative frequency of an event in simple experiments	152–153	2	351–352	352	No. 139a–139b (pp. 216–219)						
34	Compare relative frequency with probability	152–153	3	353–354	352–353	No. 140–141 (pp. 220–223)						
35	Determine probabilities of compound events using two-way tables and tree diagrams	152–153	4	356	353–354	No. 142–143 (pp. 224–227)	No. 11.2 (pp. 184–186)					

Reflect on the year

Think about and make a note of:

1. Did you complete the curriculum according to the CAPS requirements? If not, why not and what could you do to cover all of the work next year?
2. Did the tracker help with curriculum planning and coverage? How could you use it even more effectively next year?
3. What concepts and skills did learners grasp well this year? What good practice could you use again next year?
4. What did learners struggle with? How can you help your group next year understand these concepts and develop these skills better?
5. What needs to be communicated to the teacher who will teach this group of learners next year?
6. What aspects of your teaching and assessment practices would you like to develop further next year? How will you go about this?

HOD: **Date:**

Clever: Keeping Maths Simple Week 8 and 9: Examination period

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

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

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

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

Weekly reflection

The tracker provides a space that you can use to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and peers, and think of ways of improving on the daily work that the learners in your class are doing.

When you reflect you could think about things such as:

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

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

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

The reflection should be based on the daily lessons you have taught each week. It will provide you with a record for the next time you implement the same lesson and also forms the basis for collegial conversations with your HOD and peers. Note that a year-end reflection is provided at the end of Week 7.

Solutions for All Mathematics Week 1													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
1	**Transformation geometry:** Recognise, describe and perform transformations with points, line segments and simple geometric figures, focusing on reflections in the Y-axis or X-axis	147	*Getting started* Act. 26.1 Act. 26.6	366–368 374–375	327–329 331–332	No. 105 (pp. 108–109)	No. 6.1 (pp. 91–92)						
2	Recognise, describe and perform translations within and across quadrants	147	Act. 26.4–26.5	370–372	330–331	No. 109 (pp. 116–117)	No. 6.3 (pp. 96–99)						
3	Recognise, describe and perform translations within and across quadrants cont.	147	Ex. 26.1	372–373	331	No. 110 (pp. 118–119)							
4	Recognise, describe and perform reflections about the straight line $y = x$	147	Act. 26.7 Ex. 26.2	375–378	333–334	No. 106–107 (pp. 110–113)	No. 6.2 (pp. 92–96)						
5	Recognise, describe and perform rotations about the origin	147	Act. 26.2 Act. 26.8	369 379	329 334	No. 108 (pp. 114–115)							

Reflection

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

What will you change next time? Why?

HOD: **Date:**

Solutions for All Mathematics Week 2 *Select													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
6	Use proportion to describe the effect of enlargements or reductions on area and perimeter of geometric figures; Scale factors	147	Act. 26.3 Act. 26.9	369 380	334–335	No. 112a–112b (pp. 124–127)	No. 6.4 (pp. 100–105)						
7	Enlargements and reductions cont.	147	Act. 26.10 Ex. 26.3	381–383	335	No. 113a–113b (pp. 128–131)	No. 6.4 (pp. 105–108)						
8	Transformations and African fractals; Revise transformation geometry	147	Ex. 26.4 *Check what…**	384–390	336–341	No. 111a–111b (pp. 120–123)							
9	**Geometry of 3-D objects:** Classify 3-D objects	148	*Getting started*	391–392	342–344	No. 114–115 (pp. 132–135)	No. 7.1 (pp. 111–113)						
10	Revise the properties and definitions of the 5 Platonic solids	148	Act. 27.1 (no. 1–3)	393–394	344	No. 116 (pp. 136–137)	No. 7.3 (pp. 115–118)						
Note: Refer to Day 9: Models of 3-D objects should be provided. Learners require cardboard/coloured paper, compass, sticky tape/glue.													
Reflection													
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?							What will you change next time? Why? **HOD:** **Date:**						

Solutions for All Mathematics Week 3													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
11	Construct nets of the five Platonic solids	148	Act. 27.1 (no. 4)	395–397	344–347	No. 117 (pp. 138–139)							
12	Use Euler's formula for the Platonic solids	148	Act. 27.1 (no. 5–6) Act. 27.2	397–400	347–349	No. 118 (pp. 140–141)	No. 7.4 (pp. 115–118)						
13	Recognise and describe cylinders; Construct and use nets to explore properties of cylinders	148	Act. 27.3 Ex. 27.1	400–401	350	No. 119 (pp. 142–143)	No. 7.5 (pp. 121–123)						
14	Recognise and describe properties of prisms	148	Act. 27.4	402	351	No. 120a–120c (pp. 144–149)	No. 7.2 (pp. 113–115)						
15	Recognise and describe properties of spheres	148	Act. 27.5–27.6	403–405	351–352		No. 7.6 (pp. 124–125)						

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

Solutions for All Mathematics Week 4												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
16	Revise geometry of 3-D objects: Construct nets (use *DBE workbook*)	148				No. 121a–121b (pp. 150–152)						
17	Revise geometry of 3-D objects	148	*Check what…*	406–408	352	No. 122a–122c (pp. 154–159)	Rev. worksheet (p. 126)					
18	**Collect, organise and summarise data:** Collect data	149	*Getting started* Act. 28.1–28.2	409–413	353–356	No. 123a–123b (pp. 160–163)	No. 8.1 (pp. 129–132)					
19	Collect data: Starting the research process	149	Ex. 28.1	414–416	357–358	No. 124a (pp. 164–165)	No. 8.2 (pp. 133–136)					
20	Organise and summarise data	149	Act. 28.3 Ex. 28.2	416–418	358–359	No. 124b (pp. 166–167)	No. 9.4–9.5 (pp. 151–160)					

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

Solutions for All Mathematics Week 5												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
21	Organise and summarise data cont.	149	Act. 28.4 Ex. 28.3	418–419	360	No. 125a (pp. 168–169)						
22	Revise organising and summarising data	149	Act. 28.5 *Check what…*	420–424	360–361	No. 125b (pp. 169–171)	No. 8.3 (pp. 136–140)					
23	**Represent data:** Display and interpret data using bar graphs and double bar graphs	150	*Getting started* Act. 29.1	425–427	362–365	126a–127b (pp. 172–179)	No. 9.1–9.2 (pp. 143–148)					
24	Display and interpret data using broken-line graphs and histograms	150	Act. 29.2–29.3 Ex. 29.1	427–429	365–368	No. 128a–129b (pp. 180–187) No. 131a–131b (pp. 192–195)	No. 9.3 (pp. 149–150)					
25	Display and interpret data using pie charts	150	Act. 29.4 Ex. 29.2	430–432	368–370	No. 130a–130b (pp. 188–191)						
Note: Refer to Day 23: Graph paper/square grid paper.												
Reflection												
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?						
						HOD:		**Date:**				

