

Foundation Phase

MATHEMATICS

LESSON PLANS

GRADE 3

TERM 2



GAUTENG PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

GGT2030
GROWING GAUTENG TOGETHER

GDE

Developed for the Gauteng Department of Education.

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These materials were developed through funding provided by
the FirstRand Empowerment Foundation.

How to use this mathematics lesson pack

Purpose

This lesson pack is intended to support Foundation Phase mathematics teachers to prepare and deliver quality lessons to their learners. Each Foundation Phase Mathematics teacher will receive a grade-specific lesson pack for each of the four school terms with a fully planned mathematics lesson for each day of the term.

Mathematics pack content

Each pack comprises the following:

1. **Contents page:** This provides details of the lesson number, lesson topic, a brief description of the topic content and links to the DBE Workbooks.
2. **Term plan:** This provides an overview of key lesson and assessment activities.
3. **Lesson plan outline:** This provides an overview of the structure of each lesson plan, setting out the sequence in which content and activities are presented in each lesson.
4. **Assessment schedules and mark record sheets:** This provides the planning for the continuous assessment activities that should be done in the course of the year.
5. **Lesson plans:** Forty six mathematics lesson plans have been developed for each Foundation Phase grade, for each term. Note: The first 4 lessons plans (lessons 1 - 4) provide planning for revision that you should work through with your learners before starting with the lesson plans which follow on directly after the revision lessons starting with Lesson Plan 5 and going through to Lesson Plan 46.
6. **Learner's materials:** The learner's materials comprise six components: Mental mathematics, classwork activities, enrichment activities, homework activities and lesson vocabulary lists. The contents of these components have been extracted from the lesson plans and repeated at the end of each pack for easy reference and photocopying purposes.

Using the lesson plans

Each lesson has been carefully designed to align with the CAPS requirement. The lesson plans also integrate activities contained in the DBE Mathematics Workbooks.

Sequence adherence

The content in each lesson has been carefully sequenced, it is therefore important that lessons are not skipped. Should you miss a mathematics lesson for any reason, continue the next day from where you last left off, do not miss a lesson. You may need to speed up the pace of delivery to catch up the lesson schedule. To do this you may need to cut some of routine activities like mental maths or homework reflection to save time until you are up to speed again.

Lesson preparation: Key steps

The lesson plans provide a detailed lesson design for you to follow. However, to deliver the lessons successfully you must do the necessary preparation yourself. This entails a number of key steps that range from ensuring that you have a good understanding of the term focus through to checking the detailed preparation of resources that is needed for every lesson.

1. **Term focus:** Start by looking at the CAPS document and orientating yourself to the CAPS content focus for the term. It is important that you are clear about the content focus as this will frame everything you do in mathematics during the term.
2. **Prepare resources:** The resources needed for each lesson are listed in each lesson plan. It is very important that you check what is required for each lesson ahead of time so that when the day comes, you have all your resources ready for use. This includes sets of unifix blocks counters,

beads, flard cards, number lines, number grids and numerous other object such as various sized balls, empty match boxes, old newspapers and magazines etc.

- If you do not have all the necessary resources readily available, see how best you can improvise e.g. get learners to collect bottle tops or small stones to be used for counting or make your own flard cards using pieces of card board and a marker pen.
 - Collect empty cooldrink cans, cereal boxes, washing powder boxes, plastic bottles etc. for the *shop activity* long in advance so that you have all the necessary goods to “stock your shop”.
 - If you have access to a computer/internet, use Google to search for and print out pictures that you may need to use as illustrations in your lessons.
 - Don’t get yourself into the position where you find out, only on the day, that each learner needs 20 empty match boxes to build a tower and you have not prepared timeously – your lesson will not succeed - proper planning prevents poor performance.
3. **Written classwork and homework activities:** When preparing your lessons, check the class work and homework activity requirements. In some instances you will need to write information or draw some diagrams on the board for the learners to copy and do as part of their classwork activities. But in other cases, you will need to photocopy the activities in the learners’ material pack and to give a copy to each learner to complete as part of the classwork activity during the lesson. The same applies to homework activities.
 4. **Lesson topic:** Think carefully about what it is that you will teach your learners in this lesson. Prepare a short introduction to the topic so that you can explain in simple terms to your learners what they will be required to do in the lesson.
 5. **Lesson vocabulary lists:** You will notice that the *lesson vocabulary words* in each lesson have been listed in the lesson plan. These words are important as they are the language of mathematics that each learner needs to learn and understand in order to build a solid foundation and understanding of this subject. It is important to explain these words to your learners and practice using these words with your learners during the lesson. The list of all of the lesson vocabulary words forms one of the learner packs at the end of your lesson plan set. Explanations of each word are given in the list. Lesson vocabulary words will be translated in language of teaching and learning (LoLT) of your school and made available to you.
 6. **Concept development:** This is the heart of the lesson – you will use this time to explain new mathematics content and skills to your learners. Follow the activities in the lesson plan.
 7. **Remediation activities:** These activities have been built into each lesson to be used as needed. As you reflect on the previous day’s lesson and /or homework, you will identify those learners that need some additional practice to consolidate their learning. While the rest of the class are busy working through the new class activities, spend some focussed time with those that need extra support and help them to work through the remediation activities.
 8. **Enrichment activities:** Those that successfully complete the daily class activities ahead of the rest of the class may be given the enrichment activities to do. They have been provided as a set of activity cards at the end of your lesson plan set. If you are able to photocopy the enrichment cards and laminate them for use by your learners that would be an additional lasting resource.
 9. **Classwork activity:** This is an opportunity for learners to consolidate new concepts by doing classwork activities that provide them with the time to practice their problem solving skills.
 10. **Homework:** Allocate a few minutes at the end of each lesson to discuss homework – make sure that learners understand what it is that they have to do.
 11. **Lesson reflection:** Briefly jot down “*what worked well*” and “*what did not work so well*” in your lessons so that you have a record for the next lesson/next time you implement the same lesson again.

Page	Lesson	Date	Lesson name	DBE	Date completed
1	Term Plan				
2	Lesson Plan Outline				
4	Assessment Schedule				
8	Record of Marks template				
10	Lesson 1		Revision - Number	-	
11	Lesson 2		Revision – Addition and Subtraction	-	
12	Lesson 3		Revision – Grouping and sharing	-	
13	Lesson 4		Revision – Data handling and measurement	-	
14	Lesson 5		Place value 100-200	Worksheet 33b (p 77)	
16	Lesson 6		Numbers 200-300	Worksheet 33a (p 76)	
18	Lesson 7		Numbers 201-300		
20	Lesson 8		3-D objects		
22	Lesson 9		Numbers 300 - 400	Worksheet 41a (p 96)	
24	Lesson 10		Numbers 301 - 400	Worksheet 41b (p 97)	
26	Lesson 11		Numbers 400 - 500	Worksheet 43a (p 100)	
28	Lesson 12		Numbers 401 - 500	Worksheet 35a (pgs 80 & 81)	
30	Lesson 13		3-D objects		
32	Lesson 14		Geometric patterns	-	
34	Lesson 15		Problem solving Strategies: Building up and breaking down	Worksheet 35b (pgs 82)	
36	Lesson 16		Problem solving Strategies: Building up and breaking down numbers	Worksheet 38b (p 91)	
38	Lesson 17		Problem solving Strategies: Adding three digits to three digits: Breaking down the second number		

