PLANNER & TRACKER FOR RECOVERY ANNUAL TEACHING PLAN (ATP)

MATHEMATICS

GRADE 5 TERM 3

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

2021

basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NATIONAL
EDUCATION
COLLABORATION
TRUST

Read to Lead
A Reading Nation is a Leading Nation

NDP 2030

CONTENTS

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 5.
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 **six hours** of Mathematics per week in Grade 5.
- 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 over an hour per day to complete.

- 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 six 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 for you to catch up on work not done in the previous five 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 6 hours allocated for Mathematics per week, the following is a suggested plan for daily lessons.

WEEK: 6 hours	
Consolidation of Concepts – skills mastery and other	10 min
New Concept – class activity	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	5 hrs.	6 hrs.	6 hrs.	6 hrs.	5 hrs.	6 hrs.	6 hrs.		6 hrs.	6 hrs	6 hrs.	5 hrs.
Hours per topic	18 hrs.			6 hrs.		9 hrs	3 hrs		3 hrs	9 hrs	6 hrs.	5 hrs.
Topics, concepts and skills	**COMMON FRACTIONS:** **Describing and ordering fractions:** • Count forwards and backwards in fractions • Compare and order common fractions to at least twelfths **Calculations with fractions:** • Addition and subtraction of common fractions with same denominator • Addition and subtraction of mixed numbers fractions of whole numbers • Fractions of whole which result in whole numbers • Recognise, describe and use the equivalence of division and fractions **Solving problems** • Solve problems in contexts involving common fractions, including grouping and sharing **Equivalent forms:** • Recognize and use equivalent forms of common fractions with denominators which are multiples of each other			**LENGTH:** **Practical measuring** • Estimate and practically measure 2-D shapes and 3-D objects using measuring instruments such as: – rulers – metre sticks – tape measures – trundle wheels • Record, compare and order lengths of shapes and objects in millimetres (mm), centimetres (cm), metres (m), kilometres (km) **Calculations and problem-solving** • Solve problems in contexts involving length • Convert between any of the following units. – millimetres (mm), – centimetres (cm), – metres (m) and – kilometres (km) • Conversions limited to whole numbers and common fractions		**PROPERTIES OF 2D SHAPES:** **Range of shapes** • Recognize, visualize and name 2-D shapes in the environment and geometric setting, focusing on: • regular and irregular polygons - triangles, squares, rectangles, other quadrilaterals, • pentagons, hexagons, heptagons • circles • similarities and differences between squares and rectangles **Characteristics of shapes** • Describe, sort and compare 2-D shapes in terms of: – straight and curved sides – number of sides – lengths of sides – angles in shapes, limited to: ✓ right angles ✓ angles smaller than right angles ✓ angles greater than right angles **Further activities** • Draw 2-D shapes on grid paper **Angles** • Recognize and describe angles in 2-D shapes: – right angles – angles smaller than right angles – angles greater than right angles	**SYMMETRY:** • Recognize, draw and describe line(s) of symmetry in 2-D shapes		**TRANSFORMATIONS:** **Use transformations to make composite shapes** • Make composite 2-D shapes including shapes with line symmetry by tracing and moving a 2-D shape in one or more of the following ways: – by rotation – by translation – by reflection **Use transformations to make tessellations** • Make tessellated patterns including some patterns with line symmetry by tracing and moving 2-D in one or more of the following ways: – by rotation – by translation – by reflection **Describe patterns** • Refer to lines, 2-D shapes, 3-D objects, lines of symmetry, rotations, reflections and translations when describing patterns.	**PROPERTIES OF 3-D OBJECTS:** **Range of objects** • Recognize, visualize and name 3-D objects in the • environment and geometric settings, focusing on: – rectangular prisms and other prisms – cubes – cylinders – cones – pyramids – similarities and differences between cubes and rectangular prisms **Characteristics of objects** • Describe, sort and compare 3-D objects in terms of – shape of faces – number of faces – flat and curved surfaces **Further activities** • Make 3-D models using cut out polygons • Cut open boxes to trace and describe their nets	**REVISION**	**FORMAL ASSESSMENT TASKS** **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

<u>BASELINE TERM 3</u>: 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 diagnostics for their purposes.

<u>WHEN</u>: 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.

<u>NUMBER OF ITEMS</u>: Grade 5 = 15 - 20 items – depending on your context and ability groups

<u>ITEM BANK</u>: Items can also be drawn from previous:
  1) BASELINE/READINESS assessment, 2) Assessment Resources in this TRACKER or 3) the DBE Item Bank and 4) Text books

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	COMMON FRACTIONS: Describing and ordering fractions: Count forwards and backwards in fractions Compare and order common fractions to at least twelfths	Identifying fractions of a whole – express a fraction as a division sum. Comparing and ordering	Bk 1 No. R8 (pp. xxviii) No. R8 (pp. xxix) No. R9 (pp. xxx-xxxi)	Can use counters and beans	
4	COMMON FRACTIONS: Describing and ordering fractions: Count forwards and backwards in fractions Compare and order common fractions to at least twelfths	Identify fractions as parts of a whole. Compare fractions with different denominators Describe and order fractions using the number line	No. 34 pp. 104 & 105) Bk 2 No.65 (pp. 2 - 3)	Play fraction dominoes	
5	COMMON FRACTIONS Equivalent forms: Recognize and use equivalent forms of common fractions with denominators which are multiples of each other	Compare Equivalent fractions using fraction wall. Using fractions to covert litres to ml.	Bk 1 No. 35 (pp. 106 - 107) Bk 2 No. 66 (pp. 4 – 5)	Use fraction wall or mat	
6	COMMON FRACTIONS: Solving problems Solve problems in contexts involving common fractions, including grouping and sharing	Solving word problems involving grouping and sharing	No. 36 (pp. 108 & 109)		