Solutions for All Mathematics Week 6 *Select													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
26	Display and interpret data using scatter plots	150	Act. 29.5 Ex. 29.3	432–434	370–372	No. 132a–133 (pp. 196–201)							
27	**Formal assessment: Assignment**				447–448								
28	**Interpret, analyse and report on data:** Analyse and interpret data	151	*Getting started* Act. 30.1 Ex. 30.1	439–442	376–380		No. 10.1 (pp. 163–166)						
29	Analyse data	151	Act. 30.2–30.3 Ex. 30.2*	442–445	379–381	No. 134a (pp. 202–203)	No. 10.2 (pp. 167–168)						
30	Analyse data	151	Act. 30.4–30.5 Ex. 30.3– 30.4*	446–451	382–384	No. 134b (pp. 204–205)	No. 10.3–10.4 (pp. 168–176)						

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

Solutions for All Mathematics Week 7 *Select													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
31	Report on data; Revise the Data Cycle (use *DBE workbook*)		Act. 30.6 Ex. 30.5	449–451	384–385	No. 135–137b* (pp. 206–213)							
32	**Formal assessment: Investigation**				449–450								
33	**Probability:** Revise probability and relative frequency of simple events; Compare relative frequency with probability	152–153	*Getting Started* Act. 31.1–31.2* Ex. 31.1	457–461	389–392	No. 138 (pp. 214–215)	No. 11.1 (pp. 179–183)						
34	Determine probabilities of compound events using two-way tables and tree diagrams		Act. 31.3 Ex. 31.2	461–463	393-395	No. 139a–139b (pp. 216–219)	No. 11.2 (pp. 184–186)						
35	Determine probabilities of compound events with more than two parts		Act. 31.4 Ex. 31.3	464–467	395–397	No. 140–143 (pp. 220–227)							
Note: Refer to Day 32: Memo for investigation TG p. 451.													

Reflect on the year

Think about and make a note of:

1. Did you complete the curriculum according to the CAPS requirements? If not, why not and what could you do to cover all of the work next year?
2. Did the tracker help with curriculum planning and coverage? How could you use it even more effectively next year?
3. What concepts and skills did learners grasp well this year? What good practice could you use again next year?
4. What did learners struggle with? How can you help your group next year understand these concepts and develop these skills better?
5. What needs to be communicated to the teacher who will teach this group of learners next year?
6. What aspects of your teaching and assessment practices would you like to develop further next year? How will you go about this?

HOD: **Date:**

Solutions for All Mathematics Week 8 and 9: Examination period

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

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

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

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

Weekly reflection

The tracker provides a space that you can use to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and peers, and together think of ways of improving on the daily work that the learners in your class are doing.

When you reflect you could think about things such as:

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

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

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

The reflection should be based on the daily lessons you have taught each week. It will provide you with a record for the next time you implement the same lesson, and also forms the basis for collegial conversations with your HOD and peers. Note that a year-end reflection is provided at the end of Week 7.

Mathematics Today Week 1													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
1	**Transformation geometry:** Recognise, describe and perform transformations with points, line segments and simple geometric figures, focusing on reflections in the Y-axis or X-axis and translations within and across quadrants	147	20.1	256–258	112–113	No. 105 (pp. 108–109) No. 109 (pp. 116–117)	No. 6.1 (pp. 91–92) No. 6.3 (pp. 96–99)						
2	Recognise, describe and perform reflections about the straight line $y = x$	147	20.2 (no. 1–3)	258–260	113	No. 106–107 (pp. 110–113)	No. 6.2 (pp. 92–96)						
3	Recognise, describe and perform rotations about the origin	147	20.2 (no. 4–6)	259–260	113	No. 108 (pp. 114–115)							
4	Use proportion to describe the effect of enlargements or reductions on area and perimeter of geometric figures; Scale factors	147	20.3	261–263	113–114	No. 112a (pp. 124–125)	No. 6.4 (pp. 100–103)						
5	Enlargements and reductions cont.	147	20.4 (no. 1–2)	263–264	115		No. 6.4 (pp. 103–105)						
Note: Refer to Day 1: Learners should be supplied with grid paper.													
Reflection													
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?							
						HOD:				**Date:**			

Mathematics Today Week 2													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
6	Enlargements and reductions cont.	147	20.4 (no. 3–6)	265	115–116	No. 112b (pp. 126–127							
7	Enlargements and reductions cont. (use *DBE workbook*)	147				No. 113a–113b (pp. 128–131)	No. 6.4 (pp. 105–108)						
8	Revise transformation geometry	147	Rev.	266	116	No. 110–111b (pp. 118–123)							
9	**Geometry of 3-D objects:** Classify 3-D objects; Revise the properties and definitions of the 5 Platonic solids	148	21.1	268–272	117	No. 114–115 (pp. 132–135)	No. 7.1 (pp. 111–113) No. 7.3 (pp. 115–118)						
10	Investigate Euler's formula (use *Sasol Inzalo book*)	148					No. 7.4 (pp. 119–120)						
Note: Refer to Day 9: Models of 3-D objects should be supplied. Learners require washable ink, cardboard/coloured paper, compass, sticky tape/glue.													
Reflection													
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?							
						HOD:				**Date:**			

Mathematics Today Week 3												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
11	Build 3-D models: Unfold 3-D objects to examine their nets	148	21.2 (no. 1–3)	273–275	117	No. 116 (pp. 136–137)	No. 7.2 (pp. 113–115)					
12	Build 3-D models: Unfold 3-D objects to examine their nets contd.	148	21.2 (no. 4–6)	275	117							
13	Recognise and describe properties of spheres and cylinders (use *Sasol Inzalo book*)	148				No. 117 (pp. 138–139)	No. 7.5–7.6 (pp. 121–125)					
14	Revise geometry of 3-D objects (use *Sasol Inzalo book*)	148				No. 118–119 (pp. 140–143)	Rev. worksheet (p. 126)					
15	Revise geometry of 3-D objects: Construct nets (use *DBE workbook*)	148				No. 121a–121b (pp. 150–152)						

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

Mathematics Today Week 4 *Select													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
16	Revise geometry of 3-D objects: Construct nets cont. (use *DBE workbook*)	148				No. 122a–122c* (pp. 154–159)							
17	Revise geometry of 3-D objects	148	Rev.	276	118	No. 120a–120c (pp. 144–149)							
18	**Formal assessment: Investigation**		Inv.	277	119								
19	**Collect, organise and summarise data:** Collect data	149	22.1	279–282	120–121	No. 123a–123b (pp. 160–163)	No. 8.1 (pp. 129–132)						
20	Organise and summarise data	149	22.2–22.3	282–285	121–122	No. 124a (pp. 164–165)	No. 8.2 (pp. 133–136)						
Note: Refer to Day 19: Learners require old newspapers and magazines.													
Reflection													
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?							
						HOD:					**Date:**		

Mathematics Today Week 5												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**				
								Date completed				
21	Organise and summarise data cont.	149	22.4	286–287	122–123	No. 124b (pp. 166–167)						
22	Revise summarising data (use *Sasol Inzalo book*); Review investigation done in previous week	149				No. 125a–125b (pp. 168–171)	No. 8.3 (pp. 136–140)					
23	**Represent data:** Display and interpret data using bar graphs and double bar graphs	150	22.6	288–290	124	126a–127b (pp. 172–179)	No. 9.1 (pp. 143–145)					
24	Display and interpret data using histograms	150	22.7	291–294	124–127	No. 128a–129b (pp. 180–187)	No. 9.2 (pp. 146–148)					
25	Display and interpret data using pie charts and broken-line graphs	150	22.8–22.9	294–297	127–128	No. 130a–131b (pp. 188–195)	No. 9.3–9.4 (pp. 149–153)					

Reflection

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

What will you change next time? Why?