Page	Lesson	Date	Lesson name	DBE	Date completed
40	Lesson 18		Directions		
42	Lesson 19		Problem solving Strategies: Number lines		
44	Lesson 20		Working with tens	Worksheet 34 (pgs78 and 79)	
46	Lesson 21		Time	Worksheet 54a no 1 (p 122)	
48	Lesson 22		Assessment 1		
52	Lesson 23		Position and views		
54	Lesson 24		Fives	DBE Worksheet 53b (p 120)	
56	Lesson 25		Fives	Worksheet 53a (p 121)	
58	Lesson 26		Twos	Worksheet 51b (p 116)	
60	Lesson 27		Twos	Worksheet 51a (p 117)	
62	Lesson 28		Threes		
64	Lesson 29		Threes	Worksheet 55a (p 124)	
66	Lesson 30		Fours		
68	Lesson 31		Fours	Worksheet 55b (p 125)	
70	Lesson 32		Sharing leading to fractions	Worksheet 57a (p 128)	
72	Lesson 33		Fractions	DBE Worksheet 57b (p 129) DBE Worksheet 59 (p 132)	
74	Lesson 34		Length	DBE Worksheet 55 (p 125)	
76	Lesson 35		Data	Worksheet 36 (pgs 84 & 85)	
78	Lesson 36		Value of money	Worksheet 53b (p 121)	
80	Lesson 37		Money – buying and selling problems	Worksheet 56b (p 127)	
82	Lesson 38		Length		

Page	Lesson	Date	Lesson name	DBE	Date completed
84	Lesson 39		Symmetry	Worksheet 48a (p 110)	
86	Lesson 40		Symmetry	Worksheet 48b (p 111)	
88	Lesson 41		50s	Worksheet 56 (p 126)	
90	Lesson 42		100s		
92	Lesson 43		Mass		
94	Lesson 44		Mass	Worksheet 44 (pgs 102 & 103)	
96	Lesson 45		Time and calendars		
98	Lesson 46		Assessment 2		
	Revision		Revision		
	Revision		Revision		
	Revision		Revision		
	Revision		Revision		
	Revision		Revision		
	Revision		Revision		
103	Mental Maths Pack				
113	Classwork Activity Pack				
130	Homework Activity Pack				
136	Enrichment Activity Pack				
156	Vocabulary List				

Term 2 Teaching and Assessment Plan

Week	Activities	Assessment	Comment
	Revision Lesson plans week 1	Oral and Practical Counting Practical Geometric Patterns	The revision lesson plans give you an opportunity to revise and continue to assess baseline knowledge and skills of your learners. Make notes of your observations so that you can refer to them when you teach these concepts in the term. • Go through the prior knowledge information given each day so that you can remediate learner errors and misconceptions. • Teach daily according to the plans, preparing well the day before you teach. • Take note of the formal assessment requirements of the lesson and record the marks of the learners progressively through the term. • Ensure that learners complete the set classwork and homework activities every day.
	Lesson plans week 2		
	Lesson plans week 3		
	Lesson plans week 4	Oral and Practical Counting	
	Lesson plans week 5 Assessment Task 1 completed this week	Written Number, operations and relationships	
	Lesson plans week 6	Oral and practical Counting	
	Lesson plans week 7		
	Lesson plans week 8		
	Lesson plans week 9	Practical Measurement of length	
	Lesson plans week 10 Assessment Task 2 completed this week.	Oral and practical Counting Written Number, patterns, shape and space and data handling	
	Revision End of Term –		Use these 4 days to recap key maths ideas that your learners need to consolidate. Reflect on the learners' work this term to make your choices for revision topics.

Lesson plan outline

*Each day, the lesson plans give all of the following information. In the plans, each section simply has a heading to indicate the start of a new section. You need to **read this outline** to find out more about each aspect of the lesson plans.*

Topic	Each lesson has a topic with specific detail about the day's lesson.
Curriculum knowledge	The CAPS topics for the lesson content are given directly under the lesson topic. This gives all of the content related to the day's lesson. Concepts and skills covered in the lesson are written out in full. The curriculum references can be located in the Term 1 expansion of content in the CAPS document.
Lesson Vocabulary	A list of all mathematical terms used in the lesson is given here. This list has been compiled into a vocabulary list for the second term which is provided as a learner resource at the back of the lesson plan pack. The list will be translated into the LoLT of your school. You should make sure that learners refer to their vocabulary list and use the terms as often as possible so that they start to build up their mathematical language proficiency.
Prior Knowledge	The "prior knowledge" section gives information about content that learners should have learned in earlier grades that will be built on in this lesson. • You need to read through this section when you do your lesson preparation. • There is no time allocation to this part of the plan because it does not form part of the day's lesson. • Although this information does not form part of the day's lesson it may help you to assist learners who struggle to understand the content of the lesson because you can use it to help you diagnose learners' needs in relation to content they do not yet know that may be preventing them from understanding today's lesson. • Remediation may be needed on prior knowledge that you notice is not properly in place.
Assessment	An indication of the assessment activity for the day is given here. • On-going formal assessment should be done virtually every day in your class. This means that you will record a mark for a few learners for a certain criterion from the curriculum. You need to decide how many learners to assess each day in order to assess all learners in the time allocated to each assessment. • Rubrics to be used to guide you in giving ratings for formal assessments are given in the assessment schedule. • A mark record sheet that you can use to record your term marks is given in the assessment schedule. Each of the two assessment tasks for the term has been broken up into several smaller assessment activities.
Mental Maths – 15 minutes	This is the first activity of the lesson. As indicated we recommend that you take 15 minutes to go through the mental maths. There are two parts to the mental maths you should let your learners do, a counting activity and some mental maths questions. • The memo for the mental maths is given in the lesson plans. The answers are given in the answer column. There is a mental maths pack at the end of the lesson plans set, which you can use if you wish to photocopy these activities for your learners. The pack has one week of mental maths activity per page.
Homework / Corrections – 15 minutes	This is the second activity for the lesson. We recommend that you take 15 minutes to remediate and correct the previous day's homework. Read out answers to all of the homework questions. Learners/peers mark the work. Choose one or two activities that you realise were problematic to work through in full with the whole class. In this part of the lesson you may also reflect on the previous day's work.

