PLANNER & TRACKER FOR RECOVERY ANNUAL TEACHING PLAN (ATP)

MATHEMATICS

GRADE 4 TERM 2

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

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

- Please note that a Maths structured learning programme that includes daily lesson plans, big books, reading worksheets and classroom resources is available for download from www.nect.org.za
- This is a zero-rated website, so there are no data costs for downloads.
- This document can be used independently of the structured learning programme.

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ABOUT THE PLANNER AND TRACKER

This 2022 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 2022 Annual Teaching Plan including School-Based Assessments for Mathematics Grade 4.
2) To ensure that meaningful teaching continues during the remaining teaching time as per the school calendar for TERM 2.
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 2021 mathematics 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 doesn't bode well.

Curriculum coverage in 2022 must be viewed and implemented in term 2, in the light of some contextual realities that includes the following:

1) 2021 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 for most 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	10 January - 17 March	47 (10 weeks)
Term 2	**5 April – 24 June**	**53 (12 weeks) – 6 holidays**
Term 3	19 July – 30 September	54 (11 weeks) – 2 holidays
Term 4	11 October - 14 Dec	47 (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 2 Planner and Tracker has 53 teaching and learning days, of which 15 days are used for formative and summative Assessment days.
- NECT Term 2 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 4.

- 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 12 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 2	Week 1 4 days	Week 2 5 days	Week 3 3 days	Week 4 5 days	Week 5 5 days	Week 6 5 days	Week 7 5 days	Week 8 5 days	Week 9 5 days	Week 10 4 days	Week 11 5 days
Hours per week	5 hrs.	6 hrs.	3 hrs.	6 hrs.	6 hrs.	6 hrs.	6 hrs.	6 hrs.	6 hrs	5 hrs.	6 hrs.
Hours per topic	6 hrs.		15 hrs.			12 hrs.	9 hrs.	2 hrs.	6 hrs.	5 hrs.	6 hrs.
Topics, concepts and skills	**WHOLE NUMBERS:** Number range for calculations: • multiplication and division (1-digit by 1 digit) **Number range for multiples and factors** • Multiples of 1-digit numbers to at least 100	**WHOLE NUMBERS:** **Number range for calculations** • Multiply at least 2-digit by 1-digit • Multiplication of at least whole 2-digit by 2-digit numbers **Calculation techniques** • Use a range of techniques to perform and check written and mental calculations of whole numbers including: – estimation – building up and breaking down numbers – doubling and halving – using multiplication and division as inverse operations. **Multiples and factors** • Multiples of 1-digit numbers to at least 100 **Properties of whole numbers** • Recognize and use the commutative; associative and distributive properties of whole numbers. **Solving problems** • Solve problems in contexts involving whole numbers, including: – financial contexts – measurement contexts – comparing two or more quantities of the same kind (ratio) – comparing two quantities of different kinds (rate).		**WHOLE NUMBERS:** **Number range for calculations** • Division of 2- digit by 1 - digit • Division of at least whole 3-digit by 1-digit numbers **Calculation techniques** • Use a range of techniques to perform and check written and mental calculations of whole numbers including: – estimation – building up and breaking down numbers – using multiplication and division as inverse operations. **Multiples and factors** • Multiples of 1-digit numbers to at least 100. **Properties of whole numbers** • Recognize and use the distributive properties of whole numbers. **Solving problems** • Solve problems in contexts involving whole numbers, including: – financial contexts – measurement contexts – comparing two or more quantities of the same kind (ratio) – comparing two quantities of different kinds (rate). – grouping and equal sharing with remainders			**NUMERIC PATTERNS:** **Investigate and extend patterns** • Investigate and extend numeric patterns looking for relationships or rules of patterns – sequences involving a constant difference or ratio – of learner's own creation • Describe observed relationships or rules for sequences involving constant difference or ratio in learner's own words **Input and output values** Determine input values, output values and rules for patterns and relationships: – flow diagrams – tables **Equivalent forms** • Determine equivalence of different descriptions of the same relationship or rule presented: – verbally – in a flow diagram – by a number sentence	**FORMAL ASSESSMENT TASK** Investigation	**GEOMETRIC PATTERNS** **Investigate and extend patterns** • Investigate and extend geometric patterns looking for relationships or rules of patterns: – represented in physical or diagram form – sequences not limited to a constant difference or ratio – of learner's own creation • Describe observed relationships or rules in learner's own words **Input and output values** • Determine input values, output values and rules for the patterns and relationships using flow diagrams **Equivalent forms** • Determine equivalence of different descriptions of the same relationship or rule presented: – verbally – in a flow diagram – by a number sentence	**REVISION OF TERM 1 AND 2 WORK**	**FORMAL ASSESSMENT TASK** Test All Term 1 and Term 2 topics

CORE QUESTIONS	DID ALL LEARNERS MASTER 2021 AND TERM 1 CORE 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 2: Implement DBE Baseline assessments or see exemplar in Planner and Tracker or any similar diagnostic – Based on 2021 Grade 3 and term 1 core skills. Teachers are encouraged to use the exemplar, based on what content they have completed. Meaning teachers can select different items in the diagnostic for their purposes. Teachers could also use week 1 to do revision from the DBE workbooks, as shown in the Planner and Tracker

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 4 = 20 items – depending on your context and ability groups

ITEM BANK: 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) PREPARATION: Test, Marking Guideline/s, Marksheet and apparatus.

5 – 8 April 2022 (four-day week)

Week 1					
Lesson	**ATP Content**	**concepts, skills**	**DBE workbook 1**	**Resources**	**Date**
1	HOLIDAYS				
2	Revision: Diagnostic	Baseline: (Revision, consolidation of Term 1 and Grade 3 core skills)			
3	Revision: Remediation	Baseline: Remediation – error analysis			
4	WHOLE NUMBERS: Number range for calculations: -multiplication and division (1-digit by 1 digit) Number range for multiples and factors -Multiples of 1-digit numbers to at least 100	Multiply 1-digit with 1-digit. Complete the pattern. Complete the table with diagram, addition sum, words sum and times sum.	No. R5 (pp. xii, xiii)		
5	WHOLE NUMBERS: Number range for calculations: -multiplication and division (1-digit by 1 digit) Number range for multiples and factors -Multiples of 1-digit numbers to at least 100	Multiply 1-digit with 1-digit. Complete the pattern in times board. Multiply in context	No. R6 (pp. xiv, xv)		
6	WHOLE NUMBERS: Number range for calculations: -multiplication and division (1-digit by 1 digit) Number range for multiples and factors -Multiples of 1-digit numbers to at least 100	Multiply 2x table to 7x table. Use the number board for multiplication. Write repeated sums. Write Multiply and divide sums. Show times sums on number line. Use x and ÷ as inverse operations	No. 15 (pp. 44, 45)		