HOD: **Date:**

Mathematics Today Week 6 *Select #Supplement													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
26	Display and interpret data using scatter plots	150	22.10	297–299	129	No. 132a–133 (pp. 196–201)	No. 9.5 (pp. 154–160)						
27	**Interpret, analyse and report on data:** Interpret data; Revise the Data Cycle (use *DBE workbook*)	151	22.11	300	129–130	No. 135–137b* (pp. 206–213)	No. 10.1 (pp. 163–166)						
28	Analyse data	151	22.12#	300–301	130	No. 134a (pp. 202–203)	No. 10.2 (pp. 167–168)						
29	Report on data	151	22.13	301–302	130–132	No. 134b (pp. 204–205)	No. 10.3–10.4 (pp. 168–176)						
30	**Formal assessment: Assignment (2 hours – allow learners to also work at home)**		Ass.	305–308	134–137								

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

Mathematics Today Week 7 #Supplement													
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	***Sasol Inzalo***	**Class**					
								Date completed					
31	**Formal assessment: Assignment cont.**		Ass.	305–308	134–137								
32	**Probability:** Revise probability of simple events	152–153	23.1#	310–311	138	No. 138 (pp. 214–215)	No. 11.1 (pp. 179–183)						
33	Predict the relative frequency of an event in simple experiments; Compare relative frequency with probability	152–153	23.2–23.3	311–313	138	No. 139a–139b (pp. 216–219)							
34	Determine probabilities of compound events using two-way tables	152–153	23.4	314–316	138–139	No. 140–141 (pp. 220–223)	No. 11.2 (pp. 184–186)						
35	Determine probabilities of compound events using tree diagrams	152–153	23.5	316–318	140	No. 142–143 (pp. 224–227)							

Reflect on the year

Think about and make a note of:

1. Did you complete the curriculum according to the CAPS requirements? If not, why not and what could you do to cover all of the work next year?
2. Did the tracker help with curriculum planning and coverage? How could you use it even more effectively next year?
3. What concepts and skills did learners grasp well this year? What good practice could you use again next year?
4. What did learners struggle with? How can you help your group next year understand these concepts and develop these skills better?
5. What needs to be communicated to the teacher who will teach this group of learners next year?
6. What aspects of your teaching and assessment practices would you like to develop further next year? How will you go about this?

HOD: **Date:**

Mathematics Today Week 8 and 9: Examination period

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

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

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

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

Weekly reflection

The tracker provides a space that you can use to reflect on your Mathematics lessons on a weekly basis. You can share this reflection with your HOD and peers, and together think of ways of improving on the daily work that the learners in your class are doing.

When you reflect you could think about things such as:

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

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

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

The reflection should be based on the daily lessons you have taught each week. It will provide you with a record for the next time you implement the same lesson, and also forms the basis for collegial conversations with your HOD and peers. Note that a year-end reflection is provided at the end of Week 7.

Sasol Inzalo Mathematics Book 2 Week 1											
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Class**				
							Date completed				
1	**Transformation geometry:** Points on a coordinate system; Reflection (flip): Reflecting points in the x-axis, the y-axis and the line y = x	147	1–2 1–5	91–92 92–94	89–92 92–94	No. 105 (pp. 108–109)					
2	Reflecting geometric figures	147	147	1–4	94–96	No. 106–107 (pp. 110–113)					
3	Translation (slide): Translating points horizontally or vertically on a coordinate system	147	147	1–3	96–98						
4	Translation of geometric figures on a coordinate system	147	147	1–4	98–99	No. 109 (pp. 116–117)					
5	Enlargement (growing) and reduction (shrinking): What are enlargements and reductions? Practise working with enlargements and reductions	147	147	1–7	100–103	No. 112a–112b (pp. 124–127)					

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

Sasol Inzalo Mathematics Book 2 Week 2 *Select												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Class**					
							Date completed					
6	Investigating enlargement and reduction	147	1–3	103–105	103–105	No. 113a–113b (pp. 128–131)						
7	Practise	147	1–7	105–108	105–108							
8	Revise transformations (use *DBE workbook*)	147				No. 108 (pp. 114–115) No. 110–111b* (pp. 118–123)						
9	Geometry of 3-D objects: Classifying and describing 3-D objects	148	1–3	111–113	109–113							
10	**Formal assessment: Investigation**					No. 114–115 (pp. 132–135) No. 116–117 (pp. 136–139)						

Notes: 1. Refer to Day 9: Models of 3-D objects should be provided.
2. Refer to Day 10: An investigation should be sourced from another set of LTSMs.

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

Sasol Inzalo Mathematics Book 2 Week 3 *Select												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Class**					
							Date completed					
11	**Formal assessment: Investigation** cont.											
12	Nets and models of prisms and pyramids	148	1–3	113–115	113–115	No. 120a–120c (pp. 144–149)						
13	Constructing more nets (use *DBE workbook*)	148				No. 121a–121b (pp. 150–152) No. 122a–122c (pp. 154–159)*						
14	Platonic Solids: Only five Platonic Solids? Properties of the Platonic Solids	148	– 1–5	116–117 118	116–117 118	No. 118–119 (pp. 140–143)						
15	Euler's Formula and Platonic Solids; Euler's Formula and other polyhedra	148	1–3 1–3	119 120	119 120							
Note: Refer to Day 12: Learners require 3-D objects from home, paper/cardboard, scissors, glue/sticky tape.												
Reflection												
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?						
						HOD: **Date:**						

Sasol Inzalo Mathematics Book 2 Week 4												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Class**					
							Date completed					
16	Properties of cylinders; Nets of cylinders	148	1–3 1–5	121 121–123	121 121–123							
17	Spheres; Net of a sphere	148	1–5	124–125	124–125							
18	Review investigation done in previous week; Worksheet	148	1–3	126	126							
19	**Collect, organise and summarise data:** Collecting data; Think about data collection and develop a questionnaire	149	– 1–2	129–130 131–132	127–130 131–132	No. 123a–123b (pp. 160–163)						
20	Methods of organising data; Working with grouped data	149	– 1–2	133–134 135–136	133–134 135–136	No. 124a–124b (pp. 164–167)						

Reflection

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

What will you change next time? Why?

