PLANNER & TRACKER FOR RECOVERY ANNUAL TEACHING PLAN (ATP)

MATHEMATICS

GRADE 7 TERM 4

2021

Helping teachers and learners to catch up with learning losses, master new content and acquire skills for the future.

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ABOUT THE PLANNER AND TRACKER

This 2021 Revised Recovery Curriculum and Assessment Planner and Tracker is provided by the National Education Collaboration Trust (NECT) on behalf of the Department of Basic Education (DBE)! We hope that this programme provides you with additional skills, methodologies and content knowledge that you can use to teach your learners more effectively.

WHAT IS NECT?

In 2012 our government launched the National Development Plan (NDP) to eliminate poverty and reduce inequality by the year 2030. Improving education is an important goal in the NDP which states that 90% of learners will pass Maths, Science and languages with at least 50% by 2030. This is an ambitious goal for the DBE to achieve on its own, so the NECT was established in 2015 to assist in improving education.

The NECT has successfully brought together groups of people interested in education so that we can work collaboratively to improve education. These groups include the teacher unions, businesses, religious groups, trusts, foundations and NGOs.

PURPOSE OF PLANNER AND TRACKER

1) To mediate the amendments of the trimmed and re-organised 2021 Annual Teaching Plan including School-Based Assessments for Mathematics Grade 7.
2) To ensure that meaningful teaching continues during the remaining teaching time as per the school calendar for TERM 3.
3) To assist teachers with guided pacing and sequencing of curriculum content and assessment.
4) To enable teachers to cover the core skills and knowledge in each grade within the available time.
5) To assist teachers with planning for the different forms of assessment.
6) To ensure learners are adequately prepared for the subsequent year/s in terms of skills, knowledge, attitudes and values.

PREAMBLE

It must be emphasized that Term 1 and term 2 content coverage by teachers were impacted by COVID-19. Schools were particularly disrupted by the fact that learners only attended school for 50% of the time and had to endure variations of the rotation system implemented in the schools. Disruption in schools has also meant disruption in different forms of assessment, so it has been hard to fully pin down exactly how much the school closures and transitions in and out of virtual learning have affected students' mathematical learning, but the evidence so far does not bode well.

Curriculum coverage in term 1 and 2, must be viewed and implemented in term 3, in the light of some contextual realities that includes the following:

1) 2020 was an abnormal year in terms of content coverage. Learners have progressed to a higher grade level without learning all the core skills required for that grade.
2) Some learners were not in school for most of 2020 and perhaps part of 2021.
3) Mathematics is almost always formally learned at school. Many of our parents are often less well-equipped to help their children with mathematics, at a time when parent support can be even more crucial to student progress. This means that the burden falls directly on our teachers.

4) Broader stress and trauma related to the pandemic may worsen existing mathematics anxiety in some students, and mathematics anxiety can exacerbate students' other stress while in class.

Awareness of the above challenges and the consequent assumptions that emerge out of it, is crucial for the implementation of the Revised ATPs emphasizing the recovery of skills not yet mastered in mathematics. This Planner and Tracker is in alignment with the theme of recovery of skills not learnt and covers the following:

1) aims to ensure that the critical skills, knowledge, values and attitudes outlined in the ATPs are covered over this time period.
2) Curriculum Reorganisation and Trimming for this term purports to reduce the envisaged curriculum to manageable core content , skills, knowledge, attitudes and values to enhance deep and meaningful learning.
3) Create opportunities through adjusted ATPs to strengthen pre-knowledge, consolidation, revision, and deeper learning.
4) The Planner and Tracker clearly define the core knowledge, skills, attitude to be taught and assessed more specifically to guide and support teachers.
5) It also aligns curriculum content and assessment to the available teaching time. Entrench assessment for learning as a Pedagogical Approach to address the learning losses.
6) Be used as planning tool to inform instruction during the remaining school terms.

ADJUSTED SCHOOL CALENDAR

SCHOOL TERMS	DATES	TEACHING DAYS
Term 1	15 February - 23 April	50(10 weeks)
Term 2	3 May – 9 July	50(10 weeks)
Term 3	**26 July – 01 October**	**50(10 weeks)**
Term 4	11 Oct - 15 Dec	48(10 weeks)

NOTES:

- TEACHING APPROACH in this term assumes that ALL learners are attending schools and the Rotation system may not be implemented meaning that schools may implement normal timetable.
- NECT TERM 3 Planner and Tracker has 48 teaching and learning days (2 public holidays), of which 15 days are used for formative and summative Assessment days.
- NECT Term 3 Planner and Tracker focuses on Deep learning through assessment for learning - There is no time for assessment that does not inform the way forward. Teachers should consolidate, revise and remediate through error analysis that leads to skills mastery.

MANAGING TIME ALLOCATED IN THE TRACKER

- The tracker for each term contains details of work to be covered over 60 lessons per term, six per week for ten weeks.
- The CAPS prescribes **four and a half hours** of Mathematics per week in Grade 7.
- Each school will organise its timetable differently, so the programme of lessons is based on work in the Learner's Book and DBE workbook, which should take just about an hour per day to complete. Perhaps, at end of week 30 minutes – will be great if this is also an hour.

- You might have to divide the sessions in the programme slightly differently to accommodate the length of the lessons at your school.
- Depending on the pace at which your learners work, and how much support is needed,
- you might also have to supplement the set activities by using other resources to ensure that the full four and a half hours allocated to teaching 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.
- This tracker is designed for a term that is 10 weeks long.
- In most weeks, one lesson is set aside – at the end of the week - for you to catch up on work not done in the previous four lessons, or to provide remedial support or enrichment.
- The formal teaching programme, the project, some revision, and the term test should be completed by the end of Week 10.

REMEMBER: The teacher should employ group teaching based on principles of differentiation – cater for the needs of every learner by making sure every learner masters the fundamental skills in mathematics. The teacher is also mindful to plan well for effective assessment for learning to inform the remediation and teaching, through the skills mastery approach applied in this Planner and Tracker.

LINKS TO THE DBE WORKBOOKS

The tracker gives links to worksheets in the DBE workbooks relevant to the content described for each day. The worksheets are referred to by worksheet number and page number. These workbooks should be used in conjunction with the Learner's Book activities. You should review the suggested worksheets before each lesson and decide how best to use them – for teaching, revision, extension or consolidation, in class or for homework.

TEACHING TIME

Since there are **4 and $\frac{1}{2}$** hours allocated for Mathematics per week, the following is a suggested plan for daily lessons.