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: • Identify fractions as parts of a whole • Identify fraction as a division sum • Compare fractions • Order fractions • Compare fractions for equivalence • Grouping and sharing in fractions	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
7	COMMON FRACTIONS: Describing and ordering fractions: Count forwards and backwards in fractions Compare and order common fractions to at least twelfths	Describe fractional parts focus division sums. Use fraction strips to describe division. Ordering fractions from halves to twelfths	Bk 1 No 37 (pp. 110- 111) No. 38 (pp. 112 - 113)	Do the fraction hunt activity	
8	COMMON FRACTIONS Calculations with fractions: Addition and subtraction of common fractions with same denominator.	Addition and subtraction of fractions: same denominator	Bk 1 No.39 (pp. 114 – 115)	Use Fraction dominoes	
9	COMMON FRACTIONS Calculations with fractions: Recognise, describe and use the equivalence of division and fractions	Equivalent fractions – writing word problem for fraction. Equivalent fractions using geometric shapes	Bk 2 No.67 (6 – 7) No 68 (8 -9)		
10	COMMON FRACTIONS Calculations with fractions: Addition and subtraction of common fractions with same denominator.	Addition and subtraction of fractions with the same denominator – fraction sums	Bk 2 No. 69 (pp. 10 -11)		
11	COMMON FRACTIONS Calculations with fractions: Addition and subtraction of mixed number fractions of whole numbers. Fractions of whole which result in whole numbers.	Addition of mixed numbers	Bk 2 No. 70 (pp. 12 – 13) No. 71 (pp. 14 – 15) No. 117 (pp. 130)		
12	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 the role of denominator in fractions • Describing fractions • Adding fractions with same denominator • Subtracting fractions with same denominator • Write word problems to represent fractions	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
13	COMMON FRACTIONS Calculations with fractions: Fractions of whole which result in whole numbers. COMMON FRACTIONS:	Solving fractions of whole numbers.	Bk 2 No. 72 (pp.16 – 17) No. 73 (pp. 18 – 19)		

		Solving problems: Solve problems in contexts involving common fractions, including grouping and sharing	Solving problems in context.	No. 118 (pp. 133)		
	14	COMMON FRACTIONS: Describing and ordering fractions: Count forwards and backwards in fractions Compare and order common fractions to at least twelfths	Ordering and comparing common fractions Ordering and comparing mixed fractions	Bk 2 No. 112 (pp. 116 – 117)		
	15	COMMON FRACTIONS Calculations with fractions: Addition and subtraction of common fractions with same denominator.	Adding and subtracting common fractions	Bk 2 No. 113a (pp. 118 – 119) No. 113b (120 – 121)		
	16	COMMON FRACTIONS Calculations with fractions: Fractions of whole which result in whole numbers.	Fractions of whole numbers	Bk 2 No. 114a (pp. 122 – 123) No. 114b (pp124 – 125)		
	17	COMMON FRACTIONS: Solving problems: Solve problems in contexts involving common fractions, including grouping and sharing	Solving fraction problems in context	Bk 2 No. 115 (pp.126 – 127) No. 116 (pp 128 – 129)		
	18	Assessment Activity – can be cancelled because of four-day week				

Reflection	
DID ALL THE LEARNERS LEARN THE WEEKLY SKILLS? ARE THEY ABLE TO: • Work with fractions and whole numbers • Ordering common fractions • Comparing common fractions • Adding common fractions • Subtracting common fractions	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
19	LENGTH: Practical measuring: Estimate and practically measure 2-D shapes and 3-D objects using measuring instruments such as: – rulers– metre sticks– tape measures – trundle wheels	Estimate and measure different objects	Bk 1 No. R11 (pp. xxxiv – xxxv)		

20	LENGTH: Practical measuring: Estimate and practically measure 2-D shapes and 3-D objects using measuring instruments such as: – rulers– metre sticks– tape measures – trundle wheels	Measuring using different instruments.	Bk 1 No. 40 (pp 116 -117)		
21	LENGTH Calculations and problem-solving Convert between any of the following units. – (mm),–(cm), -(m) and – (km) Conversions limited to whole numbers and common fractions	Converting between lengths	Bk 1 No. 41a (pp. 118 – 119)		
22	LENGTH Calculations and problem-solving Solve problems in contexts involving lengths. Convert between any of the following units. – (mm),–(cm), -(m) and – (km) Conversions limited to whole numbers and common fractions	Converting between lengths. Solving context problems	Bk 1 No. 41b (pp. 120 – 121)		
23	LENGTH Calculations and problem-solving Solve problems in contexts involving lengths. Convert between any of the following units. – (mm),–(cm), -(m) and – (km) Conversions limited to whole numbers and common fractions	Using fractions and measurement to solve conversion problems – focus on metres	Bk 1 No. 42a (pp. 122-123)		
24	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: • Estimate lengths • Measure lengths • Measure length using different instruments and units • Convert between lengths • Combine fractions and measurement	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