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:	What will you change next time? Why?
• Multiply 1-digit with 1-digit. • Complete the pattern.	**Struggling Learners Names:**

- Complete the table with diagram, addition sum, words sum and times sum.
- Complete the pattern in times board.
- Multiply in context
- Multiply 2x table to 7x table.
- Use the number board for multiplication.
- Write repeated sums.
- Write Multiply and divide sums.
- Show times sums on number line.
- Use x and ÷ as inverse operations

HOD:	**Date:**

11 – 14 April 2022 (four-day week)

	Week 2				
Lesson	**ATP Content**	**concepts, skills**	**DBE workbook**	**Resour ces**	**Dat e**
7	WHOLE NUMBERS: Number range for calculations: -multiplication and division (1-digit by 1 digit) Number range for multiples and factors -Multiples of 1-digit numbers to at least 100	Multiply 8x table to 9x table. Write repeated sums. Write Multiply and divide sums. Show times sums on number line. Use x and ÷ as inverse operations.	No. 16 (pp. 46, 47)		
8	WHOLE NUMBERS: Number range for calculations: -multiplication and division (1-digit by 1 digit) Number range for multiples and factors -Multiples of 1-digit numbers to at least 100	Multiply 1x table to 10x table. Write repeated sums. Write Multiply and divide sums. Show times sums on number line. Use x and ÷ as inverse operations.	No. 17 (pp. 48, 49)		
9	WHOLE NUMBERS: Number range for calculations -Multiply at least 2-digit by 1- digit -Multiplication of at least whole 2-digit by 2-digit numbers	Multiply by multiples of 10. Find the multiples of 2, 3, 5.	No 23a (pp. 68, 69)		
10	WHOLE NUMBERS: Number range for calculations -Multiply at least 2-digit by 1- digit -Multiplication of at least whole 2-digit by 2-digit numbers	Find multiples of 10. Find the multiples of 2, 3, 5. Extend patterns of multiples.	No 23b (pp. 70)		
11	Assessment Activity: Consolidate and revise – assess learners understanding, remediate for understanding – use SM Activities				
12	PUBLIC HOLIDAY				

Reflection	
DID ALL THE LEARNERS LEARN THE WEEKLY SKILLS? ARE THEY ABLE TO: • Multiply 8x table to 9x table. • Write repeated sums. • Write Multiply and divide sums. • Show times sums on number line. Use x and ÷ as inverse operations. • Multiply 1x table to 10x table. • Show times sums on number line. Use x and ÷ as inverse operations. • Multiply by multiples of 10. • Find the multiples of 2, 3, 5.	What will you change next time? Why? **Struggling Learners Names?**
	HOD:

•	Find multiples of 10.	Date:
•	Extend patterns of multiples.	

19 – 22 April 2022 (four-day week)

Week 3					
Lesson	**ATP content**	**concepts, skills**	**DBE Workbook 1**	**Resources**	**Date**
13	PUBLIC HOLIDAY				
14	WHOLE NUMBERS Calculation techniques-Use a range of techniques to perform and check written and mental calculations of whole numbers including:– estimation– building up and breaking down numbers – doubling and halving – using multiplication and division as inverse operations.	Apply distributive property. Breaking down numbers to multiply.	No 23b (pp. 71)		
15	WHOLE NUMBERS Calculation techniques-Use a range of techniques to perform and check written and mental calculations of whole numbers including:– estimation– building up and breaking down numbers – doubling and halving – using multiplication and division as inverse operations.	Solve problems by grouping. Using multiplication and division as inverse operations.	No 24a (pp. 72, 73)		
16	WHOLE NUMBERS Calculation techniques-Use a range of techniques to perform and check written and mental calculations of whole numbers including:– estimation– building up and breaking down numbers – doubling and halving – using multiplication and division as inverse operations.	Solve problems by grouping. Using multiplication and division as inverse operations.	No 24b (pp. 74)		
17	WHOLE NUMBERS Calculation techniques-Use a range of techniques to perform and check written and mental calculations of whole numbers including:– estimation– building up and breaking down numbers – doubling and halving – using multiplication and division as inverse operations.	Solve problems by grouping. Using multiplication and division as inverse operations.	No 24b (pp. 75)		
18	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:	What will you change next time? Why?
• Apply distributive property. • Breaking down numbers to multiply. • Solve problems by grouping. • Using multiplication and division as inverse operations. • Solve problems by grouping.	**Struggling Learners names:**

	• Using multiplication and division as inverse operations.	**HOD:**		**Date:**	

25 – 29 April 2022 (four-day week)

	Week 4				
Day	**ATP Content**	**CAPS content, concepts, skills**	**DBE Workbook 1**	**Resources**	**Date**
19	WHOLE NUMBERS Solving problems-Solve problems in contexts involving whole numbers, including:– financial contexts– measurement contexts – comparing two or more quantities of the same kind (ratio) – comparing two quantities of different kinds (rate) -grouping and equal sharing with remainders	Grouping and sharing objects.	No. 35 (pp. 100, 101)		
20	WHOLE NUMBERS Multiples and factors - Multiples of 1-digit numbers to at least 100.	Identify patterns on the number line. Show multiples on number lines. Connecting multiples with rate.	No. 43 (pp. 116, 117)		
21	PUBLIC HOLIDAY				
22	WHOLE NUMBERS Multiples and factors - Multiples of 1-digit numbers to at least 100.	Identify patterns using multiples Extend patterns with multiples.	No. 44a (pp. 118)		
23	WHOLE NUMBERS: Properties of whole numbers- Recognize and use the distributive properties of whole numbers.	Multiply using distributive property. Breaking down 2-digit numbers.	No. 44a (pp. 119)		
24	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: • Grouping and sharing objects. • Identify patterns on the number line. • Show multiples on number lines. • Connecting multiples with rate. • Identify patterns using multiples • Extend patterns with multiples. • Multiply using distributive property. • Breaking down 2-digit numbers.		What will you change next time? Why? **Struggling Learners Names**:			
		HOD:		**Date:**	

3 – 6 May 2022 (four-day week)

	Week 5				
Day	**ATP Content**	**concepts, skills**	**DBE workbook**	**Resources**	**Date**
25	PUBLIC HOLIDAY				
26	WHOLE NUMBERS:	Multiply using distributive property.	No. 44b (pp. 120, 121)		