WEEK: 4 and $\frac{1}{2}$ hours	
Consolidation of Concepts – skills mastery and other New Concept – class activity	 10 min 50 min

CONTENT COVERAGE

TERM 3	Week 1 4 days	Week 2 5 days	Week 3 5 days	Week 4 5 days	Week 5 4 days	Week 6 5 days	Week 7 5 days	Week 8 5 days	Week 9 5 days	Week 10 5 days	Week 11 4 days
Hours per week	3.5 hrs	4.5 hrs	4.5 hrs	4.5 hrs	3.5 hrs	4.5 hrs	4.5 hrs	4.5 hrs	4.5 hrs	4.5 hrs	4 hrs
Hours per topic	6 hrs	6 hrs		8 hrs.		9 hrs.		9 hrs		2.5 hrs.	6 hrs
Topics, concepts and skills	**ALGEBRAIC EXPRESSIONS** • Recognise and interpret rules or relationships represented in symbolic form • Identify variables and constants in given formulae and equations	**ALGEBRAIC EQUATIONS** **Number sentences** • Write number sentences to describe problem situations • Analyse and interpret number sentences that describe a given situation • Identify variables and constants in given formulae or equations • Solve and complete number sentences by: – inspection – trial and improvement • Solve equations by substitution		**CONSTRUCTION OF GEOMETRIC FIGURES** **Measuring angles** • Accurately use a protractor to measure and classify angles: – < 90° (acute angles) – Right-angles – >90° (obtuse angles) – Straight angles – >180° but less than 360° (reflex angles) **Constructions** **PROVIDE LEARNERS WITH ACCURATELY CONSTRUCTED FIGURES** • Accurately construct geometric figures appropriately using a compass, ruler and protractor, including: – angles, to one degree of accuracy – circles – parallel lines – perpendicular lines • Describe and name parts of a circle **GEOMETRY OF STRAIGHT LINES** **Define:** • Line segment • Ray • Straight line • Parallel lines • Perpendicular lines		**GEOMETRY OF 2D SHAPES:** **Classifying 2D shapes** • Describe, sort, name and compare triangles according to their sides and angles, focussing on: – equilateral triangles – isosceles triangles – right-angled triangles • Describe, sort, name and compare quadrilaterals in terms of: – length of sides – parallel and perpendicular sides – size of angles (right angles or not) **Similar and congruent 2D shapes** • Recognise and describe similar and congruent figures by comparing: – shape – size **Solving problems** • Solve simple geometric problems involving unknown sides and angles in triangles and quadrilaterals, using known properties		**TRANSFORMATION GEOMETRY** **Transformations** • Recognize, describe and perform translations, reflections and rotations with geometric figures and shapes on squared paper • Identify and draw lines of symmetry in geometric figures **Enlargements and reductions** • Draw enlargements and reductions of geometric figures on squared paper and compare them in terms of shape and size		**REVISION**	**FORMAL ASSESSMENT TASK** **TEST** All topics

CORE QUESTIONS	DID ALL LEARNERS MASTER TERM 1 SKILLS?	DID ALL LEARNERS MASTER TERM 1 AND 2 SKILLS?	NEW CONCEPTS/CONTENT

RECOMMEN-DATION	1. Implement at least two Skills Mastery (SM) formative assessments every week. 2. Consolidation of Concepts – 10 minutes – twice a week apply 5-item SM assessments. 3. Teacher – can use SM as individual, pair, small group, or whole class activity. 4. Aim – to consolidate, remediate and work towards mastery. 5. Record – monitor learners who have learning gaps in the REFLECTION section of the Tracker	NEW CONCEPTS/CONTENT

WEEKLY PLANNER AND TRACKER

RECOMMENDATION

BASELINE TERM 3: Implement DBE Baseline/Diagnostic – or any similar diagnostic – Based on term 1 and term 2 core skills. Meaning teachers can select different items in the baseline/diagnostic for their purposes.

WHEN: Day 1, allow learners to complete individually and/or work with ability groups based on your classroom context. Day 2 is set aside for remediation purposes.

NUMBER OF ITEMS: Grade 7 = 15 - 20 items – depending on your context and ability groups

ITEM BANK: Items can be from previous:

1) BASELINE/READINESS assessment, 2) Assessment Resources in this TRACKER or 3) the DBE Item Bank and 4) Textbooks.

26 – 30 July 2021

Week 1					
Lesson	**ATP Content**	**concepts, skills**	**DBE workbook**	**Resources**	**Date**
1		Baseline: (Revision, consolidation of term 1 and 2 skills)			
2		Baseline: Remediation – error analysis			
3	ALGEBRAIC EXPRESSIONS Recognise and interpret rules or relationships represented in symbolic form Identify variables and constants in given formulae and equations	Input and output values Functions and relationships	Bk 2 No. 72 (pp. 18 – 19) No. 73 (pp. 20 – 21)		
4	ALGEBRAIC EXPRESSIONS Recognise and interpret rules or relationships represented in symbolic form Identify variables and constants in given formulae and equations	clarifying expression vs equation	Bk 2 No. 74 (pp. 22 – 23)		
5	ALGEBRAIC EXPRESSIONS Recognise and interpret rules or relationships represented in symbolic form Identify variables and constants in given formulae and equations	Describe the rule of a number sequence.	Bk 2 No. 75 (pp. 24 – 25)		

Notes for the teacher.

1. The Baseline Assessment can be administered one-on one or to a group of at least 5 learners at a time – it is an assessment FOR learning.
2. The onus is on the teacher to prepare substantial activities for the rest of the learners while the Baseline Assessment is being administered.
3. Prepare well - study the Baseline Assessment i.e. familiarise yourself with the apparatus and templates that must be used.

Reflection	
DID ALL THE LEARNERS LEARN THE WEEKLY SKILLS? ARE THEY ABLE TO: • Solve input/output models with all operations • Use variables with different operations • Use constants with different operations • Distinguish between expressions and equations	What will you change next time? Why? **Struggling Learners Names:** **HOD:** **Date:**

2 – 6 AUGUST 2021

Week 2					
Lesson	**ATP Content**	**concepts, skills**	**DBE workbook**	**Resources**	**Date**
6	ALGEBRAIC EXPRESSIONS Recognise and interpret rules or relationships represented in symbolic form Identify variables and constants in given formulae and equations	describing the pattern or rule in words.	Bk 2 No. 76 (pp. 26 – 27)		
7	ALGEBRAIC EQUATIONS Number sentences: Write number sentences to describe	Solve for x by applying the balance of scale method Apply rules for addition and	Bk 2 No. 77 (pp. 28 – 29)		

	problem situations Analyse and interpret number sentences that describe a given situation Identify variables and constants in given formulae or equations Solve and complete number sentences by: – inspection– trial and improvement Solve equations by substitution	subtraction			
8	ALGEBRAIC EQUATIONS Number sentences: Write number sentences to describe problem situations Analyse and interpret number sentences that describe a given situation Identify variables and constants in given formulae or equations Solve and complete number sentences by: – inspection– trial and improvement Solve equations by substitution	Solve for x by applying the balance of scale method Apply rules for multiplication and division	Bk 2 No. 78 (pp. 30 – 31)		
9	ALGEBRAIC EQUATIONS Number sentences: Write number sentences to describe problem situations Analyse and interpret number sentences that describe a given situation Identify variables and constants in given formulae or equations Solve and complete number sentences by: – inspection– trial and improvement Solve equations by substitution	Algebraic equations in context – linking known formulae to algebra	Bk 2 No. 79 (pp. 33)		
10	Assessment Activity: Consolidate and revise – assess learners understanding, remediate for understanding – use SM Activities				

Reflection	
DID ALL THE LEARNERS LEARN THE WEEKLY SKILLS? ARE THEY ABLE TO: • Describe the pattern in expressions • Solve equations • Solve equations in context • Solving equations from known formulae	What will you change next time? Why? **Struggling Learners Names?** **HOD:** **Date:**

10 – 13 August 2021 - 4-day week (skip the assessment activity at end of the week)

Week 3					
Lesson	**ATP content**	**concepts, skills**	**DBE workbook**	**Resources**	**Date**
11	ALGEBRAIC EQUATIONS Number sentences:	Input and output values	Bk 2 No. 118a (pp. 118 – 119)		