25	LENGTH Calculations and problem-solving Solve problems in contexts involving lengths. Convert between any of the following units. – (mm),–(cm), -(m) and – (km) Conversions limited to whole numbers and common fractions	Using fractions and measurement to solve conversion problems – focus on metres	Bk 1 No. 42b (pp. 124-125)		
26	LENGTH Calculations and problem-solving Solve problems in contexts involving lengths. Convert between any of the following units. – (mm),–(cm), -(m) and – (km) Conversions limited to whole numbers and common fractions	Using fractions and measurement to solve conversion problems – focus on metres	Bk 1 No. 43 (pp. 126-127)		
27	PROPERTIES OF 2D SHAPES: Range of shapes Recognize, visualize and name 2-D shapes in the environment and geometric setting, focusing on	Identify and name shapes.	Bk 1 No. R14 (pp. xi – xii) No. 23a (pp. 70 – 71)		
28	PROPERTIES OF 2D SHAPES: Range of shapes Recognize, visualize and name 2-D shapes in the environment and geometric setting, focusing on regular and irregular polygons - triangles, squares, rectangles, other quadrilaterals, pentagons, hexagons, heptagons circles similarities and differences between squares and rectangles	Drawing and labelling shapes according to sides and angles	Bk 1 No. 23b (pp. 72 – 73)		
29	PROPERTIES OF 2D SHAPES: Characteristics of shapes Describe, sort and compare 2-D shapes in terms of: – straight and curved sides - number of sides – lengths of sides – angles in shapes, limited to: right angles, angles smaller than right angles, angles greater than right angles	Polygons – straight sides, curved sides and closed shapes	Bk 2 No. 88 (pp. 54 – 55)		
30	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: • Calculate fractions of lengths • Identify fractions through measurement • Identify and name polygons • Draw and label shapes according to sides • Draw and label shapes according to angles • Identity polygons with curved sides • Identify polygons with straight sides • Identify open and closed shapes	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**	**Reso urces**	**Date**
31	PROPERTIES OF 2D SHAPES: Characteristics of shapes Describe, sort and compare 2-D shapes in terms of: – straight and curved sides - number of sides – lengths of sides – angles in shapes, limited to: right angles, angles smaller than right angles, angles greater than right angles	identify the characteristics of different shapes	Bk 1 No. 53 (pp 148 – 149)		
32	PROPERTIES OF 2D SHAPES Angles Recognize and describe angles in 2-D shapes:– right angles– angles smaller than right angles– angles greater than right angles	identify and draw Right angles with different orientations	Bk 2 No. 89a (pp. 56 – 57) No. 89b (pp. 58 – 59)		
33	SYMMETRY: Recognize, draw and describe line(s) of symmetry in 2-D shapes	Identify and draw lines of symmetry	Bk 1 No. 58a (pp. 158 – 159)		
34	SYMMETRY: Recognize, draw and describe line(s) of symmetry in 2-D shapes	Identify and describe how many lines of symmetry, or no lines of symmetry	Bk 1 No. 58b (pp. 160 – 161)		
35	TRANSFORMATIONS Use transformations to make tessellations Make tessellated patterns including some patterns with line symmetry by tracing and moving 2-D in one or more of the following ways: – by rotation– by translation– by reflection	Completing the patterns, showing tessellation pattern using different shapes	Bk 2 No 90 (pp. 60) No 90 (pp. 61)		
36	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 polygons • Identify circles and label parts • Draw right angles with different polygons • Draw lines of symmetry • Identify multiple lines of symmetry in shapes • Complete tessellating patterns	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
37	TRANSFORMATIONS: Use transformations to make composite shapes: Make composite 2-D shapes including shapes with line symmetry by tracing and moving a 2-D shape in one or more of the following ways: – by rotation– by translation– by reflection	Identify the difference between Reflection and Reflective symmetry	Bk 2 No. 91 (pp. 62)		
38	TRANSFORMATIONS: Use transformations to make composite shapes: Make composite 2-D shapes including shapes with line symmetry by tracing and moving a 2-D shape in one or more of the following ways: – by rotation– by translation– by reflection	Draw lines of symmetry and draw the reflection of a given shape	Bk 2 No. 91 (pp. 63)		
39	TRANSFORMATIONS: Use transformations to make composite shapes: Make composite 2-D shapes including shapes with line symmetry by tracing and moving a 2-D shape in one or more of the following ways: – by rotation– by translation– by reflection	Apply Rotational symmetry and rotation -	Bk 2 No. 92 (pp. 64)		
40	TRANSFORMATIONS: Use transformations to make composite shapes: Make composite 2-D shapes including shapes with line symmetry by tracing and moving a 2-D shape in one or more of the following ways: – by rotation– by translation– by reflection	Drawing Rotational symmetry and rotation -	Bk 2 No. 92 (pp. 65)		
41	TRANSFORMATIONS: Use transformations to make composite shapes: Make composite 2-D shapes including shapes with line symmetry by tracing and moving a 2-D shape in one or more of the following ways: – by rotation– by translation– by reflection	Translation – complete patterns Translation – on grid paper	Bk 2 No. 93 (pp. 66) No. 93 (pp 67)		

42	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 reflection symmetry • Identify reflective symmetry • Draw reflections of given shapes • Identify rotational symmetry • Identify rotations • Complete translations on grid paper	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**
43	TRANSFORMATIONS Use transformations to make tessellations Make tessellated patterns including some patterns with line symmetry by tracing and moving 2-D in one or more of the following ways: – by rotation– by translation– by reflection Describing patterns:	Describing patterns	Bk 2 No. 135 (pp. 170 – 171)		
44	TRANSFORMATIONS Use transformations to make tessellations Make tessellated patterns including some patterns with line symmetry by tracing and moving 2-D in one or more of the following ways: – by rotation– by translation– by reflection Describing patterns	Translation and tessellations	Bk 2 No. 136 (pp. 172 – 173)		
45	TRANSFORMATIONS Use transformations to make tessellations Make tessellated patterns including some patterns with line symmetry by tracing and moving 2-D in one or more of the following ways: – by rotation– by translation– by reflection Describing patterns	Reflections and tessellations	Bk 2 No. 137 (pp. 174 – 175)		
46	TRANSFORMATIONS Use transformations to make tessellations Make tessellated patterns including some patterns with line symmetry by tracing and moving 2-D in one or more of the following ways: – by rotation– by translation– by reflection Describing patterns	Glide reflection	Bk 2 No. 138 (pp. 176 – 177)		
47	TRANSFORMATIONS Use transformations to make tessellations Make tessellated patterns including some patterns with line symmetry by tracing and moving 2-D in one or more of the following ways: – by rotation– by translation– by reflection	Rotations and tessellations	No. 139 (pp. 178 – 179)		

	Describing patterns					
48	Complete and consolidate the week's assessment and work					

Reflection	
DID ALL THE LEARNERS LEARN THE WEEKLY SKILLS? ARE THEY ABLE TO: • Describe tessellating patterns • Identify translations • Identify tessellations • Identify glide reflections • Identify rotations	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
49	PROPERTIES OF 3-D OBJECTS: Range of objects: Recognize, visualize and name 3-D objects in the environment and geometric settings, focusing on: – rectangular prisms and other prisms – cubes– cylinders– cones– pyramids – similarities and differences between cubes and rectangular prisms	Name and describe objects according to their surfaces	Bk 1 No. 50 (pp. 142 – 143)		
50	PROPERTIES OF 3-D OBJECTS: Range of objects: Recognize, visualize and name 3-D objects in the environment and geometric settings, focusing on: – rectangular prisms and other prisms – cubes– cylinders– cones– pyramids – similarities and differences between cubes and rectangular prisms	Naming and describing rectangular prisms and cubes	Bk 1 No. 51 (pp. 144 – 145)		
51	Characteristics of objects Describe, sort and compare 3-D objects in terms of– shape of faces– number of faces – flat and curved surfaces	Faces of objects – using nets and prisms. Making 3-D objects	Bk 1 No 52 (pp. 146 – 147) No. 54 (pp. 150 – 151)		
52	PROPERTIES OF 3-D OBJECTS: Range of objects: Recognize, visualize and name 3-D objects in the environment and geometric settings, focusing on: – rectangular prisms and other prisms	Identifying and naming 3 -D objects	Bk 2 No. 111a (pp. 110 – 111) Bk 2 Bk 2 No. 111b (pp. 112 – 113)		