	Properties of whole numbers- Recognize and use the distributive properties of whole numbers.	Breaking down 2-digit numbers.			
27	WHOLE NUMBERS: Properties of whole numbers- Recognize and use the distributive properties of whole numbers.	Multiply multiples of ten. Multiply using distributive property. Breaking down 2-digit numbers.	No. 45a (pp. 120, 121)		
28	WHOLE NUMBERS Calculation techniques-Use a range of techniques to perform and check written and mental calculations of whole numbers including:– estimation– building up and breaking down numbers – doubling and halving – using multiplication and division as inverse operations.	Solve problems by grouping. Using multiplication and division as inverse operations.	No 45b (pp. 122, 123)		
29	WHOLE NUMBERS Calculation techniques-Use a range of techniques to perform and check written and mental calculations of whole numbers including:– estimation– building up and breaking down numbers – doubling and halving – using multiplication and division as inverse operations.	Round to the nearest 10. Multiply by approximating numbers. Breaking down numbers. Use the distributive property.	No 46 (pp. 124, 125)		
30	Complete and consolidate the week's assessment and work. **FORMAL ASSESSMENT TASK**				

Reflection	
DID ALL THE LEARNERS LEARN THE WEEKLY SKILLS? ARE THEY ABLE TO: • Multiply using distributive property. • Breaking down 2-digit numbers. • Multiply multiples of ten. • Solve problems by grouping. • Using multiplication and division as inverse operations. • Round to the nearest 10. • Multiply by approximating numbers. • Breaking down numbers. • Use the distributive property.	What will you change next time? Why? **Struggling Learner names:** **HOD:** **Date:**

9 – 13 May 2022

Week 6					
Day	ATP Content	concepts, skills	DBE workbook	Resources	Date
31	WHOLE NUMBERS Calculation techniques-Use a range of techniques to perform and check written and mental calculations of whole numbers including:– estimation– building up and breaking down numbers – doubling and halving – using multiplication and division as inverse operations.	Breaking down numbers and multiply. Use the distributive property.	No 47 (pp. 126, 127)		

32	WHOLE NUMBERS Solving problems-Solve problems in contexts involving whole numbers, including:– financial contexts– measurement contexts – comparing two or more quantities of the same kind (ratio)– comparing two quantities of different kinds (rate) -grouping and equal sharing with remainders	Grouping and sharing objects. Complete table with division sums.	No. 59 (pp. 152, 153)		
33	WHOLE NUMBERS Solving problems-Solve problems in contexts involving whole numbers, including:– financial contexts– measurement contexts – comparing two or more quantities of the same kind (ratio)– comparing two quantities of different kinds (rate) -grouping and equal sharing with remainders	Solve problems of rate in context.	No. 60 (pp. 154, 155)		
34	WHOLE NUMBERS Solving problems-Solve problems in contexts involving whole numbers, including:– financial contexts– measurement contexts – comparing two or more quantities of the same kind (ratio)– comparing two quantities of different kinds (rate) -grouping and equal sharing with remainders	Solve problems of ratio in context.	No. 61 (pp. 156, 157)		
35	WHOLE NUMBERS: Number range for calculations-Division of 2-digit by 1 – digit- Division of at least whole 3-digit by 1-digit numbers	Divide using different methods. Using multiplication and division as inverse operations.	No. 62 (pp. 158, 159)		
36	Assessment activity: 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: • Breaking down numbers and multiply. • Use the distributive property. • Grouping and sharing objects. • Complete table with division sums. • Solve problems of rate in context. • Solve problems of ratio in context. • Divide using different methods. • Using multiplication and division as inverse operations.	What will you change next time? Why? **Struggling Learners Names:** **HOD:** **Date:**

16 – 20 May 2022

Week 7					
less on	**ATP Content**	**concepts, skills**	**DBE workbook 1**	**Reso urces**	**Date**
37	WHOLE NUMBERS Calculation techniques-Use a range of techniques to perform and check written and mental calculations of whole	Sharing blocks with remainders. Divide 3-digit numbers by 1-digit	No 63 (pp. 160, 161)		

	numbers including:– estimation – building up and breaking down numbers – using multiplication and division as inverse operations.				
38	WHOLE NUMBERS Calculation techniques-Use a range of techniques to perform and check written and mental calculations of whole numbers including:– estimation – building up and breaking down numbers – using multiplication and division as inverse operations.	Solve division problems in context.	No 64 (pp. 162, 163)		
39	NUMERIC PATTERNS: Investigate and extend patterns - Investigate and extend numeric patterns looking for relationships or rules of patterns – sequences involving a constant difference or ratio– of learner's own creation -Describe observed relationships or rules for sequences involving constant difference or ratio in learner's own words	Identify patterns. Extend patterns. Complete patterns.	No. R7 (pp. xvi, xvii)		
40	NUMERIC PATTERNS: Investigate and extend patterns - Investigate and extend numeric patterns looking for relationships or rules of patterns – sequences involving a constant difference or ratio– of learner's own creation -Describe observed relationships or rules for sequences involving constant difference or ratio in learner's own words	Describe the pattern Identify the rule of the patterns. Extend patterns. Complete patterns.	No. 13 (pp. 40, 41)		
41	NUMERIC PATTERNS: Input and output values- Determine input values, output values and rules for patterns and relationships:– flow diagrams– tables	Complete input/output table. Complete the flow diagram. Label tables and complete.	No. 14 (pp. 42, 43)		
42	Assessment activity: 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? WHAT ARE THEY ABLE TO MASTER: • Sharing blocks with remainders. • Divide 3-digit numbers by 1-digit • Solve division problems in context. • Identify patterns. Extend patterns. • Complete patterns. • Describe the pattern • Identify the rule of the patterns. • Extend patterns. • Complete patterns. • Complete input/output table. • Complete the flow diagram. • Label tables and complete.	What will you change next time? Why? **Struggling Learners Names:** **HOD:** **Date:**

23 – 27 May 2022

Week 8					
Day	**ATP content**	**concepts, skills**	**DBE workbook**	**Resources**	**Date**
43	Revision: Catch-up on work not completed; remediation of concepts which weaker learners have not fully understood and enrichment cards for the learners who are on track				
44	Revision: Catch-up on work not completed; remediation of concepts which weaker learners have not fully understood and enrichment cards for the learners who are on track				
45	ASSESSMENT TASK ASSIGNMENT Whole number Number sentence				
46	ASSESSMENT TASK ASSIGNMENT Whole number Number sentence				
47	ASSESSMENT TASK ASSIGNMENT Whole number Number sentence				
48	Revision and consolidation				

Reflection	
DID ALL THE LEARNERS LEARN THE WEEKLY SKILLS? WHAT SKILLS ARE THEY ABLE TO MASTER? •	What will you change next time? Why? Struggling Learners Names: HOD: Date:

30 May – 3 June 2022

Week 9					
Day	**ATP content**	**concepts, skills**	**DBE workbook 1**	**Resources**	**Date**
49	GEOMETRIC PATTERNS Investigate and extend patterns-Investigate and extend geometric patterns looking for relationships or rules of patterns:– represented in physical or diagram form – sequences not limited to a constant difference or ratio – of learner's own creation Describe observed relationships or rules in learner's own words	Identify growing patterns in shapes. Extend the geometric pattern. Write GP as a number pattern. Complete tables.	No. 51 (pp. 136)		
50	GEOMETRIC PATTERNS	Identify growing patterns in shapes.	No. 51 (pp. 137)		

	Investigate and extend patterns-Investigate and extend geometric patterns looking for relationships or rules of patterns:– represented in physical or diagram form – sequences not limited to a constant difference or ratio – of learner's own creation	Extend the geometric pattern. Write GP as a number pattern. Complete tables.			
	Describe observed relationships or rules in learner's own words				
51	GEOMETRIC PATTERNS	Investigate and compare patterns.	No. 51 (pp. 136)		
	Investigate and extend patterns-Investigate and extend geometric patterns looking for relationships or rules of patterns:– represented in physical or diagram form – sequences not limited to a constant difference or ratio – of learner's own creation	Extend the geometric pattern.			
	Describe observed relationships or rules in learner's own words				
52	GEOMETRIC PATTERNS	Investigate and compare patterns.	No. 51 (pp. 137)		
	Investigate and extend patterns-Investigate and extend geometric patterns looking for relationships or rules of patterns:– represented in physical or diagram form – sequences not limited to a constant difference or ratio – of learner's own creation	Extend the geometric pattern.			
	Describe observed relationships or rules in learner's own words				
53	WHOLE NUMBERS	Solve financial contexts.	No R10 (pp. xxii, xxiii)		
	Solving problems-Solve problems in contexts involving whole numbers, including: – financial contexts – measurement contexts	Identify coins and note. Calculate change.			
54	Assessment activity: 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? WHAT SKILLS ARE THEY ABLE TO MASTER?	What will you change next time? Why?
• Identify growing patterns in shapes. • Extend the geometric pattern. • Write GP as a number pattern. • Complete tables. • Investigate and compare patterns. • Extend the geometric pattern. • Solve financial contexts. • Identify coins and note. • Calculate change.	HOD: Date:

6 – 10 June 2022

Week 10					
Day	**ATP content**	**concepts, skills**	**DBE workbook**	**Resources**	**Date**
55	WHOLE NUMBERS Solving problems-Solve problems in contexts involving whole numbers,	Solve financial contexts.	No 12 (pp. 38, 39)		

		including: – financial contexts – measurement contexts	Identify coins and note. Calculate change.			
56		WHOLE NUMBERS Solving problems-Solve problems in contexts involving whole numbers, including: – financial contexts – measurement contexts	Solve measurement contexts. Find distances with any unit of measure.	No R11 (pp. xxiv, xxv)		
57		WHOLE NUMBERS Solving problems-Solve problems in contexts involving whole numbers, including: – financial contexts – measurement contexts	Solve measurement contexts. Measure capacity	No R13 (pp. xxviii, xxix)		
58		WHOLE NUMBERS Solving problems-Solve problems in contexts involving whole numbers, including: – financial contexts – measurement contexts	Solve measurement contexts. Calculate time	No 18a (pp. 50, 51) No. 18b (pp. 52, 53)		
59		WHOLE NUMBERS Solving problems-Solve problems in contexts involving whole numbers, including: – financial contexts – measurement contexts	Solve measurement contexts. Calculate time	No 19a (pp. 54, 55) No. 19b (pp. 56, 57)		
60		Assessment activity: 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? WHAT SKILLS ARE THEY ABLE TO MASTER? • Solve financial contexts. • Identify coins and note. • Calculate change. • Solve measurement contexts. • Find distances with any unit of measure. • Measure capacity • Calculate time	What will you change next time? Why? **Struggling Learners Names:**

13 – 15 June 2022 (three-day week)

Week 11					
Day	ATP content	concepts, skills	DBE workbook	Resources	Date
61	**Revision of term 1 and 2:** Catch-up on work not completed; remediation of concepts which weaker learners have not fully understood and enrichment cards for the learners who are on track				
62	**Revision of term 1 and 2:** Catch-up on work not completed; remediation of concepts which weaker learners have not fully understood and enrichment cards for the learners who are on track				

Day	ATP content	concepts, skills	DBE workbook	Resources	Date
63	**Revision of term 1 and 2:** Catch-up on work not completed; remediation of concepts which weaker learners have not fully understood and enrichment cards for the learners who are on track				
64	**Revision of term 1 and 2:** Catch-up on work not completed; remediation of concepts which weaker learners have not fully understood and enrichment cards for the learners who are on track				
65	PUBLIC HOLIDAY				
66	PUBLIC HOLIDAY				

Reflection	
	What will you change next time? Why? **Struggling Learners Names:**

20 – 24 June 2022

Week 12					
Day	**ATP content**	**concepts, skills**	**DBE workbook**	**Resources**	**Date**
67	FORMAL ASSESSMENT TASK Test All topics				
68	FORMAL ASSESSMENT TASK Test All topics				
69	FORMAL ASSESSMENT TASK Test All topics				
70	FORMAL ASSESSMENT TASK Test All topics				
71	FORMAL ASSESSMENT TASK Test All topics				
72	END OF TERM				

Reflection	
	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) Assignment and 2) Test on all topics.
- The Skills mastery assessments – aimed at consolidating, revising and remediating skills covered last year - are added at the end of the document.
- Written assessment tasks are to be selected and marked by teachers in appropriate lessons according to their lesson plans. Teachers may wish to group the items or use them individually.

Week	Skills Mastery Activities (Tuesdays and Thursdays)	Formative Assessment Activities: Aimed to enhance Revision Programme
1	Baseline Assessment	Baseline Assessment
2	**Tuesday** Skills mastery Assessment 1 **Thursday** Skills mastery Assessment 2	
3	**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	
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	**Formal Assessment Task:** Assignment
9	**Tuesday** Skills mastery Assessment 15 **Thursday**	

	Skills mastery Assessment 16	
10	**Tuesday** Skills mastery Assessment 15 **Thursday** Skills mastery Assessment 16	
11	**Tuesday** Skills mastery Assessment 15	
12		**FORMAL ASSESSMENT TASK – Test on all topics**

Exemplar Written Baseline Assessment ITEMS with marking memos.

The exemplar items can be used as a baseline diagnostic pre-assessment, but can be used, later in the term, as a post-assessment to monitor learning.