	Write number sentences to describe problem situations Analyse and interpret number sentences that describe a given situation Identify variables and constants in given formulae or equations Solve and complete number sentences by: – inspection– trial and improvement Solve equations by substitution		No. 118b (pp. 120 -121)		
12	ALGEBRAIC EQUATIONS Number sentences: Write number sentences to describe problem situations Analyse and interpret number sentences that describe a given situation Identify variables and constants in given formulae or equations Solve and complete number sentences by: – inspection– trial and improvement Solve equations by substitution	Solving for two unknowns – interchanging input/output variables	Bk 2 No. 119 (pp.122 – 123)		
13	ALGEBRAIC EQUATIONS Number sentences: Write number sentences to describe problem situations Analyse and interpret number sentences that describe a given situation Identify variables and constants in given formulae or equations Solve and complete number sentences by: – inspection– trial and improvement Solve equations by substitution	Comparing expressions and equations – the rule as an expression	Bk 2 No. 120 (pp. 124 – 125) No. 121 (126 – 127)		
14	ALGEBRAIC EQUATIONS Number sentences: Write number sentences to describe problem situations Analyse and interpret number sentences that describe a given situation Identify variables and constants in given formulae or equations Solve and complete number sentences by: – inspection– trial and improvement Solve equations by substitution	Solving equations as a balanced scale. Using inverse operations. Algebraic equations using substitution	Bk 2 No. 123 (pp. 130 – 131) No. 124 (pp. 132 – 133) No 125 (pp. 134 – 135)		
15	Assessment Activity – can be cancelled because of four-day week				
Reflection					

DID ALL THE LEARNERS LEARN THE WEEKLY SKILLS? ARE THEY ABLE TO: • Solve input/output models with all operations • Solve for two unknowns • Solving working backwards from output to input • Compare expressions and equations and develop a rule for expressions • Solve equations as a balanced scale • Solve equations using substitution	What will you change next time? Why? **Struggling Learners names:**
	HOD: **Date:**

16 – 20 August 2021

Week 4					
Day	**ATP Content**	**CAPS content, concepts, skills**	**DBE workbook**	**Resources**	**Date**
16	CONSTRUCTION OF GEOMETRIC FIGURES Measuring angles: Accurately use a protractor to measure and classify angles: – < 90o (acute angles)– Right-angles – >90o (obtuse angles)– Straight angles – >180o but less than 360 o (reflex angles)	Construction of figures – measure angles using a protractor	Bk 1 No. 20 (pp. 44 – 45)		
17	CONSTRUCTION OF GEOMETRIC FIGURES Measuring angles: Accurately use a protractor to measure and classify angles: – < 90o (acute angles)– Right-angles – >90o (obtuse angles)– Straight angles – >180o but less than 360 o (reflex angles)	Understanding angles and sides – getting to know kinds of angles	Bk 1 No. 21a (pp. 46 – 47) No. 21b (pp. 48 – 49)		
18	CONSTRUCTION OF GEOMETRIC FIGURES Measuring angles: Accurately use a protractor to measure and classify angles: – < 90o (acute angles)– Right-angles – >90o (obtuse angles)– Straight angles – >180o but less than 360 o (reflex angles)	Size of angles in real contexts.	Bk 1 No. 22a (pp. 50 – 51) No. 22b (pp. 52 – 53)		
19	CONSTRUCTION OF GEOMETRIC FIGURES Accurately construct geometric figures appropriately using a compass, ruler and protractor, including: – angles, to one degree of accuracy – circles – parallel lines – perpendicular lines Describe and name parts of a circle	Constructing angles – draw and label. Parallel and perpendicular lines. Construct perpendicular lines	Bk 1 No. 23 (pp. 54 – 55) No. 24 (pp. 56 – 57)		
20	Assessment Activity: Consolidate and revise – assess learners understanding, remediate for understanding – use SM Activities				
Reflection					

DID ALL THE LEARNERS LEARN THE WEEKLY SKILLS? ARE THEY ABLE TO: • Measure angles using a protractor • Identify angles according to its size • Identify angles in real contexts • Construct perpendicular lines • Construct parallel lines	What will you change next time? Why? **Struggling Learners Names**: **HOD:** **Date:**

23 – 27 AUGUST 2021

Week 5					
Day	**ATP Content**	**concepts, skills**	**DBE workbook**	**Resources**	**Date**
21	CONSTRUCTION OF GEOMETRIC FIGURES Accurately construct geometric figures appropriately using a compass, ruler and protractor, including: – angles, to one degree of accuracy – circles – parallel lines – perpendicular lines Describe and name parts of a circle	Construct angles and a triangle	Bk 1 No. 25a (pp. 58 – 59) No. 25b (pp. 60 – 61)		
22	CONSTRUCTION OF GEOMETRIC FIGURES Accurately construct geometric figures appropriately using a compass, ruler and protractor, including: – angles, to one degree of accuracy – circles – parallel lines – perpendicular lines Describe and name parts of a circle	Circles: label the terminology of circles.	Bk 1 No. 26 (pp. 62)		
23	CONSTRUCTION OF GEOMETRIC FIGURES Accurately construct geometric figures appropriately using a compass, ruler and protractor, including: – angles, to one degree of accuracy – circles – parallel lines – perpendicular lines Describe and name parts of a circle	Draw circles using compasses	Bk 1 No. 26 (pp. 63)		
24	EOMETRY OF STRAIGHT LINES Define: Line segment, Ray, Straight line Parallel lines, Perpendicular lines	Triangles: measure sides to identify types of triangles. Triangles: measure and construct	Bk 1 No. 27a (pp. 64 – 65) No. 27b (pp. 66 – 67)		
25	Complete and consolidate the week's assessment and work. **FORMAL ASSESSMENT - PROJECT**				
Reflection					

DID ALL THE LEARNERS LEARN THE WEEKLY SKILLS? ARE THEY ABLE TO: • Construct angles • Construct triangles • Construct circles • Label parts of a circle • Construct and classify triangles • Measure and classify triangles	What will you change next time? Why? **Struggling Learner names:**
	HOD: **Date:**

30 AUGUST to 3 SEPTEMBER 2021

Week 6					
Less	**ATP Content**	**concepts, skills**	**DBE workbook**	**Resources**	**Date**
26	GEOMETRY OF 2D SHAPES: Classifying 2D shapes: Describe, sort, name and compare triangles according to their sides and angles, focussing on: – equilateral triangles– isosceles triangles – right-angled triangles	Identify, name and label parts 2D shapes	Bk 1 No. 10a (pp. xxx – xxxi)		
27	GEOMETRY OF 2D SHAPES Describe, sort, name and compare quadrilaterals in terms of: – length of sides – parallel and perpendicular sides – size of angles (right angles or not)	name angles, types and draw 2D shapes	Bk 1 No. 10b (pp. xxxii – xxxiii)		
28	GEOMETRY OF 2D SHAPES: Classifying 2D shapes: Describe, sort, name and compare triangles according to their sides and angles, focussing on: – equilateral triangles– isosceles triangles – right-angled triangles	Name the different polygons in real contexts	Bk 1 No. 28a (pp. 68 – 69)		
29	GEOMETRY OF 2D SHAPES Solving problems Solve simple geometric problems involving unknown sides and angles in triangles and quadrilaterals, using known properties	Use tangram to make different shapes	Bk 1 No. 28b (pp. 70) No. 28b (pp. 71)	Use cut out 1	
30	Assessment activity: Catch-up on work not completed; remediation of concepts which some learners have not fully understood and enrichment cards for the learners who are on track				
Reflection					