Lesson Content – Concept Development – 30 minutes	The “lesson content – concept development” section of the lesson plans gives information on the content that you will teach in this day’s lesson. • Worked examples are given that you can go through with your class. • There are also suggested explanations that you can use. • You need to work through this part of the lesson plan fully when you prepare to teach this lesson. You need to make sure that you understand all of the mathematics that you will teach and that you can explain it fully and well to your class. • We recommend that you should actively teach your class for 30 minutes – going through examples interactively with your learners. • Wrap up the lesson each day by giving the learners the answers to the classwork, and then give them the homework activity to do at home.
Remediation	You need to decide, based on your observation of the learners while you are teaching the lesson content, whether to use this content and with which learners.
Enrichment	Activities that you can use for enrichment opportunities for particular learners who have completed the lesson activities are provided in a set of enrichment activity cards at the end of the lesson plan set.
Classwork Activity – 25 minutes	The “Classwork Activity” section gives a set of activities on the day’s content that you can set for your class after you have taught them the content for the day. You might choose to go over one or two of the classwork activities orally with the class before allowing them to complete the activities on their own. • Learners do most of the activities in their maths books (an exercise book for learner maths writing activities). • You should allow the learners opportunities to do these activities alone, in pairs and in groups. You will work through some of the activities with the whole class. Learners should experience working alone as well as with their peers. • We recommend that you allocate 25 minutes to the classwork activity. There is a Classwork activity pack at the end of the lesson plans set. The pack presents the classwork activities for every day, with several days per page, so that learners can cut out the classwork activity and paste it into their exercise books. Learners will have to write their working as they do the classwork activities on a daily basis. This will help promote learner’s writing.
Homework Activity – 5 minutes	The “Homework Activity” section gives a set of activities on the day’s content that you can set for your class to do for homework, to consolidate the maths that you have taught them today. This will also promote learner writing and development of their mathematical knowledge. We have allocated 5 minutes to give you time to tell the learners about the homework each day There is a homework pack at the end of the lesson plans set, similar to the classwork pack.
Reflection	Each day there is a small block in which you should note your thoughts about the day’s lesson. You will use these notes as you plan and prepare for your teaching.

Assessment Task 1**Activity 1 and 2: Oral and practical**

- Number, operations and relationships
- Observation
- Note that you will not be able to assess your learners in one day, so you should assess a group of learners each day until they have all been observed. You can do this as a fun activity so the counting does not become too repetitive.

Activity 1:	
• Count in 2s to 100. • Count in 5s to 100. • Count in 10s to 100.	
Level	Criterion
1	Cannot count in 2s, 5s and 10s in correct counting order
2	Needs constant assistance to count in 2s, 5s and 10s in correct counting order
3	Counts in 2s but cannot count in 5s and 10s in correct counting order up to 100
4	Counts in 2s and 5s but cannot count in 10s in correct counting order up to 100
5	Counts in 2s, 5s and 10s in correct counting order up to 100 but makes 1 error
6	Consistently counts in 2s, 5s and 10s in correct counting order up to 100, with no errors
7	Consistently counts in 2s, 5s and 10s in correct counting order up to 100, with no errors and goes beyond the number range

Activity 2:	
• Count forwards and backwards in 2s from 2 to 150. • Count forwards and backwards in 5s from 5 to 150. • Count forwards and backwards in 10s from 10 to 150.	
Level	Criterion
1	Cannot count verbally forwards and backwards in 2s, 5s and 10s
2	Needs constant assistance to count verbally forwards and backwards in 2s, 5s and 10s
3	Counts verbally forwards without assistance but NOT backwards in 2s, 5s and 10s up to 150
4	Counts verbally forwards and backwards with no assistance in 2s, 5s and 10s up to 150 but makes 2 errors
5	Counts verbally forwards and backwards with no assistance in 2s, 5s and 10s up to 150 but makes 1 error
6	Counts verbally forwards and backwards independently in 2s, 5s and 10s up to 150
7	Independently and consistently counts verbally forwards and backwards independently in 2s, 5s and 10s up to 150 and beyond

Activity 3: Practical

- Geometric patterns

Activity 3: Geometric patterns (Lesson 14)		
Observation checklist	✓ or x	
• Describe a pattern in terms of colour		
• Describe a pattern in terms of positions of shapes		
• Describe a pattern in terms of sizes of shapes		
• Extend patterns with one shape/object where the colours of the shape/object changes in a regular way.		
• Extend patterns with one shape/object where the position of the shape/object changes in a regular way.		
• Extend patterns with a single kind of shape that decreases in size .		
• Extend patterns with a single kind of shape that increases in size .		
To assign levels, count the number of positive observations	Level	
The ticks can be for any of the above criteria. The number of ticks determines the level.	1 ✓	1
	2 ✓	2
	3 ✓	3
	4 ✓	4
	5 ✓	5
	6 ✓	6
	7 ✓	7

Activity 4: Written Assessment 1

- Number, operations and relationships
- The copy of the learners' assessment (and memo) is given in Lesson 22.

Lesson 22 Question 1: 2 marks Question 2: 1 mark Question 3: 3 marks Question 4: 2 marks Question 5: 3 mark Question 6: 4 marks Question 7: 5 marks Question 8: 2 marks Question 9: 1 mark Question 10: 2 marks Total marks: 25	Assign levels according to the following totals		
	Marks	Percentage	Level
	0-7	0-29	1
	8-9	30-39	2
	10-12	40-49	3
	13-14	50-59	4
	15-17	60-69	5
	18-19	70-79	6
	20-25	80-100	7

Assessment Task 2**Activity 1 and 2: Oral and practical**

- Number, operations and relationships
- Observation
- Note that you will not be able to assess your learners in one day, so you should assess a group of learners each day until they have all been observed. You can do this as a fun activity so the counting does not become too repetitive.

Activity 1:

- Counts in 2s to 500.
- Counts in 5s to 500.
- Counts in 3s to 100.
- Counts in 4s to 100.

Level	Criterion
1	Cannot count in 2s, 3s, 4s, and 5s
2	Needs constant assistance to count in 2s, 3s, 4s, and 5s
3	Counts in 2s and 5s but cannot count in 3s and 4s
4	Counts in 2s, 3s and 5s but cannot count in 4s
5	Counts in 2s, 3s, 5s and 4s but makes a few careless mistakes
6	Counts in 2s and 5s to 500 and 3s and 4s to 100 with no errors
7	Counts in 2s and 5s to 500 and 3s and 4s to 100 and beyond with no errors

Activity 2:

- Count forwards and backwards in 2s from 0 to 500.
- Count forwards and backwards in 3s from 0 to 500.
- Count forwards and backwards in 4s from 0 to 500.
- Count forwards and backwards in 5s from 0 to 500.
- Count forwards and backwards in 50s from 0 to 750.
- Count forwards and backwards in 100s from 0 to 1 000.

Level	Criterion
1	Cannot count verbally in 2s, 3s, 4s, 5s, 50s, and 100s
2	Counts verbally in 2s, 3s, 4s, 5s, 50s, and 100s but with constant assistance
3	Counts verbally in 2s, 3s 4s, 5s, 50s, and 100s with some assistance with some of the counting sequences
4	Counts verbally in 2s, 3s 4s, 5s, 50s, and 100s but makes a few careless errors
5	Counts verbally in 2s, 3s 4s, 5s, 50s, and 100s but makes 1 or 2 careless errors
6	Counts verbally independently in 2s, 3s 4s, 5s, 50s, and 100s with no errors
7	Independently and consistently counts verbally in 2s, 3s 4s, 5s, 50s, and 100s beyond the specified number ranges

Activity 3: Practical

- Measurement of length

Activity 3: Measurement of length (Lesson 38)		
Observation checklist		✓ or x
• Use measurement vocabulary such as metre		
• Estimate length using metres.		
• Measure length using metres.		
• Compare and order length using metres.		
• Record length using metres.		
• Use measurement vocabulary such as longer, shorter		
• Use measurement vocabulary such as taller, wider, metre		
To assign levels, count the number of positive observations		Level
The ticks can be for any of the above criteria. The number of ticks determines the level.	1 ✓	1
	2 ✓	2
	3 ✓	3
	4 ✓	4
	5 ✓	5
	6 ✓	6
	7 ✓	7

Activity 4: Written Assessment 2

- Number, operations and relationships, patterns, space and shape and data handling.
- The copy of the learners' assessment (and memo) is given in Lesson 46.