The skills mastery items can be used as a secondary formative assessment, both to monitor progress in learning skills and mastery of skills. For example, the teacher can select 5 items from the first three Skills Mastery Assessments (a selection from 15 items) and use it for end of week assessments. End-of-week days have been planned for this purpose, as well as for consolidating the learning of the week's content.

- Written formative assessments is to be done in addition to oral and practical assessment to carry out meaningful continuous assessment throughout the term, aimed at learning skills
- You need to plan when you will do a written formative assessment. We suggest you do it at the end-of week.
- The questions provided in the exemplar and Skills Mastery Assessments are taken from past written assessment papers and assessments generally, that were previously in the lesson plans. We suggest you use selected items as smaller written assessment tasks. This aligns better with the curriculum objective of continuous assessment.
- There is one lesson "slot" per week that is assigned for you to catch up or consolidate the lesson plan content covered in the week's lessons. This lesson should also be used for the purpose of carrying out written assessment tasks or to complete oral or practical tasks for that week.

ITEM BANK FOR BASELINE ASSESSMENT: EXEMPLAR

Surname:		
Name:	Boy	Girl
Date of birth:		
School:		
Province:		
EMIS no.:	Date: _____	

INSTRUCTIONS TO LEARNERS:
1. Time: 60 minutes.
2. Answer all the questions in the spaces provided.
3. No calculators may be used.

1. MENTAL MATHEMATICS (10 marks)

		Answers			Answers
a)	$2\ 100 - 300 = ?$	a) _____	f)	Round off 4 545 to the nearest hundred.	f) _____
b)	$2\ 500 + 2\ 500 = ?$	b) _____	g)	What is the smallest number you can make using each of these digits once only: **8 4 1 9**	g) _____
c)	What is a third of 24?	c) _____	h)	What is the value of **3** in the number 3 456?	h) _____
d)	Which of these is NOT a multiple of 4? 12, 24, 35, 44	d) _____	i)	35 cm = ? mm	i) _____
e)	Which is bigger? $\frac{1}{4}$ or $\frac{1}{5}$ of a bar of chocolate?	e) _____	j)	Is $30 \div 5 = 5 \div 30$?	j) _____

2. Write the following number in expanded notation: (1)

2 564 = _____

3. Look at these patterns.

X	X	X
XOX	XOX	XOX
	XOX	XOX
		XOX
Pattern 1	Pattern 2	Pattern 3

How many **X**s will there be in Pattern 6? _____ (2)

4. Use **rounding off** of both numbers to **estimate** the answer:

$\frac{1}{2}$ mark for rounding; $\frac{1}{2}$ mark for estimate = 3 marks)

		Round off the numbers	Estimate the answer
	Do it like this: 5 979 + 312 =	6 000 + 300	9 000
a)	29 + 595 =		
b)	3 988 – 1 199 =		
c)	59 × 9 =		

5. Use any method to calculate the following: (4 × 2 = 8 marks)

a) 5 214 + 3 605	b) 5 678 – 2 465

c) 43 × 24 =	d) 787 ÷ 3 =
	Clue board

6. Complete the calculation using the steps given. (3)

$3 \times 18 = (3 \times 10) + (3 \times 8)$

= ____ + ____

= ____

7. Which ONE of the following number sentences is true? (1)

Circle the letter of the correct answer.

A. 8 – 3 = 3 – 8   B. 6 × 4 = 4 × 6   C. 12 ÷ 3 = 3 ÷ 12

D. 5 × 2 = 5 + 2   E. 6 – 4 = 4 × 6

8.   Which number belongs with the group of numbers in the box?   (1)

Circle the letter of the correct answer.

A. 15   B. 27   C. 48   D. 61

12	26	30
54	18	
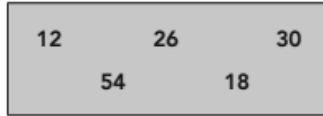
9.   Patterns:

a) What is the rule for this pattern?   (1)

35, 60, 85, 110

The rule is: _____

b) What is the rule for changing the **input** numbers to **output** numbers?   (1)

```
20  ──────→                    ──────→ 15
30  ──────→   ┌──────────┐     ──────→ 25
15  ──────→   │_____│     ──────→ 10
 5  ──────→   └──────────┘     ──────→  0
    input        RULE             output
```

The rule is: _____

10.   There are 33 learners in your class. Each learner brings 12 sweets to school.

How many sweets do the learners have altogether?   (1)

Circle the letter of the correct answer.

A. 233   B. 45   C. 396   D. 3 000

11.   Complete the number sentences: (3)

a) $80 \div 10 =$ _____

b) $900 \div 100 =$ _____

c) _____ $\div 10 = 6$

12.   Write the fraction for each question.   (3)

a) What fraction of the circle is shaded? _____

b) How many tenths can fit into the unshaded part of the circle?

Answer: _____ tenths

c) How many fifths in the whole circle? Write your answer in **2** different ways

Answer: _____

Answer: _____
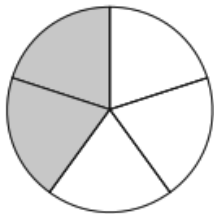
13. Find three numbers that add up to 30 **and** are also consecutive?

[Consecutive: The numbers follow on like 1, 2, 3 or 7, 8, 9] (1)

14. Look at the time on the analogue clock **A**. It is in the morning.

Find the digital clock which has the same time.

Circle the letter of the correct answer. (2)

A.	B.	C.	D.	E.
	08:01	20:05	20:01	08:05

SOLUTIONS AND MEMORANDUM

Question		Marks		Cognitive levels
1. MENTAL MATHEMATICS		1 mark each	(10)	1. K
				2. K
				3. K
				4. K
				5. K
				6. K
				7. K
				8. K
				9. K
				10. K

	Answers		Answers
a)	1 800 ✓	f)	4 500 ✓
b)	5 000 ✓	g)	1 498 ✓
c)	8 ✓	h)	3 thousand ✓
d)	35 ✓	i)	350 mm✓
e)	$\frac{1}{4}$ ✓	j)	No ✓

Question	Marks	Cognitive levels
2. 2 000 + 500 + 60 + 4	1 mark for correct answer (1)	RP

There will be 13 **X**s in pattern 6			(2)	PS
a) 30 + 600	630	(3)		RP
b) 4 000 – 1 200	2 800	$\frac{1}{2}$ mark for the correct rounding off of both numbers and $\frac{1}{2}$ mark for each correct estimate		
c) 60 × 10	600			
a) 8 819		2 marks for each answer (8)		RP
b) 3 213				RP
c) 1 032				RP
d) 262 remainder 1				RP
3 × 18 = (3 × 10) + (3 × 8)		1 mark for each correct number (3)		RP
= 30 + 24				
= 54				