DID ALL THE LEARNERS LEARN THE WEEKLY SKILLS? ARE THEY ABLE TO: • Identify 2-D shapes • Identify 3-D shapes • Construct nets of 3-D shapes • Identify polygons in real context • Use tangrams to make different shapes	What will you change next time? Why? **Struggling Learners Names:**
	HOD: **Date:**

6 – 10 SEPTEMBER 2021

Week 7					
Day	**ATP Content**	**concepts, skills**	**DBE workbook**	**Resources**	**Date**
31	GEOMETRY OF 2D SHAPES Similar and congruent 2D shapes: Recognise and describe similar and congruent figures by comparing:– shape– size	Congruent and similar shapes	Bk 1 No. 29 (pp. 72) No. 29 (pp. 73)		
32	TRANSFORMATION GEOMETRY Transformations: Recognize, describe and perform translations, reflections and rotations with geometric figures and shapes on squared paper Identify and draw lines of symmetry in geometric figures	Transformations: meaning of transformation and plotting coordinates	Bk 1 No. 11a (pp. xxxiv – xxxv)		
33	TRANSFORMATION GEOMETRY Transformations: Recognize, describe and perform translations, reflections and rotations with geometric figures and shapes on squared paper Identify and draw lines of symmetry in geometric figures	Reflect, rotate figures	Bk 1 No. 11b (pp. xxxvi – xxxvii)		
34	TRANSFORMATION GEOMETRY Transformations: Recognize, describe and perform translations, reflections and rotations with geometric figures and shapes on squared paper Identify and draw lines of symmetry in geometric figures	Explaining the different transformations from given figures	Bk 2 No. 86 (pp. 60 – 61)		
35	Assessment Activity: Consolidate and revise – assess learners fraction understanding, remediate for understanding – use SM Activities				
Reflection					

DID ALL THE LEARNERS LEARN THE WEEKLY SKILLS? ARE THEY ABLE TO: • Identify congruent shapes • Identify similar shapes • Transformations using coordinates • Reflect figures • Rotate figures • Explain different transformations in figures	What will you change next time? Why? **Struggling Learners Names:**
	HOD: **Date:**

13 – 17 SEPTEMBER 2021

Week 8					
Day	**ATP content**	**concepts, skills**	**DBE workbook**	**Resources**	**Date**
36	TRANSFORMATION GEOMETRY Transformations: Recognize, describe and perform translations, reflections and rotations with geometric figures and shapes on squared paper Identify and draw lines of symmetry in geometric figures	Rotation in nature and machines, and diagrams. Translation in grids	Bk 2 No. 87 (pp. 52 – 53) No. 88 (pp. 54 – 55)		
37	TRANSFORMATION GEOMETRY Transformations: Recognize, describe and perform translations, reflections and rotations with geometric figures and shapes on squared paper Identify and draw lines of symmetry in geometric figures	Reflection and reflective symmetry	Bk 2 No. 89 (pp. 56 – 57)		
38	TRANSFORMATION GEOMETRY Transformations: Recognize, describe and perform translations, reflections and rotations with geometric figures and shapes on squared paper Identify and draw lines of symmetry in geometric figures	Describing reflections, rotations and translations from given figures	Bk 2 No 90. (pp. 58 – 59)		
39	TRANSFORMATION GEOMETRY Transformations: Recognize, describe and perform translations, reflections and rotations with geometric figures and shapes on squared paper Identify and draw lines of symmetry in geometric figures	Investigations in transformation, testing conjectures	Bk 2 No. 91 (pp. 60 – 61)		
40	Complete and consolidate the week's assessment and work				
Reflection					

DID ALL THE LEARNERS LEARN THE WEEKLY SKILLS? ARE THEY ABLE TO: • Identify rotations in real life • Translate figures using grids • Identify Reflection symmetry • Identify reflective symmetry • Describe reflections, rotations and translations • Testing conjectures in transformation	What will you change next time? Why? Struggling Learners Names:
	HOD: **Date:**

20 -23 SEPTEMBER 2021- 4-DAY WEEK THEREFORE NO ASSESSMENT

Week 9					
Day	**ATP content**	**concepts, skills**	**DBE workbook**	**Resources**	**Date**
41	TRANSFORMATION GEOMETRY Enlargements and reductions: Draw enlargements and reductions of geometric figures on squared paper and compare them in terms of shape and size	Enlargement and reduction- using diagrams and answering questions	Bk 2 No. 92 (pp. 62 -63)		
42	TRANSFORMATION GEOMETRY Enlargements and reductions: Draw enlargements and reductions of geometric figures on squared paper and compare them in terms of shape and size	Calculating scale factors from given figures	Bk 2 No. 93 (pp. 64) No. 93 (pp. 65)		
43	TRANSFORMATION GEOMETRY Enlargements and reductions: Draw enlargements and reductions of geometric figures on squared paper and compare them in terms of shape and size	Applying knowledge of enlargements and reductions in real contexts	Bk 2 No. 94 (pp. 66)		
44	TRANSFORMATION GEOMETRY Enlargements and reductions: Draw enlargements and reductions of geometric figures on squared paper and compare them in terms of shape and size	Applying knowledge of enlargements and reductions in real contexts	Bk 2 No. 94 (pp. 67)		
45	Assessment Activity: Consolidate and revise – assess learners understanding, remediate for understanding – use SM Activities				

Reflection	
DID ALL THE LEARNERS LEARN THE WEEKLY SKILLS? ARE THEY ABLE TO: • Classify enlarging figures • Classify reducing figures • Apply scale factors to enlargements • Apply scale factor to reductions	What will you change next time? Why?
	HOD: **Date:**

27 SEPTEMBER – 1 OCTOBER 2021

Week 10					
Day	**ATP content**	**concepts, skills**	**DBE workbook**	**Resources**	**Date**
46	Teacher selects content	Revision and consolidation (Skills mastery activities)			
47		FORMAL ASSESSMENT TASK: TEST – All topics			
48	Teacher selects content	Revision and consolidation (Skills mastery activities)			
49	Teacher selects content	Revision and consolidation (Skills mastery activities)			
50	Complete and consolidate the week's assessment and work				
Reflection					
Identify some skills that need revising during the next term:		What will you change next time? Why? **Struggling Learners Names:**			

ASSESSMENT RATIONALE AND RESOURCES

Assessment Term Plan

The assessment term plan gives an overview of

1) how the formal and informal assessment programme fits into the weekly lesson plans.
2) How the skills mastery assessments fit into the weekly lesson plans

Note:

- There are two FORMAL Assessment tasks: 1) Project and 2) Test
- The Skills mastery assessments – aimed at consolidating, revising and remediating skills already covered this year - are added at the end of the document.