HOD: **Date:**

Sasol Inzalo Mathematics Book 2 Week 5												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Class**					
							Date completed					
21	Methods of summarising data	149	1–2	136–139	136–139	No. 125a–125b (pp. 168–171)						
22	Extreme values and outliers	149	1–2	139–140	139–140							
23	**Formal assessment: Assignment**											
24	**Represent data:** Revising bar graphs and double bar graphs; Drawing bar graphs and double bar graphs	150	– 1	143 144–145	141–143 143–145	No. 126a–127b (pp. 172–179)						
25	Revising histograms; Representing data in histograms	150	– 1–2	146 147–148	146 147–148	No. 128a–129b (pp. 180–187)						
Note: Refer to Day 23: An assignment should be sourced from another set of LTSMs.												
Reflection												
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?						
						HOD: **Date:**						

Sasol Inzalo Mathematics Book 2 Week 6												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Class**					
							Date completed					
26	Drawing pie charts	150	1	149–150	149–150	No. 130a–130b (pp. 188–191)						
27	Broken line graphs; Understanding and constructing scatter plots; The relationship between arm span and height	150	1–8 1–14 1–2	151–153 154–159 159–160	151–153 154–159 159–160	No. 131a–132b (pp. 192–199)						
28	**Interpret, analyse and report on data:** Which graph is best: Choose the best representation	151	– 1–3	163 164–166	161–163 164–166	No. 133 (pp. 200–201)						
29	The effects of summary statistics on how data is reported; Using different summary statistics; Misleading graphs	151	– 1–2 –	167 168 168–169	167 168 168–169	No. 134a (pp. 202–203)						
30	Analysing graphs; Analysing extreme values and outliers; Find outliers	151	1–3 1–4 1–4	170–171 172–174 175–176	170–171 172–174 175–176	No. 134b (pp. 204–205)						

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

Sasol Inzalo Mathematics Book 2 Week 7 *Select												
Day	**CAPS concepts and skills**	**CAPS pp.**	**LB ex.**	**LB pp.**	**TG pp.**	**DBE workbook**	**Class**					
							Date completed					
31	Revise the Data Cycle (use *DBE workbook*)	151				No. 135–137b* (pp. 206–213)						
32	Probability: Simple events: Revision	152–153	1–8	179–181	177–181	No. 138 (pp. 214–215)						
33	Investigate what happens when more trials are done	152–153	1–6	182–183	182–183	No. 139a–139b (pp. 216–219)						
34	Compound events: Tossing a coin and giving birth	152–153	1–9	184–186	184–186							
35	Probability of different types of events (use *DBE workbook*)	152–153				No. 140–143 (pp. 220–227)						

Reflect on the year

Think about and make a note of:

1. Did you complete the curriculum according to the CAPS requirements? If not, why not and what could you do to cover all of the work next year?
2. Did the tracker help with curriculum planning and coverage? How could you use it even more effectively next year?
3. What concepts and skills did learners grasp well this year? What good practice could you use again next year?
4. What did learners struggle with? How can you help your group next year understand these concepts and develop these skills better?
5. What needs to be communicated to the teacher who will teach this group of learners next year?
6. What aspects of your teaching and assessment practices would you like to develop further next year? How will you go about this?

HOD: **Date:**

Sasol Inzalo Mathematics Book 2 Week 8 and 9: Examination period

E. ASSESSMENT RESOURCES

GRADE 9 MATHEMATICS Formal Assessment Record Sheet: Term 4						
	Assignment	**Investigation**	**End-of-year examination**	**Total**	**%**	**Rating (1–7)**
Date of assessment						
Total marks for assessment						
Learner name						

Grade 9 Mathematics End-of-year Examination

Time: 2 hours 30 minutes

Total: 125 marks

INSTRUCTIONS TO LEARNERS:

1. There are 15 questions. Answer all questions.
2. Show all your calculations where necessary.
3. Scientific non-programmable calculators may be used. Round off to two decimal places.
4. Squared paper is provided for graphs.
5. Diagrams are not drawn to scale.

SECTION A: 75 MARKS – 1 hour 30 minutes

QUESTION 1:

1.1 Given the numbers: -3; $\sqrt{-9}$; $\frac{3}{0}$; $6{,}457$; $-\sqrt{17}$; $\sqrt[3]{64}$

Choose the numbers from the above list which are:

1.1.1 rational (2)

1.1.2 non-real (1)

1.2 A biochemist, using a powerful microscope, discovers an organism which is 0,000 000 75 mm in diameter. Write this number in scientific notation. (1)

[4]

QUESTION 2:

2.1 There are 47 children who are going on a holiday outing. Of these children, 17 choose to go ice-skating while the rest of the children choose to go to the movies.

2.1.1 What fraction of the children is going ice-skating? (1)

2.1.2 What percentage of the children is going to the movies? (2)

2.2 A retail outlet has a clothing sale. Thabang buys a jacket for R450, which is a saving of R175 on the normal price. Calculate the marked down percentage on the jacket. (2)

2.3 How much money will Amy save if she invests R10 000 compound interest for five years at an interest rate of 5,75% per annum? (3)

[8]

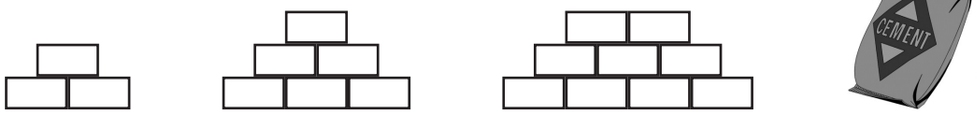
QUESTION 3:

3.1 Find the next term of each of the following number patterns:

3.1.1 $-17; -12; -7; \ldots$ (1)

3.1.2 $3; \frac{3}{4}; \frac{3}{16}; \ldots$ (1)

3.2 David is building a wall. He starts off with three bricks, then continues to build the number to six, then to ten, and so on, as in the structures below.



1 2 3

3.2.1 Following this pattern, how many bricks will the next two structures consist of? (3)

3.2.2 The base (bottom row) of the wall needs two bricks for the first structure, then three for the second structure, four for the third etc. How many bricks will be needed for the n-th structure? (2)

3.2.3 How many rows of bricks will be needed for the twentieth structure? (2)

[9]

QUESTION 4:

Simplify:

4.1 $\frac{3x^2(2x)^{-1}}{12x^{-4}z^0}$ (3)

4.2 $m - 5(m-1)(m+6) - 3(m-6)^2$ (3)

4.3 $\frac{-8x^4 - 3x^2 + 21x}{-3x}$ (3)

4.4 $\sqrt{625y^6}$ (1)

4.5 $\frac{25a^2 - 9}{3 + 5a}$ (2)

[12]

QUESTION 5:

Factorise:

5.1 $3a - 81a^2b + 9a^3$ (2)

5.2 $\frac{1}{2}y^{16} - 32$ (3)

5.3 $10p(6r - 2s) - 5q(2s - 6r)$ (4)

[9]

QUESTION 6:

6.1 Solve for the unknown variable:

6.1.1 $5(2x - 3) = 6(7x - 4) + 25$ (3)

6.1.2 $\frac{2x-3}{10} - \frac{x+1}{3} = \frac{3x-1}{5}$ (4)

6.1.3 $y^2 + 7y = -10$ (3)

6.1.4 $0 = 24f^2 - 12f$ (3)

6.1.5 $2^k = 32$ (1)

6.1.6 $4.2^p - 2 = 510$ (3)

[17]

QUESTION 7:

7.1 Given that $y = \frac{1}{2}x - 4$:

7.1.1 Redraw and complete the table:

x	–2	–1	0	1	2
y					

(3)

7.1.2 Sketch the graph of this straight line on a Cartesian Plane. (Use the squared paper provided.) (2)

7.1.3 Draw the line $y = 1$ on the same Cartesian Plane. (1)

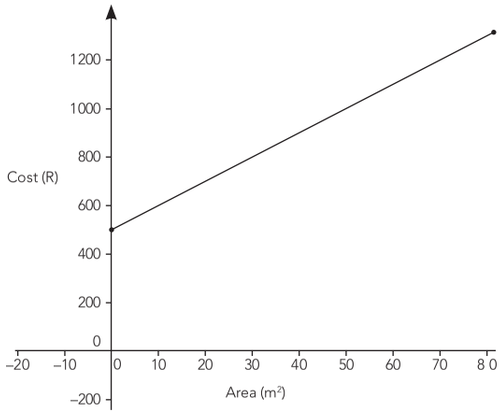
7.1.4 Give the point of intersection of these two straight lines. (1)

7.2 Find the equation of the straight line which passes through the points (–4; 2) and (3; 5). (3)

[10]

QUESTION 8:

Thembinkosi owns a painting business. He charges a standard fixed rate of R500 per day and he charges R10 for every 10 m^2 which needs to be painted. He works out quotations for his clients:



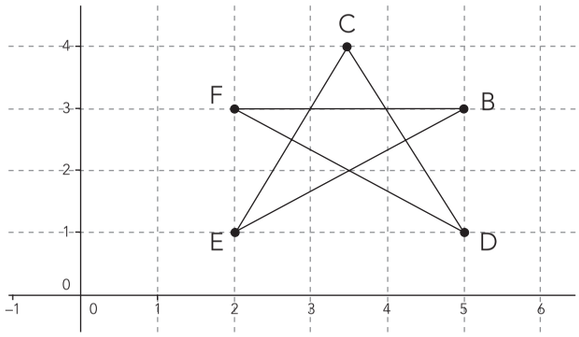
8.1 By using the information and the graph above, determine the formula which Thembinkosi uses to determine the prices of his quotations. (3)

8.2 If he quotes R1 700 for a painting job, use the formula to calculate what area his company would be expected to paint. (3)

[6]

SECTION B: 50 MARKS – 1 hour

QUESTION 9:



9.1 If the star BCFED above is reflected about the x-axis, what is the rule for the reflection? (1)

9.2 If BCFED is transformed to give B'C'F'E'D' in such a way that BCFED is reflected about the line $y = x$, what will the co-ordinates of B' be? (2)

9.3 If BCFED is enlarged by a factor of $\frac{3}{2}$ to obtain B"C"F"E"D":

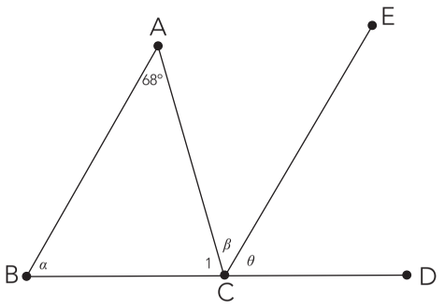
9.3.1 give the co-ordinates of B" (1)

9.3.2 Determine area BCFED **:** Area B"C"F"E"D" (2)

[6]

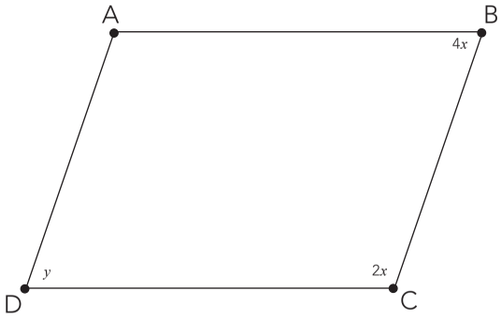
QUESTION 10: (Reasons must be provided where necessary)

10.1 BCD is a straight line. ΔABC is an isosceles triangle. $\hat{A} = 68°$. AB is parallel to EC. Determine the values of α, β and θ.



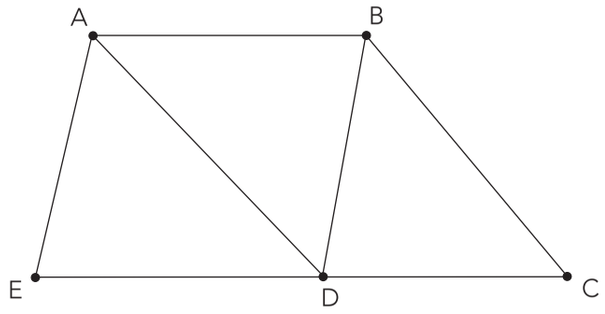
(5)

10.2 ABCD is a parallelogram. Calculate the values of *x* and *y*.



(3)

10.3 In the figure below, ABCD is a rhombus and ABDE is a rhombus.
Prove that $\Delta ADE \equiv \Delta BDC$.

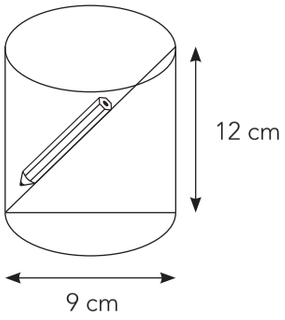


(3)

[11]

QUESTION 11:

Study the cylinder below:



11.1 Will a pencil 16 cm long fit inside a tin with its lid on? Show all calculations. (4)

11.2 Calculate the volume of water in the cylinder if it is half full. Leave your answer in kilolitres ($k\ell$). (4)
(Formula: $V = \pi r^2 h$)

[8]

QUESTION 12:

12.1 Draw the net of a cube. (2)

12.2 Name one Platonic solid. (1)

12.3 How many faces does an *icosahedron* have? (1)

[4]

QUESTION 13:

The marks for a Life Sciences examination written by 16 learners in a Grade 9 class are provided:
10; 48; 74; 82; 33; 54; 18; 46; 66; 74; 64; 80; 94; 42; 82; 74

13.1 Determine the mean mark for the class. (2)

13.2 What is the mode of the marks? (1)

13.3 Determine the median of the marks. (2)

13.4 Redraw and complete the following table:

Mark interval	Tally	Frequency
0 – 19		
20 – 39		
40 – 59		
60 – 79		
80 – 99		

(2)

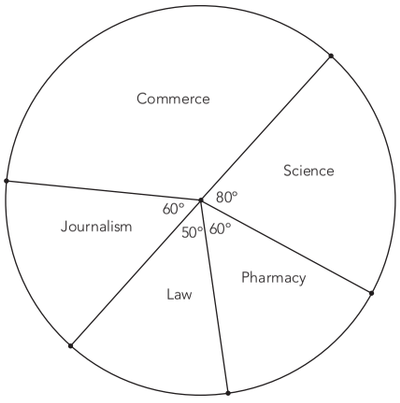
13.5 Draw a histogram showing the results of this Grade 9 class. (4)

13.6 Which best represents the learners' marks: the mean, the median or the mode? Give a reason. (1)

[12]

QUESTION 14:

This pie chart shows the number of students in different faculties at a university.
There are 2 200 Science students.