23

7.	**B** is the correct answer	1 mark	**(1)**	CP
8.	.**C** is the correct answer The numbers in the box are all even numbers	1 mark	**(1)**	PS
9.	a) Add 25 each time b) Subtract 5 or –5	1 mark for each correct answer	**(2)**	a) RP b) RP
10.	**C.** 396 sweets	1 mark for the correct answer	**(1)**	CP
11.	a) $80 \div 10 = 8$ b) $900 \div 100 = 9$ c) $60 \div 10 = 6$	1 mark for each correct answer	**(3)**	a) RP b) RP c) RP
12.	a) $\frac{2}{5}$ of the circle b) $\frac{3}{5}$ of the circle is unshaded So 6 tenths fit in c) $\frac{5}{5}$ or 1 whole or $\frac{10}{10}$ or $\frac{20}{20}$ etc.	1 mark for each correct answer	**(3)**	a) K b) CP c) P
13.	9, 10, 11 because $9 + 10 + 11 = 30$	1 mark for each correct answer	**(1)**	P
14.	The answer is E	2 marks for the correct answer	**(2)**	CP

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 EXEMPLARS

Number	Assessment
1.	**Compare bigger numbers** How many tens make up 1 000?
2.	Write the number symbols for these numbers: (a) two thousand seven hundred (b) five thousand three hundred
3.	Write down the place value parts of each number: (a) 6 285 (b) 5 862 (c) 2 568 (d) 8 652
4.	Write the number names and number symbols for the numbers indicated by the arrows on the number lines below.
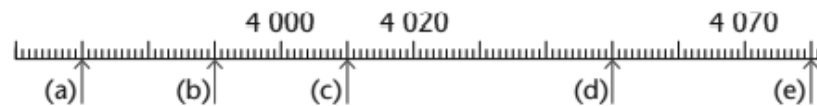
Number	Assessment
5.	Arrange these numbers from smallest to biggest. 6 152 9 987 5 423 9 899 4 777 3 365

SM Assessment 2

Number	Assessment
1.	Count the number of ONES and TENTHS and then put them together.

Number	Assessment
2.	Count the total in each box.

3.

3-digit addition problems with no regrouping.

$$\begin{array}{r} 315 \\ +\ \underline{153} \\ \end{array}$$

4.

Fill in the missing digits in these 3-digit addition problems.

1)
$$\begin{array}{r} \_65 \\ +\ \underline{1\_3} \\ 47\_ \end{array}$$

2)
$$\begin{array}{r} 6\_8 \\ +\ \underline{\_35} \\ 76\_ \end{array}$$

3)
$$\begin{array}{r} 25\_ \\ +\ \underline{2\_3} \\ \_79 \end{array}$$

5.

Factoring numbers between 4 and 50

List the factors for each number.

1. 28 _____

2. 9 _____

SM Assessment 3

Number   Assessment

1.

Add / Subtract with parenthesis - 5 numbers

$(2 + 13) - (2 + 10 + 2) =$ _____

$8 + 18 + (29 + 35 - 8) =$ _____

2.   Write the numbers from smallest to largest.

377,276 _____

202,758 _____

552,037 _____

712,334 _____

3.

Mixed rounding: round numbers to the underlined digit

Round to the accuracy of the underlined digit.

1. 5<u>6</u>,914 = _____   2. 77,<u>4</u>53 = _____   3. 6<u>3</u>,678 = _____

4.

Addition and subtraction word problems

The table shows the number of people visiting an art museum over 3 months.

	January	February	March
Child	28	34	56
Adult	59	?	55
Senior	15	22	?
Total	?	139	?

1.   What is the total number of people that visited the art museum in January?

5.

Mental math: subtracting whole tens (missing number)

270 - 90 = _____

600 - 40 = _____

Number   Assessment

1.

Division by whole tens with remainder

35 ÷ 30 = _____

137 ÷ 70 = _____

2.

Comparing proper fractions

$\frac{15}{16}$ $\frac{1}{8}$

3.

Adding decimals in columns

Find the sum.

1.	2.	3.
5.5	3.3	9.7
+ 4.0	+ 9.1	+ 2.3
_____	_____	_____

4.

Prime factor trees

8

2
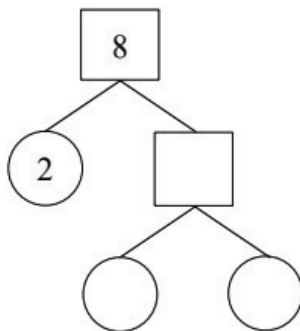
5.

Prime factors (numbers under 50)

List the prime factors for each number. Is the number prime?

1. 26 = _____

2. 21 = _____

28

Number	Assessment
1.	**Add and subtract with money**

The school fee at a certain school is R460.

Manare's mother pays with one R200 note, two R100 notes and three R20 notes.

Elizabeth's father pays with four R100 notes, one R50 note and one R10 note.

Describe three other ways in which R460 can be made up from different banknotes.

2. How much is each of the following?

(a) 583 – 300   (b) 583 – 80

3. **Arrange the numbers from the smallest to the biggest.**

a. 1 231 , 1 213 , 1 312 , 1 132 , 1 123, _____

b.1 945 , 1 549 , 1 559 , 1 954 , 1 459 , _____

4. 1. **Complete the sentences and round the numbers off to the nearest _ten_ using the number lines.**

a. 56 is closer to 60 than 50. So 56 rounded off to the nearest **ten** is ⬚

```
50  51  52  53  54  55  56  57  58  59  60
```

b. 136 is closer to ⬚ than ⬚ So 136 rounded off to the nearest **ten** is ⬚

```
130                                    140
```

5. 1. **Subtract the following:**
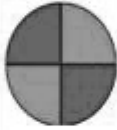
a. 60 – 20 = _____   b. 5 – 2 = _____   c. 800 – 400 = _____

d. 600 – 400 = _____   e. 9 000 – 3 000 = _____   f. 700 – 100 = _____

Number   Assessment

1.
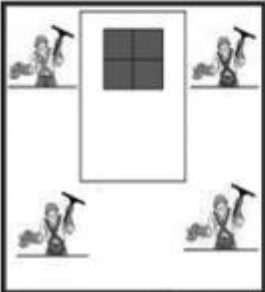
1. Complete the tables below.

| Fraction circle	What fraction is red?	What fraction is green?	Fraction circle	What fraction is red?	What fraction is green?
a.	$\frac{1}{2}$	$\frac{1}{2}$	e.		

2.

2. Look at the pictures. All jobs are shared equally.

a. How many window panes will each person wash?
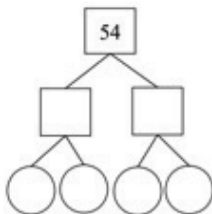
b. What fraction of the window is this?

3.