Lesson 46 Question 1: 3 marks Question 2: 3 marks Question 3: 3 marks Question 4: 2 marks Question 5: 1 mark Question 6: 1 mark Question 7: 1 mark Question 8: 1 mark Question 9: 3 marks Question 10: 1 marks Question 11: 1 mark Question 12: 4 marks Question 13: 2 marks Question 14: 1 mark Question 15: 1 mark Question 16: 2 marks Total marks: 30	Assign levels according to the following totals		
	Marks	Percentage	Level
	0-9	0-29	1
	9-11	30-39	2
	12-14	40-49	3
	15-17	50-59	4
	18-20	60-69	5
	21-23	70-79	6
	22-30	80-100	7

Term 2: Grade 3 Mark Record Sheet

Learner Name	Surname	Assessment Task 1		Task Level	Assessment task 2				Task Level	Term Level	
		Activities				Activities					
		1	2	3	4		1	2	3	4	
		Oral	Oral	Practical Lesson 14	Written Lesson 22		Oral	Oral	Practical Lesson 38	Written Lesson 46	
											</

Term 2: Grade 3 Mark Record Sheet

[illegible]

Date:

Lesson 1: Revise number**Teacher's notes**

CAPS Topics: 1.1 Count objects, 1.2 Count forwards and backwards, 1.3 Number symbols and number names, 1.4 Describe, compare and order numbers, 1.16 Mental mathematics

Concepts and skills for today

- Counts out 200 objects reliably, saying the names in sequence.
- Recognise, identify and read number symbols and names 0 to 500.
- Compare and order whole numbers up to 99.
- Decompose two-digit numbers into multiples of tens and units/ones up to 99.

Lesson vocabulary: Number symbols 1 to 500, number names one to two hundred and fifty, greatest, smallest, smaller, bigger

Prior knowledge

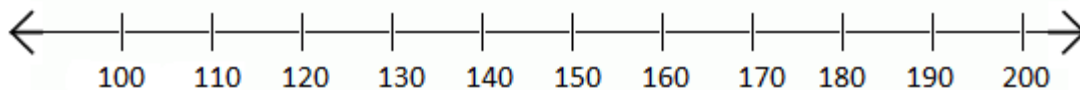
- In Grade 3 term 1 learners should have learnt to work with numbers up to 500 as above.

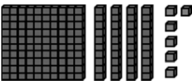
Mental maths – 10 minutes

Do number bonds up to 20 with your learners.

Warm up activity – 20 minutes

Draw a number line from 100 to 200 on the board. Ask your learners where to place numbers on this number line, such as 102, 125, 146, 170, 185 and so on.

**Lesson content – concept development – 30 minutes**

Activity	Observation	Comments
• Give learners 146 counters to count. Note if learners count in ones, tens or hundreds. • Give learners base ten blocks to count. How many blocks do you count?  Note if they count 100, 110, 120, 130, 140, ...141, 142, 143... Give learners some flard cards. Ask them to show you 167. <i>How would you break the one hundred and sixty seven into hundreds, tens and units?</i> 1 6 7 ➡ 100 60 7 <i>We can say 167 is the same as 100 and 60 and 7.</i> Do the same with 127, 132, 163, 169 and 194 Write 50 on the board. Ask the learners to give you a number smaller and then greater than the number. Do the same with 48, 52, 54 and 79.	Can learners: – count object to 200 in groups? – decompose two-digit numbers up to 99? – order and compare whole numbers up to 99?	

Add any revision activities on number that you feel you need to revise before introducing the second term's work.

Classwork activity (Group/independent work) – 30 minutes

Do the following activity in your maths book.

1. Give two numbers smaller than 81. (Any two numbers between 0 and 80)
2. Break 58 into tens and units. ($50 + 8$)
3. Write the number from the smallest to the greatest: 40, 22, 31, 32, 41 (22, 31, 32, 40, 41)
4. Complete: $90 + 8 = \square$ (98)

Reflection

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Date:

Lesson 2: Revise addition and subtraction**Teacher's notes****CAPS Topics:** 1.7 and 1.13 Addition and subtraction, 1.16 Mental mathematics**Concepts and skills for today**

- Solve word problems in context and explain own solution to problems involving addition and subtraction with answers up to 99.
- Add up to 99.
- Subtract from 99.

Lesson vocabulary: Number symbols 1 to 99, number names one to hundred, greatest, smallest, smaller, bigger**Prior knowledge**

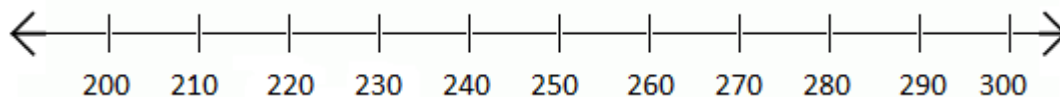
- In Grade 2 term 1 learners should have learnt to add up to 99 and subtract from 99.

Mental maths – 10 minutes

Practise number bonds up to 20.

Warm up activity – 20 minutes

Draw a number line from 200 to 300 on the board. Ask your learners where to place numbers on this number line, such as 209, 255, 234, 280, 275 and so on.

**Lesson content – concept development – 30 minutes**

Activity	Observation	Comments
Give learners word problems to answer orally. There are ninety children in the hall. Another three arrived. How many children are in the hall? Thirty seven children left to go and play cricket. How many children are in the hall now?	Can learners: – solve addition and subtraction problems up to 99?	
Give another word problem. We are 64 children in the bus. Twenty nine got off at the first stop. How many children are left in the bus? Ask the learners to make a drawing to help them solve the problem.		

Add any revision activities on number that you feel you need to revise before introducing the second term's work.

Classwork activity (Group/independent work) – 30 minutes

Calculate the following.

1. $54 + 32 = \square$
2. $65 - 23 = \square$
3. $70 + \square = 98$
4. $\square - 35 = 84$

Reflection

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Date:

Lesson 3: Revise grouping and sharing**Teacher's notes****CAPS Topics:** 1.9 Grouping and sharing, 1.2 Counting forwards and backwards, 1.16 Mental mathematics**Concepts and skills for today**

- Solve word problems in context and explain own solutions to problems that involve equal sharing and grouping up to 50 with answers that may include remainders.

Lesson vocabulary: Group, grouping, left over, sharing**Prior knowledge**

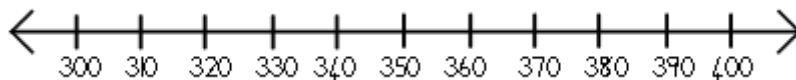
- In Grade 2 term 1 learners should have learnt to work with grouping and sharing up to 50.