Week	**Informal Assessment (End of week) and Skills Mastery Activities (Tuesdays and Thursdays)**	**Formal Assessment Activities (End of week) – 2 FORMAL ASSESSMENTS: 1) Project 2) Test**
1	Baseline Assessment	Baseline Assessment
2	**Tuesday** Skills mastery Assessment 1 **Thursday** Skills mastery Assessment 2	

3	No Informal Assessment – 4-day week **Tuesday** Skills mastery Assessment 3 **Thursday** Skills mastery Assessment 4	
4	**Tuesday** Skills mastery Assessment 5 **Thursday** Skills mastery Assessment 6	
5	**Tuesday** Skills mastery Assessment 7 **Thursday** Skills mastery Assessment 8	**Formal Assessment 1 - Project**
6	**Tuesday** Skills mastery Assessment 9 **Thursday** Skills mastery Assessment 10	
7	**Tuesday** Skills mastery Assessment 11 **Thursday** Skills mastery Assessment 12	
8	**Tuesday** Skills mastery Assessment 13 **Thursday** Skills mastery Assessment 14	
9	No Assessment – 4-day week **Tuesday** Skills mastery Assessment 15 **Thursday** Skills mastery Assessment 16	
10	**Tuesday** Skills mastery Assessment 17 **Thursday** Skills mastery Assessment 18	**FORMAL ASSESSMENT 2 – Test (All Topics)**

SKILLS MASTERY ASSESSMENTS

Rationale

- A Skills Mastery Assessment (SMA) is one in which there is an iterative revisiting of skills, topics, subjects or themes throughout the year.
- SMA is not simply the repetition of a topic taught. It requires the deepening of it, with each successive encounter building on the previous one.
- SMA is critical in today's educational environment, especially in mathematics, where we must consistently give our learners the opportunity to revisit and practice skills they have already learned aimed at mastery.
- The traditional practice is to incorporate consolidating, revising or reviewing, through homework, morning work, small group instruction, and even after school math classes. Through SMA we are going to continuously review skills and concepts with our students.

- It makes sense that we would continue to assess their understanding on those same skills by changing the context of the question using C-P-A-W (Concrete – Pictorial – Abstract -Worded)
- When we first teach and assess a skill, many of our students have yet to master it. By incorporating a SMA activity into your classroom, you are providing your students with the opportunity to demonstrate their growth and understanding on a regular basis.
- These regular SMAs help you see where your students are always struggling. You can use the results to guide your small group instruction and customize your lessons and activities to meet the needs of your students, not just the covering of curriculum.

Implementation

- In every lesson plan there are 10 minutes set aside for consolidation and revision, meaning one could apply SMA every day for 10 minutes, before teaching a new concept for that day.
- Each SMA is using a five-item design to ensure teachers can complete it in 10 minutes.
- As a minimum, this Planner and Tracker, recommends the use of Tuesdays and Fridays, but teachers could use every day.
- Each Tuesday and Thursday you are encouraged to take 10 minutes and give a SMA to the whole class, or groups. Learners should be able to take about 5 minutes to complete – then the teacher must remediate by addressing errors, misconceptions and misunderstandings.
- Teachers could also use the data from the SMA to help plan small group lessons for the next week.
- Teachers could also pull different students for different skills until the teacher felt confident that the learners were more confident in their responses. Then next week, repeat….new set of SMAs, similar skills being assessed, new data for small group instruction.
- These daily SMAs should be seen as a progress monitoring tool as well. This will prove to be effective in letting teachers know how their most struggling students are progressing.

SKILLS MASTERY SKILLS PER 5 – ITEM ASSESSMENTS

SM Assessment 1	**Integer inequalities with absolute values** **Operations with integers** **Integer addition and subtraction rules** **Add and subtract integers using counters** **Add and subtract integers** **Complete addition and subtraction sentences with integers**
SM Assessment 2	**BODMAS** **Determine if the following expressions are equivalent to each other** **Division and remainder**
SM Assessment 3	**State if the following is true or false: Even, odd numbers** **Definitions of addition, subtraction, multiplication and division** **Organize the operations** **Problem solving**
SM Assessment 4	**Replace shapes with numbers** **Substitute a number in the place of X** **Which x satisfies an equation?** **Write an equation from words**

	Model and solve equations using algebra tiles
SM Assessment 5	**Order of operations** **Factors of 20** **Integers: Write an integer to represent a description** **Order integers from smallest to biggest** **Fill in >,< and =**
SM Assessment 6	**Fraction problems** **Ratio** **Shapes: Similar or congruent** **Adding fractions with the same denominator**
SM Assessment 7	**Complete the addition or subtraction sentence** **Choose numbers with a particular sum** **Subtraction patterns over increasing place values** **Find the next shape in a repeating pattern** **Find start and end times** **Fill in bigger >, smaller < or equal =**
SM Assessment 8	**Identify reflections, rotations and translations** **Symmetry** **Identify reflections, rotations and translations** **Similar and congruent figures** **Congruence statements and corresponding parts** **Pie Graph**
SM Assessment 9	**Volume** **Surface area** **Capacity** **Construct the midpoint or perpendicular bisector of a segment** **Construct an angle bisector** **Construct a congruent angle** **Construct a perpendicular line**
SM Assessment 10	**Reflections: graph the image** **Reflections: find the coordinates** **Looking at objects: Identify triangular prisms** **Vertices** **Word Problems** **Interpret Line Graph**
SM Assessment 11	**Fill in missing input values on a flow diagram** **Evaluate linear expressions** **Geometric sequences** **Adding/Subtracting Fractions**
SM Assessment 12	**Write a two-variable equation** **Identify the graph of an equation** **Graph a two-variable equation** **Interpret a graph: word problems**
SM Assessment 13	**Find the next shape in a repeating pattern** **Complete a repeating pattern** **Make a repeating pattern** **Find the next row in a growing pattern of shapes** **Identify arithmetic and geometric sequences**
SM Assessment 14	**Solve equations with variable exponents** **Exponents with negative bases** **Exponents with decimal and fractional bases** **Evaluate numerical expressions involving exponents**

SM Assessment 15	**Record data with tally charts, picture graphs, tables** **Graph integers on horizontal and vertical number lines** **Identify reflections, rotations and translations**
SM Assessment 16	**Surface area of prisms and cylinders** **Volume and surface area of similar solids** **Nets of three-dimensional figures** **Front, side and top view**
SM Assessment 17	**Perimeter** **Rectangles: relationship between perimeter and area** **Area of rectangles and parallelograms** **Area of triangles and trapeziums** **Area between two shapes** **Simplify**
SM Assessment 18	**Perimeter and Area** **Length and Width of a 2D shape** **Perimeter**
SM Assessment 19	**Division/Multiplication** **Understanding ratios** **Identify equivalent ratios** **Write an equivalent ratio**
SM Assessment 20	**Place values** **Convert between place values** **Compare numbers up to millions** **Add and subtract whole numbers up to millions** **Multiplication Diagrams**

SKILLS MASTERY EXEMPLARS

SKILLS MASTERY ASSESSMENT 1

Number Assessment

1. **Quick recall. How fast can you answer the following:**

   40 x 50 = ____ 400 x 90 = ____ 5 000 x 6 = ____ 70 x 60 = ____ 900 x 60 = ____

2. **What is the value of ✗ ?**

   a. 8 000 + 3 000 = ✗ + 8 000 ✗ = ____

   b. 4 000 × ✗ = 9 00 × 4 000 ✗ = ____

3. (a + 40) × 5 = (a × 5) + (40 × 5)

   = ____

   = ____

4. **3. Calculate the following:**

   a = 500 **b = 300** **c = 20**

   a. a + b = b + a

   = ____

   = ____

   = ____

5. **What is the value of**  **?**

   a.  + 2 000 = 2 000 + 8 000  = ____

SM Assessment 2

Number Assessment

1. a. 5 x (12 + 18) = (5 x 12) + (5 x 18)

   5 x (30) = 60 + ____

   150 = ____

2. **Determine if the following expressions are equivalent to each other. Insert an = if they are the same and ≠ if they are not.**

   a. (2 + 5) x 3 ____ (2 x 3) + (5 x 3)

3. **Complete the following:**

   a. 100 x (30 + 50) = (100 x 30) + (100 x 50)

   b. 120 x (80 + 20) = ____

4. **Work these out in your head:**

   a. 18 plus 28 ____ b. 8 multiplied by 9 ____

   c. The sum of 26 and 32 ____ d. Divide 890 by 10 ____

5. What is the remainder if 87 is divided by 5? ____

SM Assessment 3

Number Assessment

1.