53	PROPERTIES OF 3-D OBJECTS: Range of objects: Recognize, visualize and name 3-D objects in the environment and geometric settings, focusing on: – rectangular prisms and other prisms – cubes– cylinders– cones– pyramids – similarities and differences between cubes and rectangular prisms	Identifying and naming 3-D objects	Bk 2 No. 111c (pp. 114 – 115)		
	– cubes– cylinders– cones– pyramids – similarities and differences between cubes and rectangular prisms				
54	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: • Name and label objects with curved surfaces • Name and label objects with flat surfaces • Identify rectangular prisms • Identify cubes • Determine the number of faces from nets • Identify and name 3-D shapes	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**
55	Teacher selects content	Revision and consolidation (Skills mastery activities)			
56		FORMAL ASSESSMENT TASK: TEST – All topics			
57	Teacher selects content	Revision and consolidation (Skills mastery activities)			
58	Teacher selects content	Revision and consolidation (Skills mastery activities)			
59	Teacher selects content	Revision and consolidation (Skills mastery activities)			
60	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 ASSESSMENT

SM Assessment 1	**Drawing repeated shapes** **Growing patterns** **Fill in the missing numbers** Use a rule to complete a number sequence Number sequences: mixed review **Flow Diagram: Addition and Multiplication**
SM Assessment 2	Write a number from words **Write words in numbers** **Number order** **Factors of 14 and 16**
SM Assessment 3	**Activities to consolidate the Bonds and factors.** **Focus: Repeated addition, leading to multiplication.**
SM Assessment 4	**Activities to consolidate the Bonds and factors.** **Rainbow method for factors.**
SM Assessment 5	HCF and LCM: word problems Use Venn diagrams to solve problems **Adding and subtracting fractions with same and different denominator**
SM Assessment 6	**Addition, subtraction, multiplication and division terms** **Compare fractions.** **Order fractions with like numerators or denominators** **Order fractions** **Find smaller or larger fractions**
SM Assessment 7	**Addition patterns over increasing place values** **Choose numbers with a particular sum** **Find intervals in number sentences** **Adding fractions with same denominator**
SM Assessment 8	**LCM** **Multiples of 5** **Units of measurement** **Choose the appropriate metric unit of measure**
SM Assessment 9	**Area and perimeter of figures on grids** **Area of squares and rectangles** **Perimeter** **Area of figures made of unit squares**
SM Assessment 10	**Prime and composite numbers**

	LCM Complete the table by inserting the first 6 multiples of each number Solve a riddle
SM Assessment 11	**Factor trees** **True and False: Prime and Composite numbers**
SM Assessment 12	**Write suitable names for a set of objects** **Write a suitable number sentence using braces** **Compare equivalence viewing objects** **Empty, Singleton, finite or infinite**
SM Assessment 13	**Expanded notation** **Place Value** **Addition by making use of expanded notation method** **Complete the pattern by adding up to three-digits**
SM Assessment 14	**Estimate products** **Properties of multiplication** **Relate multiplication and division**
SM Assessment 15	**Making use of colour to match addition, subtraction and multiplication answers.** **Visual Aid. Interpreting objects** **Ratios and rates** **Write a ratio** **Write a ratio: word problems** **Identify equivalent ratios** **Write an equivalent ratio**
SM Assessment 16	**Identifying fractions shaded in shapes.** **Identifying fractions on a number line** **Fraction Diagrams: Write an equivalent fraction.** **Fractions: Bigger>, smaller<** **Nets of three-dimensional figures**
SM Assessment 17	**Understanding fractions: word problems** **Compare fractions with like and unlike denominators** **Compare fractions: word problems** **Add and subtract fractions with like denominators**
SM Assessment 18	**Parallel, perpendicular and intersecting lines** **Identify lines of symmetry** **Rotational symmetry** **Identify reflections, rotations and translations**
SM Assessment 19	**Input/output tables - write the rule - up to ten thousand** **Solve the problems** **Divisibility rules**
SM Assessment 20	**Answer <,> or =** **Write the following in numbers** **Write numbers in words** **Fill in the missing numbers in a pattern.**

SKILLS MASTERY EXEMPLARS

Skills Mastery (SM) Assessment 1

Number   Assessment

1.

Look at these repeating patterns. Draw the next two shapes.

2.

Draw the shape that should come next in this growing pattern.
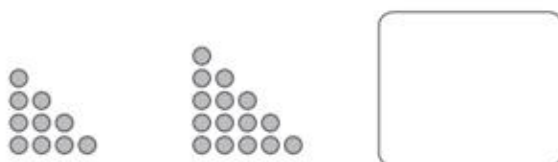
3.

Figure out the missing numbers in each pattern and write the rule.

a   72   63   [ ]   45   36   [ ]   b   81   73   65   [ ] [ ] [ ]

Rule: _____   Rule: _____

4.

Complete these number patterns, by following the rules written in the diamond shapes. Describe the rule underneath.

3 < +5 x 2 > [ ] < +5 x 2 > [ ] < +5 x 2 > [ ]

The rule is _____

5.   Can you predict the number pattern below.

A flower has 7 petals. How many petals are there in a bunch of 10 flowers?

Flowers	1	2	3	4	5	10
Number of petals	7	14				

21

SM Assessment 2

Number Assessment

1. Complete the table for each sequence of matchstick shapes and find the number of matchsticks needed for the 10th shape.

a   Shape 1   Shape 2   Shape 3

Shape number	1	2	3	4	5	10
Number of matchsticks	4					

2.