How many students are doing Commerce?

[3]

QUESTION 15:

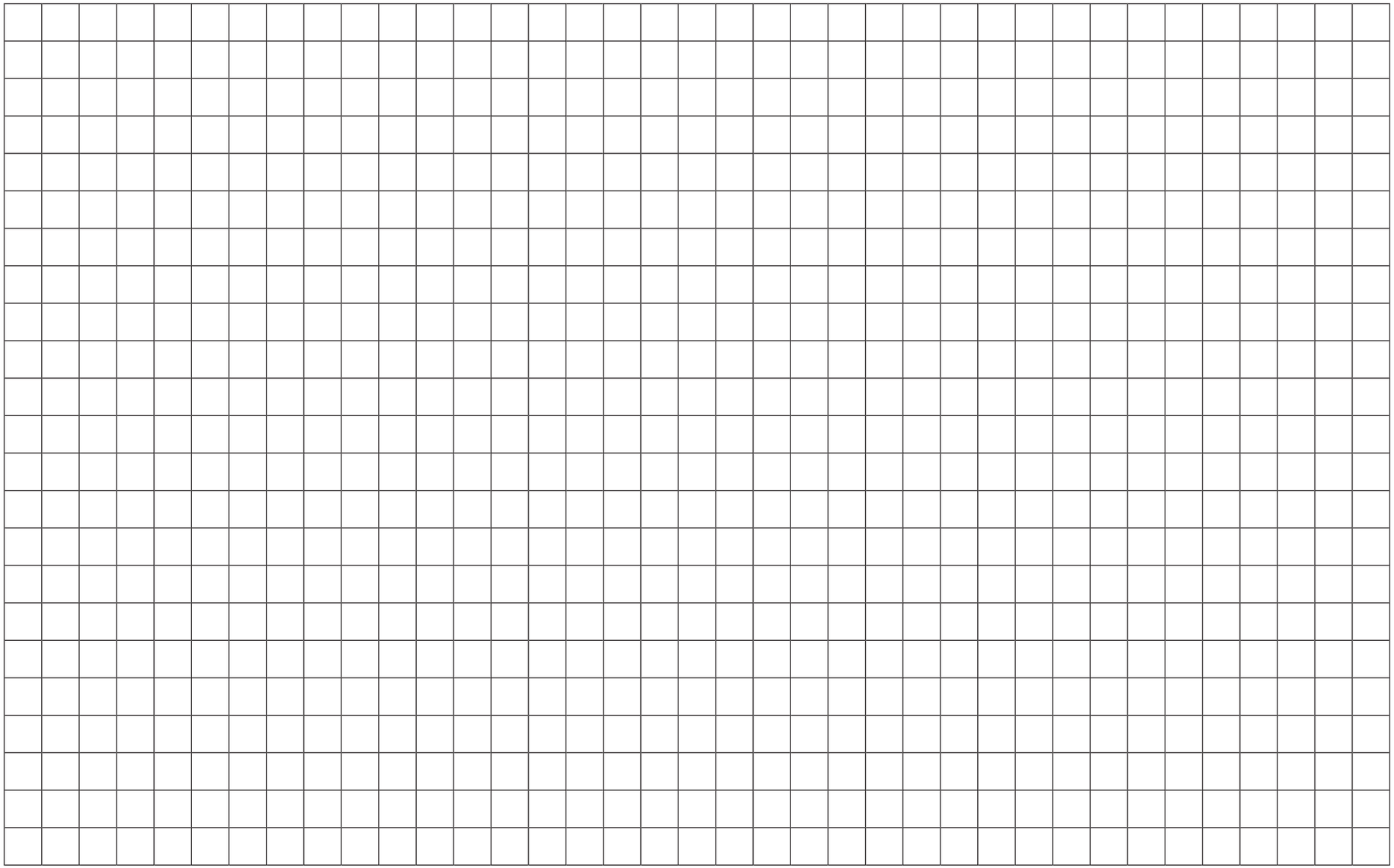
Newly-weds, Mr and Mrs Bambino, want to have three children.

15.1 Draw a tree diagram, showing all the potential outcomes about the gender possibilities of each child. (Note: Suppose that there will be no twins, triplets or other multi-births!) (3)

15.2 What is the probability of the Bambino's having three girls in a row? (1)

15.3 What is the probability of their having 2 girls and 1 boy? (2)

[6]



Grade 9 Mathematics End-of-Year Examination: Memorandum and Cognitive Levels of Questions

Note: The last column in the memorandum shows the cognitive level for each question in the test.

The levels are:

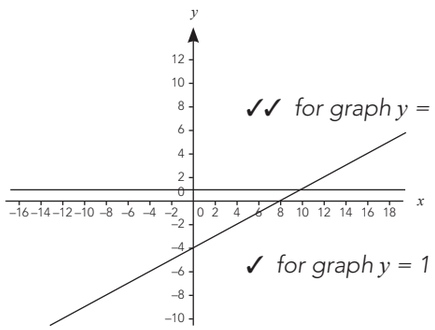
K: Knowledge – straight recall of facts
RP: Routine Procedures – well-known, simple applications and calculations
C: Complex Procedures – procedures involving complex calculations and/or higher reasoning
P: Problem Solving – solving problems for which higher order reasoning and processes are involved

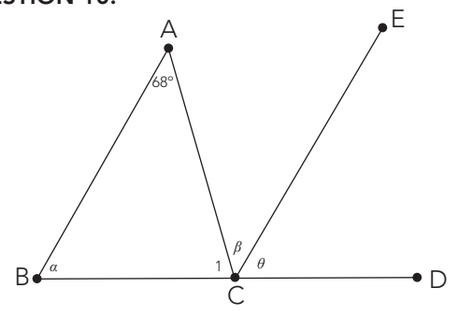
More information about these levels can be found in the CAPS (p. 157).