Say if the following is true or false:

a. All whole numbers that end in 0 or 5 are divisible by 10. _____

b. All even numbers are divisible by 2. _____

c. All odd numbers will have a remainder of 1 when divided by 2. _____

2.

Match column A with column B.

A	B
a. Addition	i. Share
b. Subtraction	ii. Product
c. Multiplication	iii. Increase by
d. Division	iv. Decrease by

3. **Identify what the person did wrong here...**

a. 489 + 375
= 400 + 300 + 80 + 70 + 9 + 5
= 700 + 150 + 14
= 754.

b. 45 x 36
= (40 + 5) x (30 + 6)
= (40 x 30) + (5 x 6)
= 1 200 + 30
= 1 530

4. **A greengrocer had 410 oranges. He put some of them into 15 boxes containing 12 oranges each. He then put the rest into 15 boxes, each containing the same number of oranges.**

a. How many oranges were in each of the 15 boxes? _____

5. **Organize the operations so that each equation is correct. Use each symbol only once.**

- ÷ x ( )

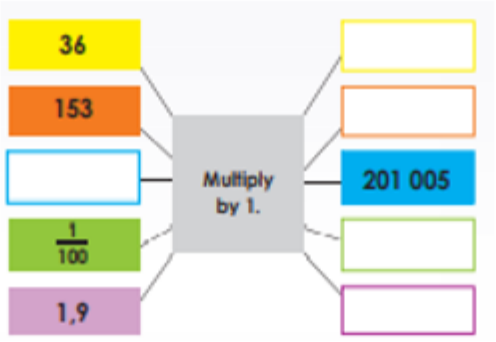
a. 18 ☐ 6 ☐ 3 ☐ 5 = 30

b. 24 ☐ 3 ☐ 9 ☐ 2 = 1

SM ASSESSMENT 4

Number Assessment

1.



2. **. Replace:**

■ = 5 ▬ = 25 ⬟ = $\frac{1}{4}$

⬢ = 0,5 ● = 500 000

a. ● - ● = 0 ____

b. ■ - ■ = 0 ____

c. ⬢ - ⬢ = 0 ____

d. ⬟ - ⬟ = 0 ____

e. ▬ - ▬ = 0 ____

3. **What is the value of ✗ :**

a. ✗ + 19 = 19 + 5 ✗ = ____

b. 8 × 25 = ✗ × 8 ✗ = ____

4. **If, a = 10, b = 200, and c = 3 000, then complete and calculate the sums.**

a. $a + b = b + a$ ____

b. $a \times b = b \times a$ ____

5. **Add the following.**

a. $\frac{3}{6} + \frac{2}{6} =$ b. $\frac{3}{10} + \frac{5}{10} =$

SM Assessment 5

Number Assessment

1. Calculate:

$4 + 2 \times 4 =$

A 24
B 32
C 12
D 10

2. Choose the factors of 20 from the following:

A 1; 2; 4; 5; 10; 15; 20
B 1; 2; 4; 5; 10; 20
C 1; 2; 4; 8; 10; 20
D 1; 2; 4; 5; 12; 20

3. **Write an integer to represent each description.**

Five units to the left of 4 on a number line. ____

20 below zero. ____

The opposite of 271. ____

4. **Order these integers from smallest to biggest.**

–5, –51, 21, –61, 42, –66, 5, 39, –31, –71, 31, 66

5. **3. Fill in <, > or =**

a. –2 ☐ 2 b. –10 ☐ 10 c. –5 ☐ 0

d. –4 ☐ –3 e. –9 ☐ –6 f. –20 ☐ –16

SM Assessment 6

Number Assessment

1. Complete the following problems

a) $(4^2 - 2^3) \div (3\frac{1}{8} + \frac{7}{8})^2$

2. 32 Grade 7 learners watched rugby. The ratio of the number of boys to that of girls was 5 : 3. How many girls were there?

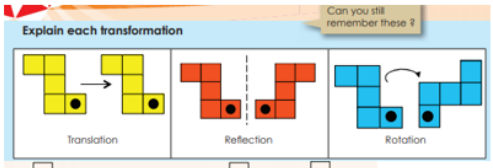
3. Study the following shapes and state whether they are similar or congruent.

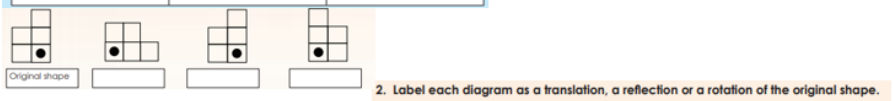
4. $12\frac{4}{12} + 11\frac{5}{12}$

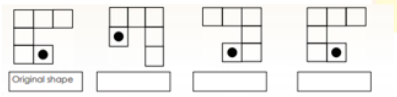
5. $9\frac{4}{5} - 5\frac{2}{7}$

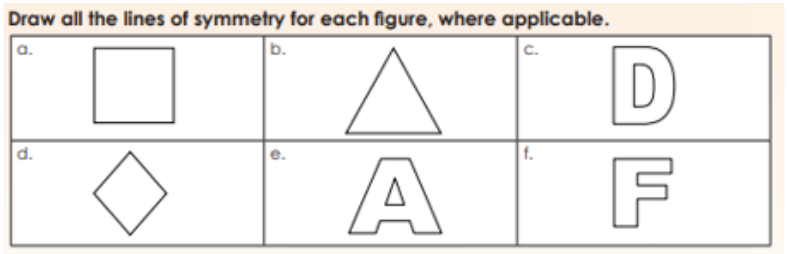
SM Assessment 7

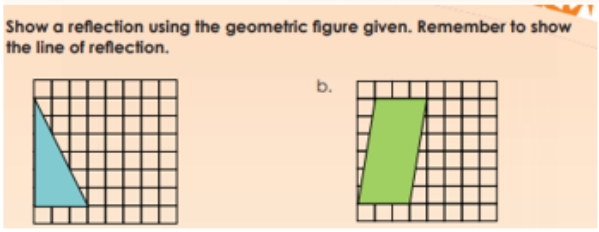
Number Assessment

1. 

2. 

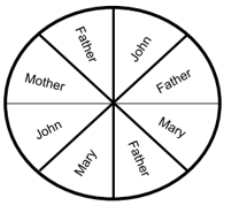
3. 

4. 

5. 

SM Assessment 8

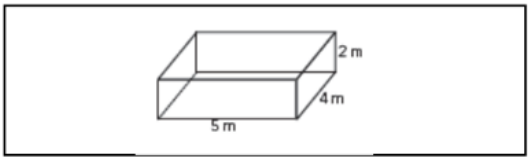
A mother bought a round cake for R80,00. She divided it for the family as follows:



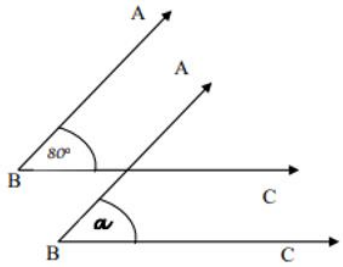
Number	Assessment
1.	How much did Father's cake pieces cost?
2.	What percentage of the cake pieces did Mary and Mother eat?
3.	What is the relationship of the female's pieces to the men's pieces?
4.	A fair six-sided die is rolled. What is the probability of getting a six when a fair-sided die is rolled?
5.	A cube has a height of 30 mm. Calculate its volume and write your answer in cubic cm.