Shape 1   Shape 2   Shape 3

Shape number	1	2	3	4	5	10
Number of matchsticks	7					

3. Complete the following flow diagram.

a

IN	RULE: × 8	OUT
3		
4		
7		

4.

b

IN	RULE: + 10	OUT
		78
		287
		122
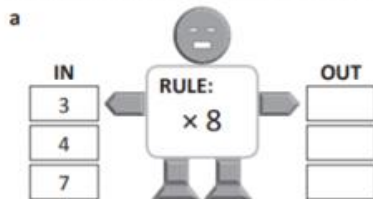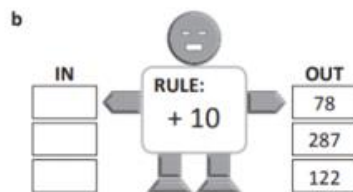
5. Complete these function tables according to the rule:

a

Rule: × 8 + 1								
IN	8	2	3	5	7	9	4	6
OUT	65							

Number	Assessment

1. **Express the following in numerals. Remember to leave a space after each period.**

(a) Thirty-two thousand four hundred one   _____

(b) Ninety thousand twelve   _____

2. **Write the following in words.**

(a)   34 567 _____

(b)   87 900 _____

3. **Look at the numbers carefully below. Some numbers are written incorrectly. Rewrite the numbers correctly.**

(a)   56 908 _____

(b)   67893 _____

(c)   10000 _____

4.

Statements	Numeral	Words
600 less than 14 000		
10 more than 23 897		

5.

$$2 \times 3 = 6$$

Factor   Factor

2 and 3 are factors of 6

Circle the number that is **NOT** a factor of the given number.

(a)   Factors of 14 = 1, 2 , 4, 7, 14

(b)   Factors of 16 = 1, 2, 4, 6, 8, 16

Number   Assessment
1.
          1. Listing factors using a rainbow
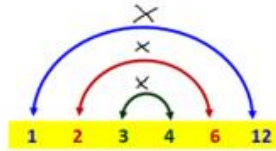
2.
          Use the rainbow factors and arrays to show the factors of the

          numbers below:

          (a) 8

3.
              Insert the missing factor in each below.

                  36

                  ☐ × 36 = 36

                  2 × ☐ = 36

                  ☐ × 12 = 36

                  4 × ☐ = 36

                  ☐ × 6 = 36

              The factors of 36 are _____

4.
          Mrs. Paul has 40 books to donate to classrooms at school. How many

          books will each classroom get if there are?

              (a)   2 classrooms   _____

              (b)   4 classrooms   _____

5.
          Write the factors for the number shown on each rainbow below.

          Draw a line to connect the pairs of factors.

          ❶   10   ❷   12

          ☐1 ☐2 ☐ ☐10   ☐1 ☐2 ☐ ☐ ☐ ☐12
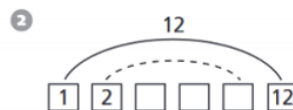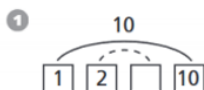
SM Assessment 5

Number   Assessment

1.   List the HCF of 18 and 20

Factors of 18 _____

Factors of 20 _____

Common factors _____

HCF of 18 & 20 = _____

Factors of 10 = 1, 2, 5, 10

Factors of 16 = 1, 2, 4, 8, 16

HCF = 2

2.   Find the HCF of 30 and 40.
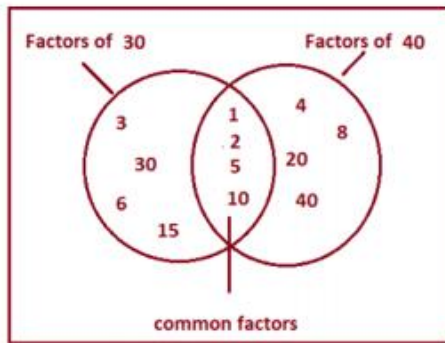
HCF = 10

Use the Venn diagram below; insert the factors of 24 and 28 and find the HCF.
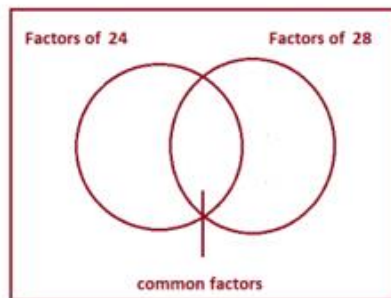
HCF =

3. $\dfrac{4}{10} + \dfrac{3}{10} + \dfrac{2}{10}$

_____

4. $3\dfrac{4}{5} - \dfrac{3}{5}$

5. $4\dfrac{1}{4} + \underline{\quad} = 5\dfrac{2}{4}$

25

Number	Assessment
1.	If you put $\frac{5}{10}$ and $\frac{3}{10}$ of a loaf together, what part of a whole loaf do you get?
2.	If you have $\frac{5}{8}$ of a loaf and you eat $\frac{2}{8}$ of the loaf, what part of a whole loaf do you have left?
3.	
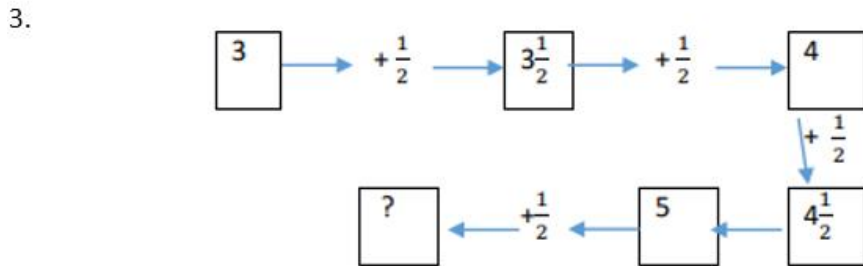
4. Write the number that completes the number sentence.

$$10 - \underline{\quad} = 9\frac{5}{6}$$

5. 30. Determine the value of a and b on the number line.
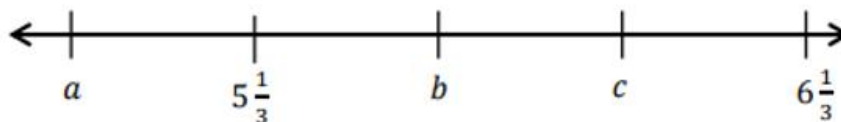
SM ASSESSMENT 7

Number	Assessment

1. **Write the next 3 numbers in each number pattern.**
   a. 2, 4, 6, 8, 10, 12, 14, 16, ...
   b. 3, 6, 9, 12, 15, 18, 21, ...