SOLUTIONS	MARKS	COGNITIVE LEVELS
QUESTION 1:		
1.1.1 Rational: –3; 6,457; $\sqrt[3]{64}$ ✓✓ *one mark if two choices are correct*	(2)	K
1.1.2 Non-real: $\sqrt{-9}$ ✓ *answer*	(1)	K
1.2 0,00000075 = $7{,}5 \times 10^{-7}$ mm ✓ *answer (excl. units)*	(1)	RP
QUESTION 2:		
2.1.1 $\frac{17}{47}$ of the children are going ice-skating. ✓ *ratio*	(1)	RP
2.1.2 $\frac{30}{47} \times 100 = 63{,}83\%$ are going to the movies ✓✓ *answer*	(2)	RP
2.2 450 + 175 = 625 ✓ *calculation* $\frac{175}{625} \times 100 = 28\%$ ✓ *final answer*	(2)	PS
2.3 $A = P(1 + i)^n$ ✓ *formula* $= 10\,000(1 + \frac{5{,}75}{100})^5$ ✓ *substitution* = R13 225,19 ✓ *answer*	(3)	RP
QUESTION 3:		
3.1.1 –2 ✓ *answer*	(1)	RP
3.1.2 $\frac{6}{34}$ ✓ *answer*	(1)	RP
3.2.1 15; 21; 28 ✓✓✓ *two marks for first answer; three for both correct*	(3)	RP
3.2.2 2; 3; 4; … The nth term = n + 1 bricks ✓✓ *formula*	(2)	PS
3.2.3 The 20th term = 20 + 1 = 21 bricks ✓✓ *answer*	(2)	RP
QUESTION 4: ✓ *simplification* 4.1 $\frac{3x^2(2x)^{-1}}{12x^{-4}z^0} = \frac{3x^2.x^4}{12(2x).1}$ ✓$= \frac{x^6}{8x}$ ✓$= \frac{x^5}{8}$ ✓ *final answer*	(3)	RP
4.2 $m - 5(m - 1)(m + 6) - 3(m - 6)^2$ $= m - 5(m^2 + 5m - 6) - 3(m^2 - 12m + 36)$ ✓✓ *simplification* $= m - 5m^2 - 25m + 30 - 3m^2 + 36m - 108$ $= -8m^2 + 12m - 78$ ✓ *final answer*	(3)	RP
4.3 $\frac{-8x^4 - 3x^2 + 21x}{-3x} = \frac{-8x^4}{-3x} - \frac{3x^2}{-3x} + \frac{21x}{-3x}$ ✓✓ *split denominators* $= \frac{8x^3}{3} + x - 7$ ✓ *final answer*	(3)	CP
4.4 $\sqrt{625y^6} = 25y^3$ ✓ *answer*	(1)	RP
4.5 $\frac{25a^2 - 9}{3 + 5a} = \frac{(5a - 3)(5a + 3)}{5a + 3}$ ✓ *simplification* $= 5a - 3$ ✓ *answer*	(2)	RP

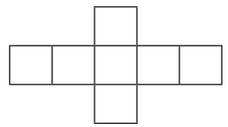
SOLUTIONS	MARKS	COGNITIVE LEVELS
QUESTION 5:		
5.1 $3a - 81a^2b + 9a^3 = 3a(1 - 27ab + 3a^2)$ ✓ *factor* ✓ *factor*	(2)	RP
5.2 $\frac{1}{2}y^{16} - 32 = \frac{1}{2}(y^{16} - 64) = \frac{1}{2}(y^8 - 8)(y^8 + 8)$ ✓✓ *factors* ✓ *factors*	(3)	CP
5.3 $10p(6r - 2s) - 5q(2s - 6r)$ $= 10p(6r - 2s) + 5q(6r - 2s)$ ✓ *sign change* $= (6r - 2s)(10p + 5q)$ ✓✓ *factorisation* $= 2(3r - s)5(2p + q)$ ✓ *final answer* $= 10(3r - s)(2p + q)$	(4)	CP
QUESTION 6:		
6.1.1 $5(2x - 3) = 6(7x - 4) + 25$ $10x - 15 = 42x - 24 + 25$ ✓ *simplification* $10x - 42x = 1 + 15$ $-32x = 16$ ✓ *simplification* $x = \frac{16}{-32}$ $x = -\frac{1}{2}$ ✓ *final answer* *($x = \frac{-16}{32}$ is acceptable)*	(3)	RP
6.1.2 $\frac{2x-3}{10} - \frac{x+1}{3} = \frac{3x-1}{5}$ $\frac{3(2x-3) - 10(x+1)}{30} = \frac{6(3x-1)}{30}$ ✓✓ *numerator & denominator* $\therefore 6x - 9 - 10x - 10 = 18x - 6$ ✓ *simplification* $-4x - 18x = -6 + 19$ $-22x = 13$ $x = -\frac{13}{22}$ ✓ *final answer*	(4)	CP

SOLUTIONS	MARKS	COGNITIVE LEVELS
6.1.3 $y^2 + 7y = -10$ $y^2 + 7y + 10 = 0$ ✓ *factors* $(y + 5)(y + 2) = 0$ $y = -5$ *or* $y = -2$ ✓✓ *answers*	(3)	RP
6.1.4 $0 = 24f^2 - 12f$ $0 = 12f(2f - 1)$ ✓ *factors* $f = 0$ or $2f - 1 = 0$ ✓ *answer* $f = \frac{1}{2}$ ✓ *answer*	(3)	RP
6.1.5 $2^k = 32$ $2^k = 2^5$ $k = 5$ ✓ *answer*	(1)	RP
6.1.6 $4.2^p - 2 = 510$ $4.2^p = 510 + 2$ $4.2^p = 512$ ✓ *simplification* $2^p = \frac{512}{4}$ $2^p = 128$ ✓ *simplification* $2^p = 2^7$ $\therefore p = 7$ ✓ *answer*	(3)	CP
QUESTION 7:		
7.1 $y = \frac{1}{2}x - 4$		
7.1.1 <table><tr><td>x</td><td>–2</td><td>–1</td><td>0</td><td>1</td><td>2</td></tr><tr><td>y</td><td>–5</td><td>$-4\frac{1}{2}$</td><td>–4</td><td>$-3\frac{1}{2}$</td><td>–3</td></tr></table> ✓✓✓ *y-values*	(3)	RP

SOLUTIONS	MARKS	COGNITIVE LEVELS
7.1.2  ✓✓ *for graph* $y = \frac{1}{2}x - 4$	(2)	RP
✓ *for graph* $y = 1$	(1)	RP
7.1.4 Point of intersection: (10; 1) ✓ *answer*	(1)	RP
7.2 $m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{5-2}{3+4} = \frac{3}{7}$ ✓ *gradient* $y = \frac{3}{7}x + c$ Substitute (3; 5): $5 = \frac{3}{7}(3) + c$ ✓ *substitution* $5 = \frac{9}{7} + c$ $\therefore c = 5 - \frac{9}{7} = \frac{35-9}{7} = \frac{26}{7}$ ✓ *simplification* $y = \frac{3}{7}x + \frac{26}{7}$ ✓ *answer*	(4)	CP
QUESTION 8:		
8.1 Price = 500 + 10x where x = no. of 10 m^2 ✓ ✓✓ *correct formula*	(3)	PS
8.2 500 + 10x = 1 700 ✓ *equation* 10x = 1 700 – 500 10x = 1 200 x = 120 m^2 ✓ *answer (full marks if units are left out)*	(2)	PS