Mental maths – 10 minutes

Practise number bonds up to 20,

Warm up activity – 20 minutes

Draw a number line from 300 to 400 on the board. Ask your learners where to place numbers on this number line, such as 319, 325, 244, 380, 389 and so on.

**Lesson content – concept development – 30 minutes**

Activity	Observation	Comments
- Give learners 36 counters. Ask learners to put the counters into groups of 6. - Ask learners: <i>How many groups of six counters will you have?</i> - Give learners 36 counters. Ask learners: <i>How many groups of 4 counters can you make?</i> - Do the same but ask them how many groups of 3 counters they can make.	Can learners: – group with whole numbers up to 50? Can learners: – share with whole numbers up to 50?	
- Give each pair of learners 43 counters. Tell them to share the counters between them in their pairs. - Ask learners: <i>How many counters do you each have?</i> (Answer: 21 and there is one left) - Ask the learners: <i>Why is there 1 left over?</i> (Answer: That would not be sharing equally/ Sharing equally means we all have to have the same amount) Note that this can also be linked to fractions. Learners might answer each will get 21 and a half counters.		

Add any revision activities on number that you feel you need to revise before introducing the second term's work.

Classwork activity (Group/independent work) – 30 minutes

Make drawings to show and then give the answer.

- 35 sweets shared amongst two children. Do you have any sweets left?
- Put forty one sweets in three packets. Do you have any sweets left?

Reflection

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Date:

Lesson 4: Revision – data handling and measurement**Teacher's notes****CAPS Topics:** 1.2 Counting forwards and backwards, 4.4 Capacity/Volume, 5.5 Represent data, 1.16 Mental mathematics**Concepts and skills for today**

- Estimate, measure, compare and order the capacity of containers (i.e. the amount the container can hold if filled) by using non-standard measures e.g. spoons and cups.
- Estimate, measure, compare, order and record the capacity of objects by measuring in litres, half litres and quarter litres.
- Represent data in tables.

Lesson vocabulary: Numbers 0-500, litres, tables**Prior knowledge**

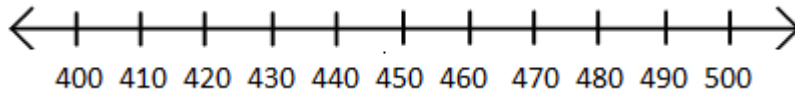
- In Grade 3 term 1 learners should have learnt about capacity and representing data in tables.

Mental maths – 10 minutes

Practise number bonds up to 20.

Warm up activity – 20 minutes

Draw a number line from 400 to 500 on the board. Ask your learners where to place numbers on this number line, such as 405, 438, 467, 422, 488 and so on.

**Lesson content – concept development – 30 minutes**

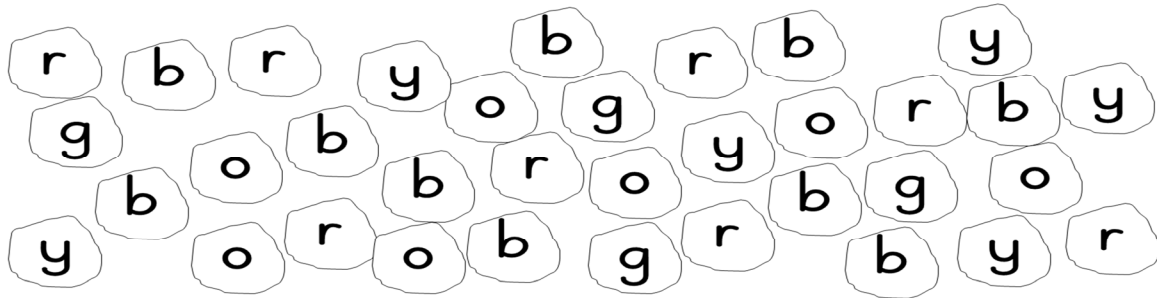
Activity	Observation	Comments
Revise comparing and ordering capacity using standard units. See term 1.	Can learners: - compare and order according to capacity? - represent data in pictograph with one-to-one correspondence?	
• Represent data in pictograph with one-to-one correspondence – use the classwork activity given below to tally data that has been collected and draw a pictograph. Collect data on other themes from learners in the class and let them draw other pictographs to represent the data.		

Add any revision activities on number that you feel you need to revise before introducing the second term's work.

Classwork activity (Group/independent work) – 30 minutes

Complete a table in your classwork book.

I collected this data. These are the favourite colours in our class. y stands for yellow, b for blue, g for green, o for orange and r for red.

**Reflection**

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Lesson Topic: Place value 100-200**Teacher's notes**

CAPS Topics: 1.1 Count objects 1.2 Count forwards and backwards 1.5 Place value 1.16 Mental Mathematics

Lesson vocabulary: Place values, digits, decompose, multiples, hundreds, tens, ones, estimate, check

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Recognise place value of numbers to 99.
- Identify and state the value of each digit in a three digit number

Assessment

Formal Task 1 Activity 1: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 1s from any number between 0 and 300. E.g. 203, 202, 201, 200, 199, ...

Mental maths activity - 10 minutes

	Arrange these numbers from the smallest to the biggest	Answer		Arrange these numbers from the smallest to the biggest	Answer
1.	116, 145, 120, 64	64, 116, 120, 145	6.	200, 195, 199, 142	142, 195, 199, 200
2.	200, 145, 87, 97, 115	87, 97, 115, 145, 200	7.	54, 69, 32, 102, 45	32, 45, 54, 69, 102
3.	179, 58, 39, 200, 157	39, 58, 157, 179, 200	8.	98, 65, 102, 130, 14	14, 65, 98, 102, 130
4.	89, 150, 45, 39, 55	39, 45, 55, 89, 150	9.	89, 24, 102, 68, 31	24, 31, 68, 89, 102
5.	15, 16, 48, 102, 98	15, 16, 48, 98, 102	10.	166, 160, 106, 161, 116	106, 116, 160, 161, 166

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes

Resources: Slates, base ten blocks, flard cards, number cards, number lines

Concepts:

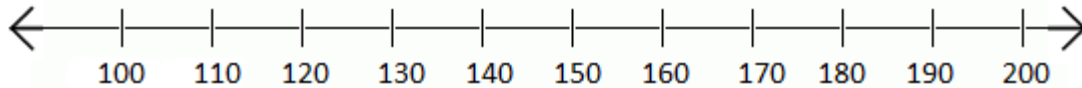
- Recognise the place value of numbers to 300 and know what each digit represents.
- Decompose 3 digit numbers up to 200 into multiples of hundreds, tens and ones.
- Identify and state the value of each digit.

Activity 1: Learners work in pairs.

Write 164 on the board. Ask learners to:

- Read the number.
- Write the number on their slates.
- Show the number with base ten blocks.
- Show the number with your flard cards.
- Repeat with the numbers 168, 163 and 165.

Activity 2: Draw a 100 - 200 number line on the board, numbered in 10s.