2. **Write down the number patterns which starts with a:**
   a. 5 and 3 is added each time
   b. 3 and 9 is added each time

3. **Find the interval in each of these patterns.**
   a. 6, 8, 10, 12, 14, ...
   b. 15, 13, 11, 9, 7, ...

4. $\frac{1}{10}$ of _____ = 60

5. (a) $\frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} = \square$

Number **Assessment**

1.
    (a)   State the LCM of 4 and 8.

Multiples of 4 =

Multiples of 8 =

Common multiples:

LCM of 4 and 8 =

PRACTICE EXAMPLE 1

Find the LCM of 3 and 4.

Multiples of 3 = 3, 6, 9, 12, 16 ... (use skip counting or multiplication facts)

Multiples of 4= 4, 8, 12, 16, 20 ...

Common multiples:

Multiples of 3 = 3, 6, 9, 12, 16...

Multiples of 4= 4, 8, 12, 16, 20 ...

LCM of 3 and 4 = 12 (this is the smaller of the two numbers)

2.
Colour the group of numbers below that shows multiples of 5.

4, 10, 13, 17	7, 27, 37, 47	20, 15, 40, 25	53, 55, 58, 51	50, 20, 80, 10

3.
Which units of mass would you use for each item below, Kilogram (kg) or gram (g)?

(a)   (b)   (c)

_____   _____   _____

4.
Look at the words below, colour the words that you might use when measuring and talking about mass.

heavier than   edges   more mass than

volume   less mass than

a bit more   exactly   shorter than

weigh   different

long   area

heavy   lighter than

vertex

about the same   capacity
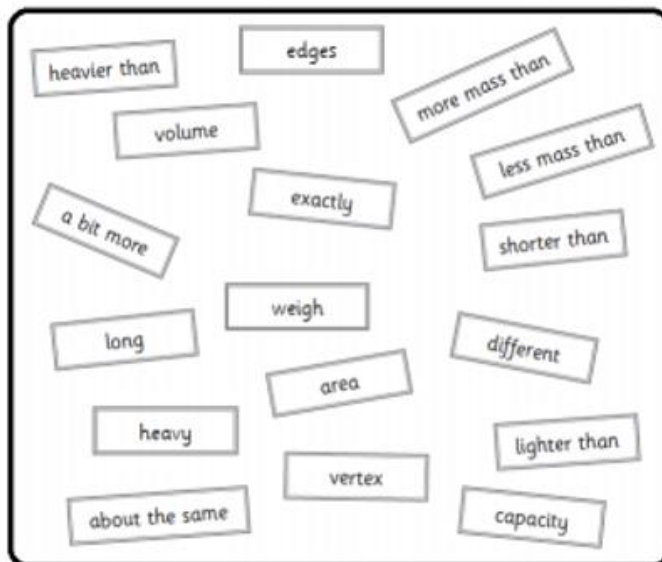
5.

Draw two things in your home that has a mass of 1 kg.

SM Assessment 9

Number   Assessment

1.   How many **square units** are colored in below? ....
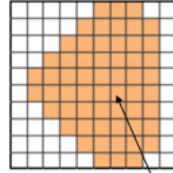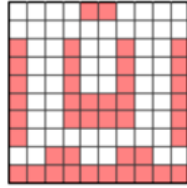
The number of square units coloured in above is 58 square units.

2.   Colour in the block to show a rectangle of 6 square units.
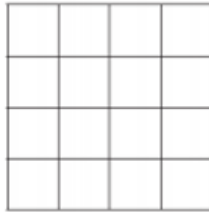
3.   What is the area of each shaded shape?

b)   c)
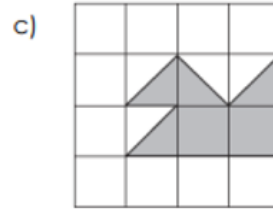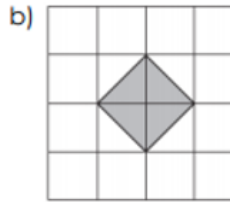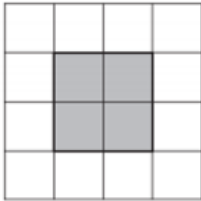
4.   Calculate the area and perimeter of the shapes below.

a)   b)
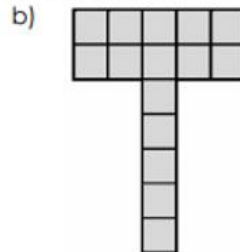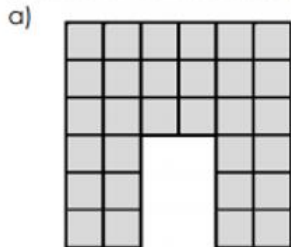
5.   The straight lines around the circle are all 2 cm long.
Use these straight lines to estimate the perimeter around the circle.

SM Assessment 10

PRACTICE EXAMPLE

Number	Factors	Prime	Composite
2	1, 2	✓	
3	1, 3	✓	
4	1,2,4		✓
5	1,5	✓	
6	1,2,3,6		✓

From the table we can see that:
- The factors of each number are listed.
- Numbers with only two factors are **Prime**.
- Numbers with more than two factors are **Composite**.
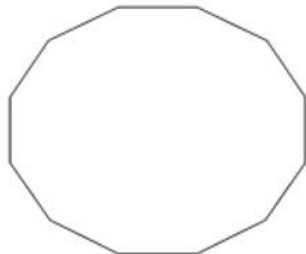
Number   Assessment

1. **Complete the table below by:**

   (i)   Listing the factors for the given numbers

   (ii)   Placing a tick to show whether the number is prime or composite.

Number	Factors	Prime	Composite
9			
11			
14			

2. Write two differences between prime and composite numbers.

Prime Numbers	**Composite Numbers**
1.	
2.	