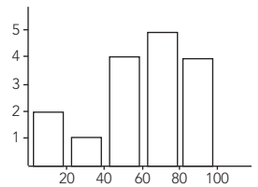
SOLUTIONS	MARKS	COGNITIVE LEVELS
QUESTION 9:		
9.1 $(x; y) \rightarrow (x; -y)$ ✓ *answer*	(1)	K
9.2 B′(3; 5) ✓✓ *answer (one mark for each value)*	(2)	K
9.3.1 B″ $(\frac{15}{2}; \frac{9}{2})$ ✓ *answer (one mark for each value)*	(1)	RP
9.3.2 Area BCFED **:** Area B″C″F″E″D″ $= 1 : (\frac{3}{2})^2 = 1 : \frac{9}{4}$ ✓✓ *simplified answer* $= 4 : 9$	(2) $1 : \frac{9}{4}$ is acceptable	K
QUESTION 10: 		
10.1 $\alpha + \hat{C}_1 = 180° - 68°$ (sum of angles of Δ) ✓ *statement and reason (s&r)* $= 112°$ ✓ *answer* But AB = AC (given) $\therefore \hat{B} = \hat{C}_1$ (<'s opp. = sides) $\therefore \alpha = \hat{C}_1 = \frac{1}{2} \times 112° = 56°$ ✓ *answer* $\theta = 56°$ (BA//CE; corresp. <'s) ✓ *(s&r)* $\beta = 68°$ (BA//CE; alt. <'s) ✓ *(s&r)*	(5)	RP

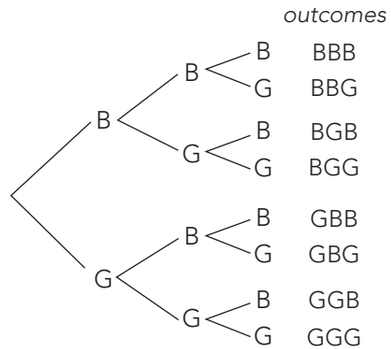
SOLUTIONS	MARKS	COGNITIVE LEVELS
10.2 $4x + 2x = 180°$ (AB//DC; co-int.<'s) ✓ *(s&r)* $6x = 180°$ $x = \frac{180°}{6} = 30°$ ✓ *answer* $\therefore 4x = 4(30°) = 120°$ $y = 120°$ (opp. <'s of parallelogram) ✓ *(s&r)*	(3)	RP
10.3 AB=BD=ED=AE (opp. sides rhombus ABDE) AB=BC=DC=AD (opp. sides rhombus ABCD) $\therefore$ AB=BD=ED=AE=BC=DC=AD ✓ *conclusion* In ΔADE, ΔBDC: 1) AE=BD (proved) 2) AD=BC (proved) ✓ *statements* 3) ED=DC (proved) $\therefore$ ΔADE≡ΔBDC (side, side, side) ✓ *(s&r)*	(3)	CP

SOLUTIONS	MARKS	COGNITIVE LEVELS
QUESTION 11:		
11.1 $l^2 = 9^2 + 12^2$ ✓ *equation* (Theorem of Pythagoras) ✓ *reason* $l^2 = 81 + 144$ $l^2 = 225$ $l = 15$ cm ✓ *answer* $\therefore$ A pencil 16 cm long will not fit in the cylinder. ✓ *conclusion*	(4)	PS
11.2 $V = \frac{1}{2} \times \pi r^2 h = \frac{1}{2} \times \pi(4,5)^2.12$ ✓ ✓ *substitution* $= 381,70\ cm^3$ ✓ *answer* $= 381,70\ m\ell$ $= 0,387\ k\ell$ ✓ *conclusion*	(4)	CP
QUESTION 12:		
12.1  ✓✓ *for net (or any other correct net)*	(2)	K
12.2 One of the following Platonic solids: Tetrahedron, hexahedron (cube), octahedron, dodecahedron, icosahedron ✓ *one answer*	(1)	K
12.3 *Icosahedron:* 20 faces. ✓ *answer*	(1)	K

SOLUTIONS	MARKS	COGNITIVE LEVELS
QUESTION 13:		
13.1 Mean mark: 58,81 ✓✓ *answer*	(2)	RP
13.2 Mode: 74 ✓ *answer*	(1)	K
13.3 Median: 65 ✓✓ *answer*	(2)	RP
13.4		

Mark interval	Tally	Frequency
0 – 19	//	2
20 – 39	/	1
40 – 59	////	4
60 – 79	~~////~~	5
80 – 99	////	4

✓ *correct tally* ✓ *correct frequency*	(2)	RP
13.5 		
✓ *histogram (no spaces between bars)*		
✓ *intervals on axes*		
✓ *correct heights*		
✓ *labelling axes*		
Note: The histogram may be drawn horizontally	(4)	RP
13.6 The median – because the outliers do not affect this measure of central tendency.		
✓ *correct heights*	(1)	K

SOLUTIONS	MARKS	COGNITIVE LEVELS
QUESTION 14:		
14.1 Number of degrees of students taking Commerce:		
$360° - (60° + 60° + 50° + 80°) = 110°$ ✓ *calculation*		
Let x be the number of Commerce students:		
$\frac{x}{110°} = \frac{2\,200}{80°}$ ✓ *equation*		
$\therefore x = 110° \times \frac{2\,200}{80°} = 3\,025$ Commerce students		
✓ *answer*		
Or: Alternative approach: Convert degrees to percentages first.	(3)	PS
QUESTION 15:		
15.1 		
✓✓✓ *for tree*	(3)	RP
15.2 $P(GGG) = \frac{1}{8}$ ✓ *answer*	(1)	RP
15.3 P(GGB) or P(GBG) or P(BGG) = $\frac{3}{8}$ ✓✓ *answer*	(2)	RP

Analysis of Cognitive Levels of End-of-Year Examination

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

Table 1: WEIGHTING OF THE COGNITIVE LEVELS SPECIFIED BY THE CAPS

Cognitive levels	Percentage
Knowledge	≈ 25%
Routine Procedures	≈ 45%
Complex Procedures	≈ 20%
Problem Solving	≈ 10%

Table 2 below shows the weighting of marks across the cognitive levels in the exemplar examination paper provided above. This differs slightly from the suggested weightings in the CAPS. This is acceptable, provided that the two lower cognitive levels add up to approximately 70%, and the two higher levels add up to approximately 30%.

In this exemplar examination, the two lower levels add up to 64,8% and the two higher levels add up to 35,2%, meaning that the test complies with the CAPS requirements.

Table 2: ANALYSIS OF COGNITIVE LEVELS OF TEST

Cognitive levels	Mark out of 125	Percentage
Knowledge	14	11,2%
Routine Procedures	67	53,6%
Complex Procedures	28	22,4%
Problem Solving	16	12,8%