- Ask the learners to show you on the number line which side of 164 will be more and which side less.
- Which number comes before 164?
- Which number comes after 164?
- Repeat with the numbers 168, 163 and 165.

Activity 3

Give learners cards for the numbers 160 to 170. Ask them to place the cards in the correct order from smallest to biggest.

Remediation: Counting: Give learners base ten blocks to use to count up to 100. In tens: 10, 20, 30, 40, 50, 60, 70, 80, 90. Count up to 200 using base ten blocks: 100, 200. Learners use base ten blocks to show you 172. Ask them to show the number that is: one smaller than 172 (171) and 17 (169). Ask them to show the number that is: one bigger than 172 (173) and 179 (180).

Enrichment: See Enrichment Activity Cards 2.1-2.4

4. Classwork activity (Group/independent work) – 25 minutes

Do the following questions in your maths book.

1. Write a number sentence and the answer for: 100 blocks and 20 blocks and 9 blocks. ($100 + 20 + 9 = 129$)
2. Write a number sentence and the answer for: 100 and 80 and 1. ($100 + 80 + 1 = 181$)
3. *How many tens are in 260?*
4. *How many hundreds are in 99?*
5. *How many ones are there in 45?*
6. Write 128 in words (one hundred and twenty-eight).
7. Write 105 in words (one hundred and five).
8. Complete DBE Worksheet 33b (Page 77).

5. Homework activity – 5 minutes

Do the following questions in your homework book.

1. Write a number sentence and answer for: 100 blocks and 60 blocks and 2 blocks. ($100 + 60 + 2 = 162$)
2. Write a number sentence and answer for: 90 and 100 and 2. ($100 + 90 + 2 = 192$)
3. Draw and complete a number line. Start at 180 and end at 190. Write in all the numbers bigger than 186. (187, 188, 189) Write in all the numbers smaller than 184. (183, 182, 181)
4. Write 176 in words (one hundred and seventy-six).

6. Reflection on lesson

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Date:

Lesson Topic: Numbers 200 – 300**Teacher's notes**

CAPS Topics: 1.1 Count objects 1.2 Count forwards and backwards 1.3 Number symbols and number names 1.4 Describe, compare and order numbers 1.6 Mental Mathematics

Lesson vocabulary: Estimate, check, describe, compare, whole numbers, smaller than, greater than, more than, fewer than, equal to, smallest, greatest, ordinal numbers (first, second, etc), place, position, number symbols and names.

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Describe and compare whole numbers up to 50 using smaller than, greater than, more than, fewer than and is equal to, as well as smallest to greatest and greatest to smallest.
- Identify, recognise, write and read number symbols 0 to 150 and number names 0 to 50.

Assessment

Formal Task 1 Activity 1: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 1s from any number between 0 and 400. E.g. 389, 390, 391,...

Mental maths activity - 10 minutes

	Arrange these numbers from the smallest to the biggest	Answer		Arrange these numbers from the smallest to the biggest	Answer
1.	201, 300, 298, 187	300, 298, 201, 187	6.	78, 98, 125, 65	125, 98, 78, 65
2.	211, 300, 165, 122	300, 211, 165, 122	7.	154, 145, 123, 132	154, 145, 132, 123
3.	124, 201, 152, 98	201, 152, 124, 98	8.	12, 54, 89, 0, 45	89, 54, 45, 12, 0
4.	78, 15, 98, 87, 221	221, 98, 87, 78, 15	9.	3, 4, 9, 201, 2	201, 9, 4, 3, 2
5.	14, 56, 102, 300	300, 102, 56, 14	10.	154, 145, 114, 169	169, 154, 145, 114

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes

Resources: Number boards, counters

Concepts:

- Describe and compare whole numbers up to 500 using smaller than, greater than, more than, fewer than and is equal to, as well as smallest to greatest and greatest to smallest.
- Use ordinal numbers to show order, place and position
- Identify, recognise, write and read number symbols 0 to 100 and number names 0 to 250.

Activity 1:

Individual work.

Give each learner a 200–300 number board. Ask them to place counters on following numbers:

- 212, 220, 202, 201, 221
- The numbers that are between 215 and 220 (216, 217, 218, 219)

Date:

- The numbers that are between 299 and 296 (298,297)
- The numbers that are between 234 and 239 (235, 236, 237, 238)

Activity 2:

Still using the 200-300 number board, ask the learners the following questions. Remember to each time ask them how they came to the answer.

- What is the first number (201) , second number (202), ----tenth number (210)
- 10th number (210), 20th number (220), 30th number (230), ----100th number (300)
- Ask randomly what is the 40th number, 60th number , etc.

Remediation:

- Get learners to stand in a line. Revise ordinal numbers. Ask Who is first, 5th, 3rd, etc. Show them how to count from the front.
- Work sequentially on half the number board i.e. from 200-250.
- Pointing at 200 ask '*If we start here, which number is this?* (first), and the next number, (second), and then (third).....(twentieth)'
- Then work sequentially with the tens pointing at the 10th 20th,----50th numbers first in sequence and then randomly.

Enrichment: See Enrichment Activity Cards 2.1-2.4.

4. Classwork activity (Group/independent work) – 25 minutes

Do the following questions in your maths book.

1. Colour any five numbers that are smaller than 276 in red. (Draw an 200-300 number line)
2. Colour any five numbers that are bigger than 276 in orange. (Draw a number line)
3. Write these numbers from the smallest to the biggest: 215, 255, 205, 251, 250 (205, 215, 250, 251, 255)
4. Write these numbers from the biggest to the smallest: 299, 209, 219, 290, 201 (201, 209, 219, 290, 299)
5. Write 237 in words. (two hundred and thirty-seven)
6. Complete DBE Worksheet 33a (Page 76)

5. Homework activity – 5 minutes

Do the following questions in your homework book.

1. Write down a number that is bigger than 224, but smaller than 229. (225/226/227/228)
2. Write these numbers from the biggest to the smallest: 223, 203, 213, 233 (233, 223, 213, 203)
3. Write the same numbers from the smallest to the biggest. (203, 213, 223, 233)
4. Write 215 in words. (two hundred and fifteen)

6. Reflection on lesson

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Date:

Lesson Topic: Numbers 201 - 300**Teacher's notes**

CAPS Topics: 1.1 Count objects 1.2 Count forwards and backwards 1.3 Number symbols and number names 1.4 Describe, compare and order numbers 1.16 Mental Mathematics

Lesson vocabulary: Describe, compare, whole numbers, smaller than, greater than, more than, fewer than, equal to, smallest, greatest, ordinal numbers, place, position, number symbols and names, estimate, check, first, second....hundredth

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Describe and compare whole numbers up to 50 using smaller than, greater than, more than, fewer than and is equal to, as well as smallest to greatest and greatest to smallest.
- Identify, recognise, write and read number symbols 0 to 150 and number names 0 to 50.