Mass & weight word problems (metric units)

A glue stick weighs 57 grams, and a stapler weighs 126 grams heavier than the glue stick. What is the weight of a stapler?

4.
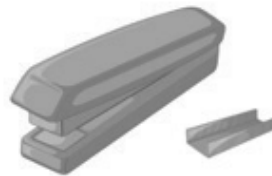
Prime factor trees

54

5.

Subtracting 1-digit decimals (missing number)

1) _____ $- 1.1 = 0$

2) $7 -$ _____ $= 5.3$

SM ASSESSMENT 7

Number	Assessment
1.	**What's the jump?**

301		281				

		171				211

					101	

2.   **Showing and comparing**

a. Write the numbers that go in each card.

298:	208:	301:	276:	227:	269:	311

2	0	0
9	0	
	8	

3.   c. 276 + 148

4.   **Estimating and rounding**

Use estimation and rounding to choose the appropriate answer for each problem.

1. There are about 310 passengers in each car of the city train. As there are 8 cars for each train, there are about _____ passengers on each train.

    a. 240   b. 2,400   c. 2,004

5.   **Add/Subtract/Multiply/Divide – 6 numbers**

$(28 \div 7 - 4) \div 90 \div 38 \div 49 =$ _____

$10 \times 10 \times (4 - 4) + 4 + 16 =$ _____

SM Assessment 8

Number	Assessment
1.	In Photograph A an orange is cut into halves. In Photograph C an orange is cut into eighths.

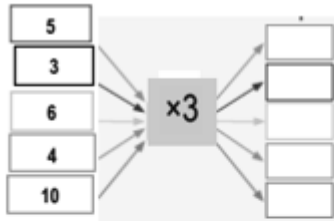Into what fraction parts is the orange cut in Photographs B and D?

Photograph A

Photograph B

Photograph C

Photograph D

2.

3.

Using fractions to measure

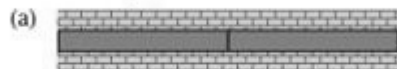Billy uses these measuring sticks to take measurements on a building site.

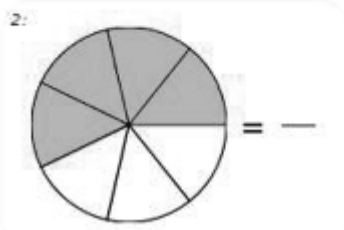1. (a) Are the three sticks the same length?

4.

This brick wall is exactly **3 sticks long**:

2. Can you say exactly how long each brick wall below is? Give reasons for your answers.
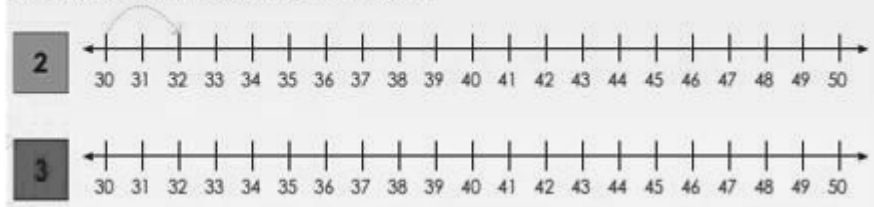
(a)

(b)

5.

2: [circle diagram] = —

SM Assessment 9

Number

3.

Assessment

1. Show the multiples on the number lines.

4.

2. Solve the following by showing it on a number line.

a. How much will 600 g of cheese cost?

```
0    R5   R10  R15  R20  R25  R30  R35  R40  R45  R50

0   100g 200g 300g 400g 500g 600g 700g 800g 900g 1 000g
```

R5/100 g

Number sentence: R5 x 6 = R30

b. How much will 900 g viennas cost?

R6/100 g

5.   **Are these multiples of (extend the pattern):**

a. **10?** 50, 60, 70, 80, ☐ ☐ ☐ ☐ ☐

SM Assessment 10

Number	Assessment
1.	**1. Complete the table below.**

Number	x 10	x 20	x 30	x 40	x 50	x 60	x 70	x 80	x 90
8									
10									

2.   **These are multiples of (extend the pattern):**

a. **20:** 60, 80, 100, 120, ☐ ☐ ☐ ☐ ☐

b. **50:** 150, 200, 250, 300, ☐ ☐ ☐ ☐ ☐

3.   **1. Round the following off to the nearest ten.**

a. 13 ☐   b. 42 ☐   c. 35 ☐

d. 54 ☐   e. 21 ☐   f. 79 ☐

4.   **1. Extend the geometric pattern and write it as a number pattern.**

a.

1   4   9   16

b.

33

SM ASSESSMENT 11

3.

Calculate these sums. Write the steps you use on a separate piece of paper.

a. 2 481 + 1 318 = _____   b. 1 516 + 3 243 = _____

4.

How quick can you calculate?

start

100 ≤ 100 ≤ 100 ≤ 100 ≤ 100 ≤ 100 ≤ 100 ≤ 100

≤

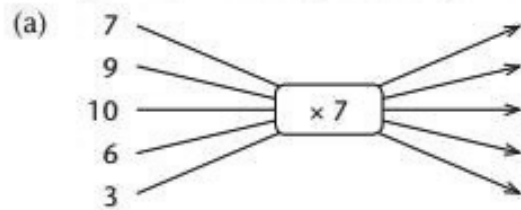100 ≤ 100 ≤ 100 ≤ 100 ≤ 100 ≤ 100 ≤ 100 ≤ 100

≤

100 ≤ 100 ≤ 100 ≤ 100 ≤ 100 ≤ 100 ≤ 100 ▽ ◯

end

5.

3 500 people attended the first show of a concert.
Another 2 425 booked tickets for the second show but 518 of them did not arrive.
How many people attended the second show?

_____

SM ASSESSMENT 12

3.

Complete the following flow diagrams.

(a)
7
9
10 → ×7 →
6
3

4.

Write the next five numbers in each pattern.

(a) 20   40   60   80   100   120

(b) 200   220   240   260

5.

A shoe shop sells all pairs of shoes for R82. My mother and sister bought 9 pairs altogether. How much did they pay?

Number   Assessment
1.   **Ordering numbers up to 1 million**

967,260 _____
537,269 _____
277,303 _____
996,022 _____

2.   **Adding 4-digit numbers in columns**

Find the sum.

1.   7,340   2.   3,026
     + 9,473   + 2,689
     _____   _____

3.   **Breaking down in a different way to multiply**

Calculate the following.

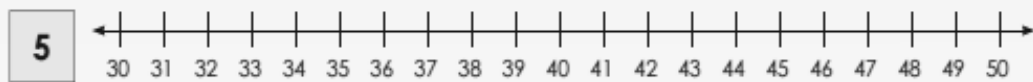(a) 80 × 2   (b) 40 × 4   (c) 20 × 8

5.   **Clever counting**

) How many beads are there in this string? Explain your method.