3. Find the LCM of 5 and 15 using repeated division.

2	12, 18
2	6, 9
3	3, 9
3	1, 3
	1,1

LCM of 12 and 18 = 2 x 2 x 3 x 3 = 36

4. **Solve this riddle. Explain your answers.**

   I am a multiple of 6. I am also a multiple of 4. I am less than 30. Who am I?

   _____ or _____ [2 possibilities]

5. Complete the table below by inserting the first 6 multiples of each number. The first one is done for you.

Number	1st	2nd	3rd	4th	5th	6th
6	6	12	18	24	30	36
20						
4						
11						
15						

Use the table and state the:

(a)   LCM of 6 and 15. _____

(b)   LCM of 4 and 20. _____

29

Number   Assessment

1.   Complete the factor trees below.

14

14 = ____ x ____

2.

28

28 = ___ x ___ x ___

Index form =

3 —— index

,5

base number

27

3   9

3   3

27 = 3 x 3 x 3

3³ (index form)
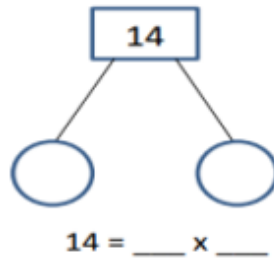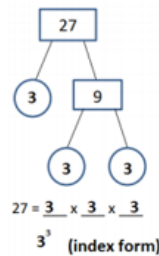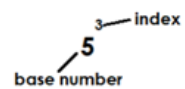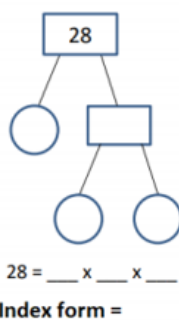
3.   Mark X on the number below that has only two factors.

6   17   21   27   30
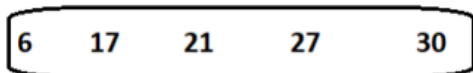
4.   Write **TRUE** or **False** at the end of each statement.

All prime numbers are odd. _____

All composite numbers are divisible by 2. _____

The number of prime numbers between 0 and 10 is 4. _____

5.   State **ONE** reason why 1 is not used on the factor tree.

_____

Number   Assessment
1.   **1. Write suitable names for the sets below.**

_____

_____

2.

List the members of the following sets using braces.

(a) First 5 multiples of 7.

(b) People living in your home

3.   Which two sets below are equivalent?

_____
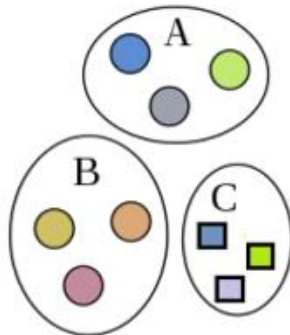
4.   **Study each set and state its type. (empty, singleton, finite or infinite)**

. A set of cows that can fly _____

. Months of the year with 28 days _____

5.   Make this set equal.
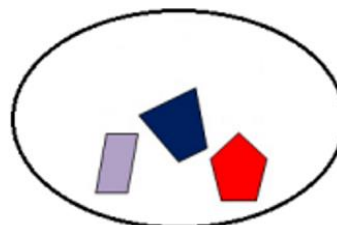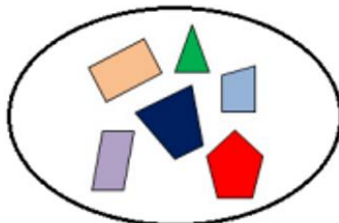
SM Assessment 13

Number | Assessment

1.

| 3 0 0 0 | + | 1 0 0 | + | 4 0 | = | |

| |

2.

2. Write the number in the correct column:

		Thousands	Hundreds	Tens	Units
a.	387		3	8	7
b.	704				

3. **Complete the pattern**

```
        + 300      + 300      + 300
      ┌──────┐   ┌──────┐   ┌──────┐
  600      900      1 200            
```

```
        – 400      – 400      – 400
      ┌──────┐   ┌──────┐   ┌──────┐
 5 000      4 600      4 200            
```
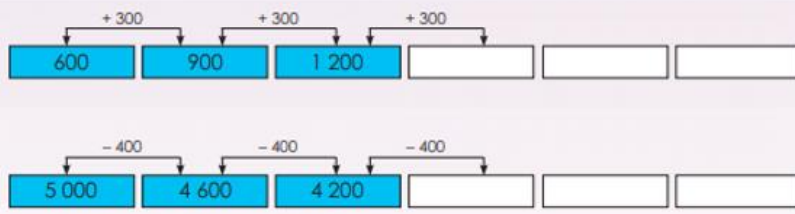
4.

a. 654 + 43 =   b. 572 + 317 =

Examples:
Example 1:
5 783 + 129
= 5 000 + 700 + 80 + 3 + 100 + 20 + 9
= 5 000 + 800 + 100 + 12
= 5 000 + 900 + 10 + 2
= 5 912

5.

a. 7 182 – 61 =   b. 7 546 – 431 =

Example 1:
8 342 – 2 131
= (8 000 – 2 000) + (300 – 100) + (40 – 30) + (2 – 1)
= 6 000 + 200 + 10 + 1
= 6 211

Number   Assessment

1.

Estimate the number of fruit. Then write two multiplicaton sums.

a.

| 12 | 4 × 3 = 12 | 3 × 4 = 12 |

b.

| | | |

2.   a. 24 x 3 =   b. 52 x 9 =

56 x 5
= (50 + 6) x 5
= (50 x 5) + (6 x 5)
= 250 + 30
= 280

3.

X	1	2	3	4	5	6	7	8	9
1	1	2	3	4	5	6	7	8	9
2	2	4	6	8	10	12	14	16	18
3	3	6	9	12	15	18	21	24	27
4	4	8	12	16	20	24	28	32	36
5	5	10	15	20	25	30	36	40	45
6	6	12	18	24	30	36	42	48	54
7	7	14	21	28	35	42	49	56	63
8	8	16	24	32	40	48	56	64	72
9	9	18	27	36	45	54	63	72	81

a. ● 24 ÷ 6 = 4 or 24 ÷ 4 = 6   b. ● [ ]

4.