Assessment

Formal Task 1 Activity 1: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 1s from any number between 0 and 500. E.g. 467, 468, 469,

Mental maths activity - 10 minutes

	Answer the following:	Answer		Answer the following:	Answer
1.	What is 1 more than 336?	337	6.	What is 3 less than 45?	42
2.	What is 1 more than 254?	255	7.	What are 2 less than 71?	69
3.	What are 2 more than 330?	332	8.	What is 4 less than 354?	350
4.	What is 2 more than 221?	223	9.	What are 10 less than 380?	370
5.	What are 3 more than 145?	148	10.	What is 10 less than 400?	390

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes

Resources: Slates, base ten blocks, flard cards, number cards, number lines

Concepts:

- Describe and compare whole numbers up to 500 using smaller than, greater than, more than, fewer than and is equal to, as well as smallest to greatest and greatest to smallest.
- Use ordinal numbers to show order, place and position
- Identify, recognise, write and read number symbols 0 to 100 and number names 0 to 250.

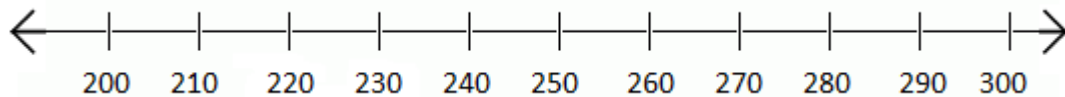
Activity 1: Learners work in pairs.

Write 264 on the board. Ask learners to:

- Read the number.
- Write the number on your slate.
- Show the number with your base ten blocks.
- Show the number with your flard cards.
- Repeat the sequence of questions for other numbers in the range, e.g. 294, 201, 283, 219.

Activity 2:

Draw a 200 - 300 number line on the board (demarcations in 10's: 200, 205, 210.....300).



Ask learners to come up to the board and help you to place the following numbers on the number line 294, 201, 264, 283, 219

Activity 3:

Give learners cards for the numbers 260 to 270

- Place the numbers cards in the correct order.

Remediation: Counting:

On the same number line ask learners to show the position of the numbers that is:

- One smaller than 275 (274) one bigger than 272 (276).
- Two smaller than 275 (273) two bigger than 272 (277).
- One smaller than 240 (239) one bigger than 240 (241)
- Two smaller than 240 (238) two bigger than 240 (242).

Enrichment: See Enrichment Activity Cards 2.1-2.4.

4. Classwork activity (Group/independent work) – 25 minutes

Do the following questions in your maths book.

1. Write a number sentence and the answer for 200 blocks and 20 blocks and 9 blocks. ($200 + 20 + 9 = 229$)
2. Write a number sentence and the answer for 200 and 80 and 1. ($200 + 80 + 1 = 281$)
3. Draw and complete a number line. Start at 290 and end at 300. Circle all the numbers smaller than 295. (291, 292, 293, 294). Underline all the numbers bigger than 295. (296, 297, 298, 299)
4. Write 233 in words. (two hundred and thirty-three)
5. Write 204 in words. (two hundred and four)

5. Homework activity – 5 minutes

Do the following questions in your homework book.

1. Write a number sentence and answer for 200 blocks and 60 blocks and 2 blocks. ($200 + 60 + 2 = 262$)
2. Write a number sentence and answer for 90 and 200 and 2. ($200 + 90 + 2 = 292$)
3. Draw and complete a number line. Start at 280 and end at 290. Circle all the numbers bigger than 286. (287, 288, 289) Underline all the numbers smaller than 284. (283, 282, 281)
4. Write 226 in words. (two hundred and twenty-six)

6. Reflection on lesson

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Date:

Lesson Topic: 3-D objects**Teacher's notes****CAPS Topics:** 1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 3.2 3-D objects**Lesson vocabulary:** Estimate, check, 2-D shapes, 3-D objects, ball shapes, spheres, box shapes, prisms, cylinders, pyramids, cones, curved surfaces, roll, slide, side, surface,**Prior knowledge**

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Recognise and name 3-D objects in the classroom and pictures – ball shapes (spheres), box shapes (prisms), cylinders.
- Describe, sort and compare 3-D objects in terms of: size, objects that roll and objects that slide.

Assessment

Formal Task 1 Activity 1: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 10s from any number between 0 and 500. e.g. 210, 220, 230, ...

Mental maths activity - 10 minutes

	Answer the following:	Answer		Answer the following:	Answer
1.	What is 1 more than 354?	355	6.	What is 3 less than 285?	182
2.	What is 1 less than 398?	397	7.	What are 4 more than 54?	58
3.	What are 2 more than 102?	104	8.	What is 4 less than 78?	74
4.	What are 2 less than 305?	303	9.	What are 10 more than 158?	168
5.	What are 3 more than 389?	392	10.	What is 10 less than 48?	38

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes**Resources:** Old magazines, building blocks**Concepts for the day:**

- Recognise and name 3-D objects in the classroom and pictures – ball shapes (spheres), box shapes (prisms), cylinders, pyramids, cones.
- Describe, sort and compare 3-D objects in terms of: 2-D shapes that make up the faces of 3-D objects and flat or curved surfaces.

Activity 1:

Take the children outside.

- Ask one child to demonstrate rolling on the ground. Give others a turn to roll.
- Ask one child to demonstrate sliding. Give others a turn to slide.
- Do this many times until the concepts of 'roll' and 'slide' are established.

Activity 2:

Return to the class

- **Note:** Help children to become familiar with the shape terminology by asking questions and allowing children to use the words they have learnt.

- Give children building blocks. Ask them to sort the blocks into those that can roll (e.g. sphere, cone) and those that can slide (e.g. prism, pyramid)
- *Which blocks can slide?* (sphere, cone) *What can you tell me about them?* (They have flat surfaces/ faces/ sides)
- *Which blocks can roll?* (prism, pyramid) *What can you tell me about them?* (They have round surfaces /faces/ sides)
- *Are there any blocks that can roll and slide?* Allow learners to experiment (cylinder and cone)
- *Why do they roll and slide?* (because they have flat and curved surfaces).
- Ask learners to show which surfaces are flat and which surfaces are curved.

Remediation: Give learners building blocks. Ask them to build anything of their choice. Ask them to name the objects they used and which of these objects can roll and which can slide?

Enrichment: See Enrichment Activity Cards 2.1-2.4.

4. Classwork activity (Group/independent work) – 25 minutes

1. Look in the magazines, pamphlets and newspapers for pictures of two objects that look like each of the following shapes

- balls.
- boxes
- cylinders

2. Paste them in your maths book and write down why you have chosen that picture.

3. Draw a cylinder balancing on a box.

5. Homework activity – 5 minutes

Do the following questions in your homework book. Draw a picture using only box-shaped objects.

1. Draw a picture using box-shaped and cylinder-shaped objects.
2. Draw a picture using ball-shaped and cylinder-shaped objects.
3. Draw a cylinder balancing on a box.

6. Reflection on lesson

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Date:

Lesson Topic: Numbers 300 - 400**Teacher's notes**

CAPS Topics: 1.1 Count objects 1.2 Count forwards and backwards 1.3 Number symbols and number names 1.4 Describe, compare and order numbers 1.16 Mental Mathematics

Lesson vocabulary: Describe, compare, whole numbers, smaller than, greater than, more than, fewer than, equal to, smallest, greatest, ordinal numbers, place, position, number symbols and names, estimate, check

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Describe and compare whole numbers up to 50 using smaller than, greater than, more than, fewer than and is equal to, as well as smallest to greatest and greatest to smallest.
- Identify, recognise, write and read number symbols 0 to 150 and number names 0 to 50.