Number   Assessment
1.   **Show the multiples on the number lines.**

2.   **Are these multiples of (extend the pattern):**

90? 180, 270, 360, 450, ☐ ☐ ☐ ☐ ☐

3. $12 \times 13 =$
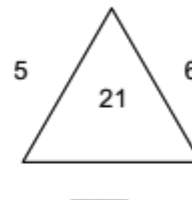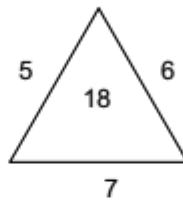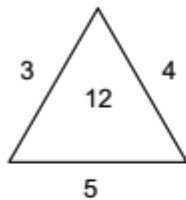
4.   1. Complete the table below.

Number	x 10	x 20	x 30	x 40	x 50	x 60	x 70	x 80	x 90
8									

5.   My answer is 1 440. What can the possible multiplicand and multiplier be?

Number   Assessment
1.   Fill in the missing number in the third diagram.

2.
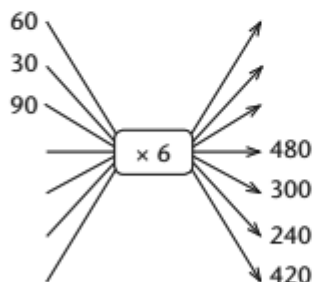
3.

Number	20	40	80				
Number × 7				490	210	700	350

4.   **Represent, order and compare numbers**

Which numbers are missing on the number lines below?
Write them in the correct order in your book.

(a)   1 000 2 000   9 000

(b)   3 800 3 900   4 700

5.   **Practise addition and subtraction**

First estimate the answers to the nearest thousand.
Then calculate the answers.

(a) 3 467 + 5 231   (b) 4 736 + 3 263

SM ASSESSMENT 16

3.

d.

Pattern	1	2	3	4	5	6	10
Number of blocks							

4.

1. Complete the following:

How many girls are there in each picture?
How many boys are there in each picture?

Class	Girls	Boys	We can write it as:
Yellow	6	4	6:4
White			
Green			
Orange			

5.   Give the inverse operation for the following.

. 57 ÷ 3 = ☐   b. 56 ÷ 8 = ☐   c. 60 ÷ 5 = ☐

SM ASSESSMENTS 17

Number   Assessment

1.

4 ＼   ↗ 8 ＼   ↗ 24
3 —→ [× 2] —→ (a) —→ [× 3] —→ (b)
2 ↗   ↘ (c) ↗   ↘ (d)
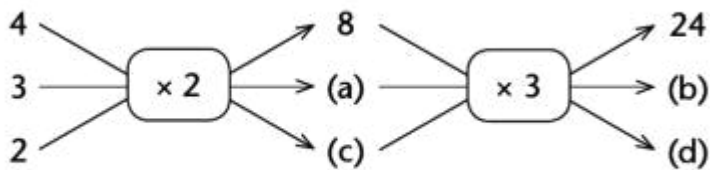
2.   Complete the following:

How much do these apples cost if one apple costs R2?

4.

Example 1:
6 = 2 × 3
12 = 2 × 2 × 3
36 = 2 × 2 × 3 × 3
18 = 2 × 3 × 3
72 = 2 × 2 × 2 × 3 × 3

Example 2:
45 = 3 × 3 × 5
30 = 2 × 3 × 5
10 = 2 × 5
60 = 2 × 2 × 3 × 5
50 = 2 × 5 × 5

1. Break down the number by multiplying 2s and 3s.

a. 6

b. 72

c. 108

5. . Complete the table by adding or subtracting to or from the number in the first column.

Number	Add 100	Subtract 100	Add 1 000	Subtract 1 000
3 212				

SM Assessment 18

Number   Assessment

1. Anandi bought an oven for R3 780 and a dinner set for R6 560. How much did she pay altogether?

2.

	Share between	Division sum
	8	80 ÷ 8 = ☐ (number line 0 10 20 30 40 50 60 70 80)
	5	(number line 0 10 20 30 40 50)

3. 1. Give the inverse operation for the following.

a. 57 ÷ 3 = ☐   b. 56 ÷ 8 = ☐   c. 60 ÷ 5 = ☐

d. 63 ÷ 9 = ☐   e. 68 ÷ 4 = ☐   f. 48 ÷ 2 = ☐

4.

c. 284 is closer to ☐ than ☐. So 284 rounded off to the nearest **ten** is ☐.

5. Arrange the numbers from the smallest to the biggest.

a. 1 231 , 1 213 , 1 312 , 1 132 , 1 123, ☐

b. 1 945 , 1 549 , 1 559 , 1 954 , 1 459 , ☐

Number	Assessment
1.	**Complete the following:**

3 9 2 6

a. Use each digit once, make the smallest 4-digit number: _____

b. Use each digit once, make the largest 4-digit number: _____

2. Peter bought 3 chairs for his house, all at the same price. He also bought a refrigerator for R2 780. Peter paid R3 677 in total. How much did each of the chairs cost?

3. Is it true that 76 ÷ 10 = 7 remainder 6?

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

a. 589 [<] 598

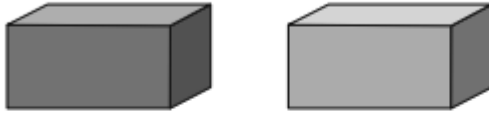b. 948 [ ] 849

c. 1 030 [ ] 1 003

5. Ma Minah bought 3 chickens for R44 each. She also bought a bag of potatoes. Ma Minah paid R174 in total. How much did the potatoes cost?
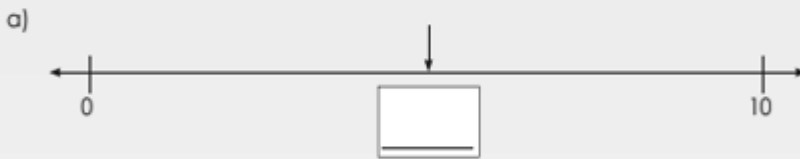
SM Assessment 20

Number   Assessment

1.

1. There are 128 lemons in the red box.

   There are 248 lemons in the two boxes together.

   (a) How many lemons are there in the green box?

2.

3. **Estimate the position of the arrow on the number line.**

   a)

   b)

3.

. **Fill in the missing number.**

   a. 1 733 + _____ = 1 800   b. 1 256 + _____ = 1 500

   c. 1 612 + _____ = 1 800   d. 1 347 + _____ = 1 400

4.

Number	Subtract 10	Subtract 100	Subtract 1 000
1 847			
1 680			
1 020			