SM Assessment 9

A painter must paint the sides, top and bottom of this solid object. The base is a rectangle with length 5 m and breadth 4 m. The height of the sides is 2 m.

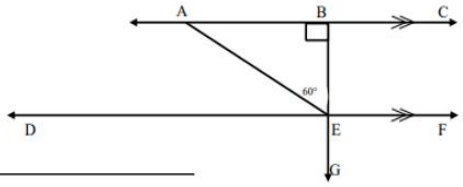


Number	Assessment
1.	Determine the total surface area he needs to paint.
2.	How many litres of paint does he need, if 1 ℓ covers 6 m^2
3.	Patrick slides his A$\hat{B}$C as shown in the diagram. Write down the value of a.



4. Identify perpendicular lines: _____

Consider the following diagram and answer the questions that follow.

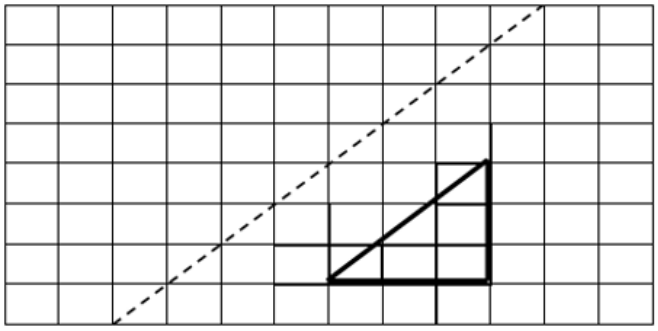


5. What is the size of $C\hat{B}E$? _____

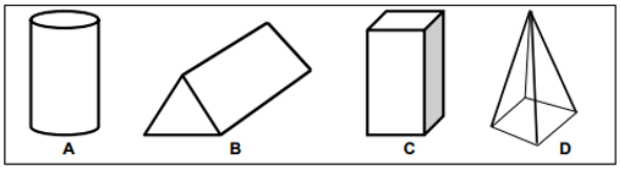
SM Assessment 10

Number Assessment

1. Reflect the triangle on the grid paper below over the mirror line.



2. Use the objects below to answer the following questions.



Which object is a triangular prism? _____

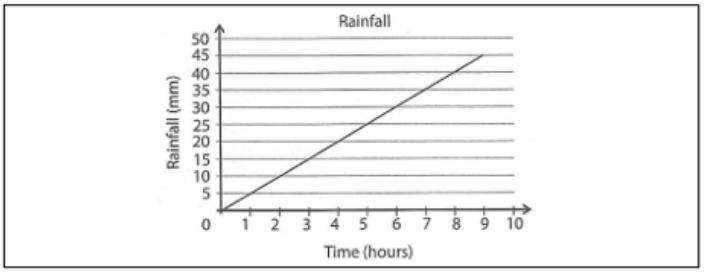
Give the object that has eight vertices. _____

3. Sipho works 8 hours and earns R920 per day. How much does he earn per hour?

_____

_____

4. The graph below shows the rainfall in a particular area.



How much rain has fallen after 5 hours?

_____

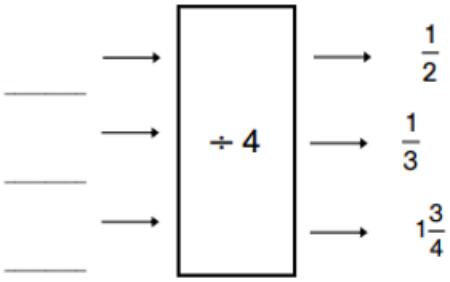
5. Predict what the rainfall would be after 10 hours. Motivate your answer.

_____

SM ASSESSMENT 11

Number Assessment

1. Fill in the missing input values in the flow diagram.



2. $4x = 10$ .....

3. Rule: .....

x	1	2	3	4	5	8	20
y	1,2	2,4	3,6				

4. Shoes are marked down from R600 to R324.
What percentage is the discount?

5. $\frac{2}{4} + \square = \frac{4}{4}$

$\square + \frac{3}{6} = 1$

$\frac{2}{4} + \square = \frac{15}{24}$

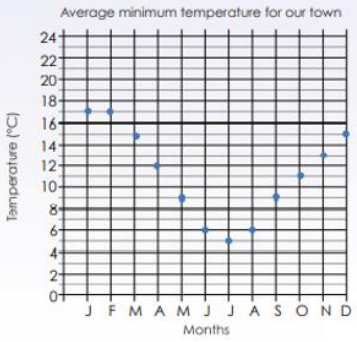
SM Assessment 12

Number Assessment

1. What is the heading of the graph?

2. What is the scale on the x–axis?

Answer the questions on the graph below.



3. **Example:** If $y = x^2 + 2$, calculate y when $x = 4$

$y = 4^2 + 2$

$y = 16 + 2$

$y = 18$

a. $y = x^2 + 2$; $x = 4$

b. $y = b^2 + 10$; $b = 1$

4. **Example:** $3x - 2 = 10$

$3x - 2 + 2 = 10 + 2$

$\frac{3x}{3} = \frac{12}{3}$

$x = 4$

a. $7x - 2 = 12$

b. $4x - 4 = 12$

5. **Example: 4, 8, 12, 16, 20, ...** **First term: 4(1) + 1** **The n^{th} term is 4 (n).**

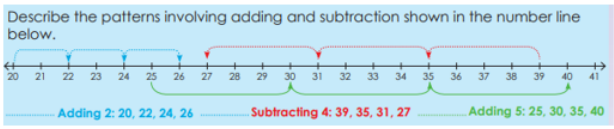
Position in sequence	1	2	3	4	5	n
Value of term	4	8	12	16	20	

a. 6; 11; 16; 21; ...

Position in sequence	1	2	3	4	5	n
Value of term						

SM Assessment 13

Describe the patterns involving adding and subtraction shown in the number line below.



Number Assessment

1. a.

2. **Example:** 27, 36, 45, 54, 63
Rule: Adding 9 or counting on in 9s

–6, –4, –2, 0, 2

3. **1. Describe the pattern.**

Example: 8, 32, 128, 512

2 x 4 = 8
8 x 4 = 32
32 x 4 = 128
128 x 4= 512

Multiply the previous term by 4

a. 2, 8, 32, 128, 512

4. **2. What will the term be?**

Example: 5, 10, 15, 20. Position of the term × 5.

Position in the sequence	1	2	3	4		15
Value of term	5	10	15	20		75

a.

Position in the sequence	1	2	3	4		20
Value of term	10	20	30	40		

5. **1. Create the first three terms of the following patterns with matchsticks and then draw the patterns in your book. Complete the tables.**

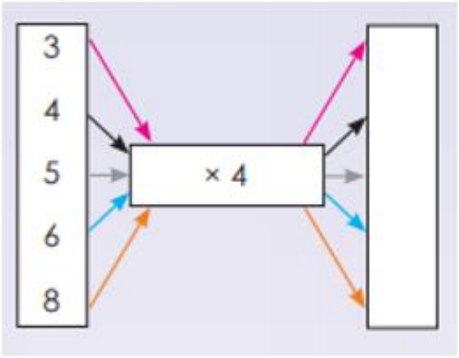
a. Triangular pattern

Position of a triangle in pattern	1	2	3	4	5	6	7
Number of matches							

SM ASSESSMENT 14

Number Assessment

1.



2.