35		5
42		6
14		2
56		8
63		9

5.

What is the value of the 🍎 in each of these?

a. 7 + 2 = 🍎 + 7   b. 3 + 9 = 🍎 + 3

33

SM Assessment 15

Number	Assessment
1.	

Colour the cards					
Use different colours to colour in those cards that have the same answer.	6 + 8	7 + 3	2 x 9	6 x 8	3 x 7
	9 x 2	9 + 2	6 + 5	5 + 6	2 + 9
	7 x 3	8 x 6	8 + 6	3 + 7	6 – 5

2.

How many peaches do you see?

3.

How many bananas do you see?

4.

What is the ratio of bananas to peaches?

What is the ratio of peaches to bananas?

5.

What is the ratio of yellow flowers to purple flowers?
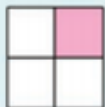
What is the ratio of pink flowers to purple flowers?

What is the ratio of yellow flowers to white flowers?
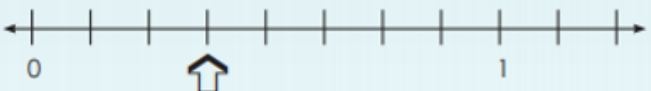
SM Assessment 16
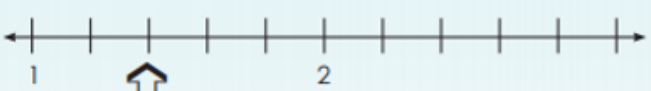
Number	Assessment
1.	**What fraction of the pictures below have been coloured?**
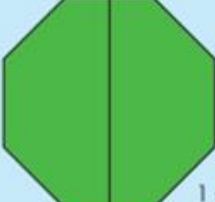
a. b. c. d.
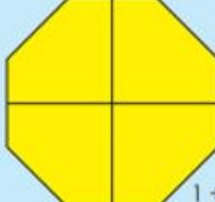
2. **What fraction does the arrow show?**

a.

0   ⇧   1

b.

1   ⇧   2

3. **Look at the fractions and the sums. Talk about it.**

$1 \div 2 = \frac{1}{2}$

Halves

$1 \div 4 = \frac{1}{4}$

Quarters

$1 \div 8 = \frac{1}{8}$

Eighths

. **Using the above diagrams, write an equivalent fraction for:**

a. $\frac{1}{2} = \boxed{\frac{2}{4}}$

b. $\frac{3}{4} = \boxed{}$

c. $\frac{4}{8} = \boxed{}$

d. $\frac{2}{4} = \boxed{}$

e. $\frac{2}{2} = \boxed{}$

f. $\frac{6}{8} = \boxed{}$

4. **Fill in < or >.**

a. $\frac{6}{12} \boxed{<} \frac{2}{3}$

b. $\frac{1}{2} \boxed{} \frac{2}{6}$

c. $\frac{9}{12} \boxed{} \frac{1}{2}$

5. How many green triangles ▲ are in one blue rhombus ⬦ ? ▭

SM Assessment 17

Number   Assessment

1.

a. $\bigcirc = \bigcirc \quad \frac{1}{3} + \bigcirc \quad \boxed{}$

b. $\bigcirc = \bigcirc \quad \frac{1}{4} + \bigcirc \quad \boxed{} + \bigcirc \quad \boxed{}$
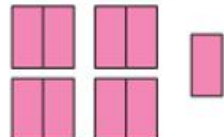
c. $\bigcirc = \bigcirc \quad \frac{1}{5} + \bigcirc \quad \boxed{} + \bigcirc \quad \boxed{} + \bigcirc \quad \boxed{}$

2.

a. $\frac{1}{4} + \frac{2}{4} = \boxed{\frac{3}{4}}$ b. $\frac{6}{10} + \frac{2}{10} = \boxed{}$ c. $\frac{7}{8} - \frac{3}{8} = \boxed{}$

3.

At the party I ate $\frac{2}{12}$ of a pizza, my friend had $\frac{1}{12}$ and my big brother had $\frac{4}{12}$ of the same pizza. How much pizza did we eat altogether? Show your answer. Show your answer on a separate piece of paper.

4.

Write it as a mixed number:

a. $\boxed{1\frac{2}{5}}$

b. $\boxed{}$

c. $\boxed{}$

d. $\boxed{}$

5.

a. $\frac{3}{4} + \frac{1}{4} =$

b. $\frac{2}{5} + \frac{1}{5} =$
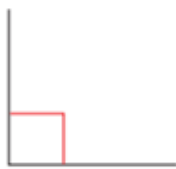
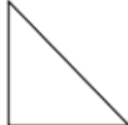c. $\frac{4}{7} + \frac{1}{7} =$

SM Assessment 18

Number Assessment

1.

1. Show which is the right angle and write its size in degrees.

a. 90°	b. _____
c. _____	d. _____

2.

Draw a line of symmetry in each shape.

a.	b.	c.

3.

5. Describe each picture using your knowledge of reflection and reflective symmetry.

a.   b.   c.   d.

4.

. Draw the reflection of the shape and show the line of reflection.

a.   b.

5.

| 133 | 138 | 143 | | | | | | | | | |

SM Assessment 19

Number	Assessment
1.	**What is the answer?**

2 000
+ 3 000
3 000
4 000
5 000

2.		3	4	5	6	7	8	9	10	11	12
	x 12										

3.		500	475	450	425	400	375	350	325	300	275
	÷ 25										

4.

Solve the problems.

a. 378 children attended the sport event. Each spent R35. How much money did they spend altogether?

5.

9 999 people each had 1 litre of milk each day for a week. How much milk did they drink altogether?

SM Assessment 20

Number	Assessment

1. **Answer <, > or =**

a. 194 578 _____ 184 587

b. 14 680 _____ 15 680

2. **. Write the following in numbers:**

a. One hundred and sixty five thousand three hundred and twenty one.

_____

3. Write in words

a. 123 633 _____

b. 105 128 _____

4.

a. 90 000 + 5 000 + 800 + 20 + 5 = _____

b. 70 000 + 1 000 + 500 + 80 + 9 = _____

5. **What number comes next? Try this!**

5	50	500	5 000	?

3	36	432	5184	?