Example: $3x - 2 = 10$

$3x - 2 + 2 = 10 + 2$

$\frac{3x}{3} = \frac{12}{3}$

$x = 4$

$5x - 7 = 13$

3. **How fast can you solve these…**

Two times y equals sixteen.

Five times c equals sixty-five.

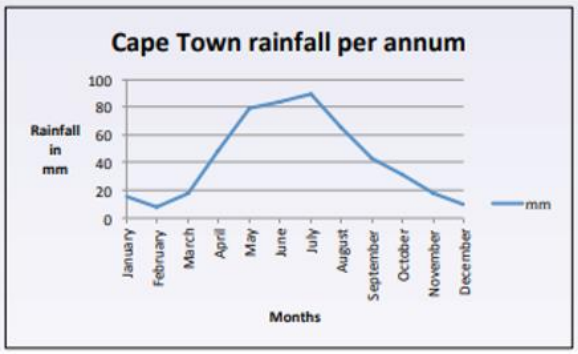
Eight times x equals sixteen.

4.

Write an equation and then solve it for each of these:

What is the perimeter of a rectangular swimming pool if the breadth is 12 m and the length is 16 m?

5.



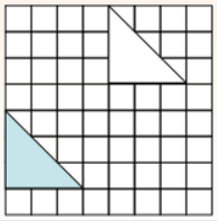
b. What does the x–axis show us?

SM ASSESSMENT 15

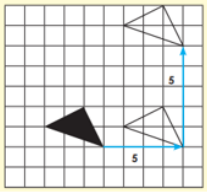
Number Assessment

1. **Explain each translation in your own words. The original shape is shaded.**

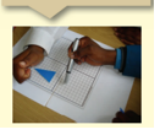
a.



Example:

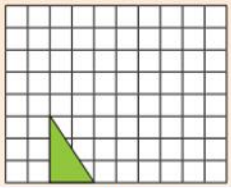


Each point of the triangle is translated four squares to the right and five squares up.

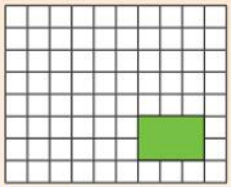


2. **2. Show the following translations on a grid board.**

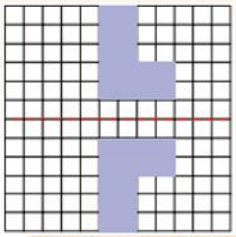
a. Each point of the triangle is translated four squares to the right and five squares up.



b. Each point of the rectangle is translated three squares to the left and three squares up.



3. **Describe each diagram. Make use of words such as mirror, shape, original shape, line of reflection and vertical.**



b.

4. **Which geometric solid can be made with these geometric figures?**

b.

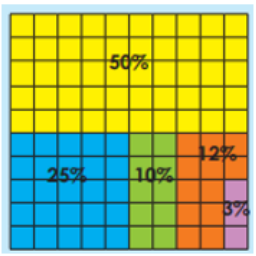
c.

5. a.

- ___ faces
- ___ edges
- ___ vertices

SM ASSESSMENT 16

SM Assessment 16



Number Assessment

1. **What fraction of the square is blue?**

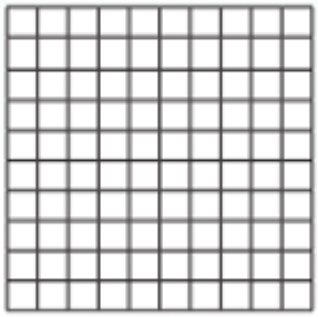
What percentage of the square is blue?

a.

i. _____

ii. _____

2. **Colour in 99 per cent.**
Write your answer as a fraction.



_____

3. 100 % means all of a whole.

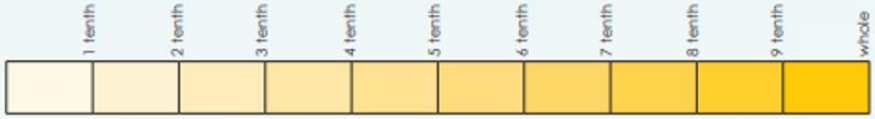
50 % means _____ of a whole.

4. **What percentage of the circle is red?**

a. _____

b. _____

5. **Look at the diagram and answer the questions below.**



a. 1 tenth = _____ % b. 4 tenths = _____ % c. 9 tenths = _____ %

SM Assessment 17

Number Assessment

1.

Favourite pet	Frequency
Dog	9
Cat	4
Guinea Pig	18
Snake	0
Goldfish	5

Why do you think Guinea Pigs are so popular?

Why don't people seem keen on snakes?

2.

Column A	Column B
2.1 Isosceles triangle	a) All interior angles = 90°
2.2 Square	b) Three equal sides
2.3 Parallelogram	c) One pair of opposite sides parallel
2.4 Scalene triangle	d) Opposite sides are parallel
2.5 Trapezium	e) All angles = 60°
	f) Has a side called a hypotenuse
	g) Two equal sides
	h) Three unequal sides

3. **State whether the following is true or false.**

Opposite sides of a kite are equal.

4. Negative ÷ Negative = Positive.

5. Simplify the following. Show ALL your working out.

a) (12 + 7) – (2 – 23)

b) 8 x 5 ÷ (4 – 14)

SM Assessment 18

Number Assessment

1. **Solve the following problems.**

a. My aunt's food budget is R 3 500. She saves $\frac{1}{5}$ of her budget. How much money did she save?

2. **Identify and count the:**

i. vertices ii. edges iii. faces

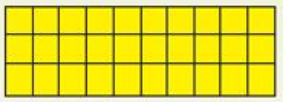
i. _____
ii. _____
iii. _____

i. _____
ii. _____
iii. _____

i. _____
ii. _____
iii. _____

3. **Write a sum to work out the square units.**

a.



_____

b.

_____

4. **Calculate the perimeter and area of the following rectangles.**

a. 3 cm, 2 cm

b. 1 cm, 3 cm

Perimeter	Area	Perimeter	Area

5. **Complete the table.**

Rectangle	Length	Width	Perimeter in:
30 mm, 20 mm			mm: _____ cm: _____ m: _____

SM Assessment 19

Number Assessment

1.

6 ÷ 2	28 ÷ 7
12 ÷ 2	40 ÷ 4
21 ÷ 3	6 ÷ 3
72 ÷ 8	45 ÷ 9
20 ÷ 5	56 ÷ 8

2. Colour in the multiplication sums and answers that match. What do you notice?

7 x 30	70 x 30	2 x 50	20 x 50	1 x 80	10 x 80	6 x 90	60 x 90
5 400	100	800	210	80	2 100	1 000	540

3. A class raised R4 286 for a maths dictionary for each child. There are 41 children in the class. A dictionary cost R120. How much money do they still need to raise?

4. The ratio of boys to girls in a school is 1 200: 960.
   i) What fraction of the children are girls?
   ii) What fraction are boys?

5. - ÷ x ( )

   24 ☐ 3 ☐ 9 ☐ 2 = 1

SM ASSESSMENT 20

Number Assessment

1. **a. Another word for addition is:**
   i. subtraction
   ii. product
   iii. plus

2. What is the remainder if 87 is divided by 5? ____
   What is 30 less than 5 time a thousand? ____

3. (8 x 1) + 2 ☐ (8 + 1) x 2

   5 + 4 x 3 ☐ 5 + (4 x 3)

4. (740 + 10) × 20 = 740 × 🍎 + 10 × 🍎 🍎 = ____

5. **Calculate the following:** $a = 1\,000$

   a. $a + 50\,000 = 50\,000 + a$

   = ____