Assessment

Formal Task 1 Activity 1: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 10s from any given number between 0 and 500. E.g. 411, 421, 431, ...

Mental maths activity - 10 minutes

	Arrange these numbers from biggest to smallest	Answer		Arrange these numbers from biggest to smallest	Answer
1.	143, 500, 489, 215	500, 489, 215, 143	6.	87, 98, 150, 306	306, 150, 98, 87
2.	450, 95, 125, 148	450, 148, 125, 95	7.	105, 208, 218, 12	218, 208, 105, 12
3.	94, 105, 35, 405, 0	405, 105, 94, 35, 0	8.	78, 201, 357, 94	357, 201, 94, 78
4.	102, 54, 120, 320	320, 120, 102, 54	9.	98, 58, 305, 51	305, 98, 58, 51
5.	45, 465, 245, 105	465, 245, 105, 45	10.	98, 210, 358, 450	450, 358, 210, 98

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes

Resources: Number boards, counters

Concepts:

- Describe and compare whole numbers up to 400 using smaller than, greater than, more than, fewer than and is equal to, as well as smallest to greatest and greatest to smallest.
- Use ordinal numbers to show order, place and position
- Identify, recognise, write and read number symbols 0 to 100 and number names 0 to 250.

Activity 1

Individual work.

Give each learner a 301–400 number board. Ask them to place counters on following numbers:

- 312, 320, 302, 301, 321
- The numbers that are in between 315 and 320 (316, 317, 318, 319)
- The numbers that are in between 399 and 396 (398, 397)
- The numbers that are in between 334 and 339 (335, 336, 337, 338)

Activity 2

Still using the 300-400 number board as the learners the following questions. Each time ask them how they came to the answer.

What is the first number (301) , second number (302), ----tenth number (310)

10th number (310), 20th number (320), 30th number (330), ----100th number (400)

Ask randomly what is the 20th number (320), 50th number (350) , etc

Ask randomly what is the 23rd number (323), 57th number (357), 82nd number (382)

Remediation:

Work sequentially on half the number board i.e. from 300-350.

Pointing at 300 ask: *If we start here, which number is this?* (first), and the next number, (second), and then (third).....(twentieth)'

Then work sequentially with the tens.

Enrichment: See Enrichment Activity Cards 2.1-2.4

4. Classwork activity (Group/independent work) – 25 minutes

Do the following questions 1 to 3 orally on a 301-400 number board and questions 4 and 5 in your maths book.

1. Colour any five numbers that are smaller than 376 in red.
2. Colour any five numbers that are bigger than 376 in orange.
3. Write these numbers from the smallest to the biggest: 315, 355, 305, 351, 350 (305, 315, 350, 351, 355)
4. Write these numbers from the biggest to the smallest: 399, 309, 319, 390, 301 (301, 309, 319, 390, 399)
5. Write 237 in words. (two hundred and thirty-seven)
6. Complete DBE Worksheet 41a (Page 96).

5. Homework activity – 5 minutes

No homework.

6. Reflection on lesson

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Date:

Lesson Topic: Numbers 301 – 400**Teacher's notes**

CAPS Topics: 1.1 Count objects 1.2 Count forwards and backwards 1.3 Number symbols and number names 1.4 Describe, compare and order numbers 1.16 Mental Mathematics

Lesson vocabulary: Describe, compare, whole numbers, smaller than, greater than, more than, fewer than, equal to, smallest, greatest, ordinal numbers, place, position, number symbols and names.

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Describe and compare whole numbers up to 50 using smaller than, greater than, more than, fewer than and is equal to, as well as smallest to greatest and greatest to smallest.
- Identify, recognise, write and read number symbols 0 to 150 and number names 0 to 50.

Assessment

Formal Task 1 Activity 2: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 100s between 0 and 500. E.g. 100, 200, 300, 400, 500

Mental maths activity - 10 minutes

	Give me the number/s between:	Answer		Give me the number/s between:	Answer
1.	457 and 460	458 and 459	6.	51 and 54?	52 and 53
2.	300 and 298?	299	7.	500 and 497?	498 and 499
3.	51 and 54?	52 and 53	8.	487 and 490	488 and 489
4.	207 and 204?	206 and 205	9.	124 and 126?	125
5.	45 and 48?	46 and 47	10.	101 and 98?	100 and 99

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes

Resources: Slates, base ten blocks, flard cards, number cards, number lines

Concepts:

- Describe and compare whole numbers up to 400 using smaller than, greater than, more than, fewer than and is equal to, as well as smallest to greatest and greatest to smallest.
- Use ordinal numbers to show order, place and position
- Identify, recognise, write and read number symbols 0 to 100 and number names 0 to 250.

Activity 1: Learners work in pairs.

Write 364 on the board. Ask learners to:

- Read the number.
- Write the number on your slate.
- Show the number with your base ten blocks.
- Show the number with your flard cards.

Date:

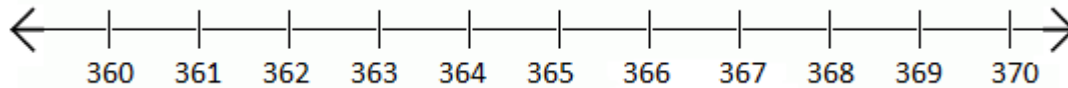
Activity 2:

Give learners cards for the numbers 360 to 370

- Place the numbers cards in the correct order.

Activity 3:

Draw a 360 - 370 number line on the board.



- Which number is 2 numbers before 369? (367)
- Which number comes three numbers after 367? (370)
- Which even numbers are between 361 and 368? (362, 364, 366).

Remediation: Counting: Give learners base ten blocks to use to count up to 100. In tens: 10, 20, 30, 40, 50, 60, 70, 80, 90. Count up to 400 using the base ten blocks: 100, 200, 300, 400. Learners also use the base ten blocks to show you 372. Ask them to show you the number that is: One smaller than 372 (371) one bigger than 372 (373).

Enrichment: See Enrichment Activity Cards 3.1-3.4.

4. Classwork activity (Group/independent work) – 25 minutes

Do the following questions in your maths book.

- Write a number sentence and the answer for 300 blocks and 20 blocks and 9 blocks. ($300 + 20 + 9 = 329$)
- Write a number sentence and the answer for 300 and 80 and 1. ($300 + 80 + 1 = 381$)
- Draw and complete a number line. Start at 390 and end at 400. Underline all the numbers smaller than 395. (391, 392, 393, 394) Circle all the numbers bigger than 395. (396, 397, 398, 399)
- Write 233 in words. (two hundred and thirty-three)
- Write 244 in words. (two hundred and forty-four)
- Complete DBE Worksheet 41b (Page 97)

5. Homework activity – 5 minutes

Do the following questions in your homework book.

- Write a number sentence and answer for 300 blocks and 60 blocks and 2 blocks. ($300 + 60 + 2 = 362$)
- Write a number sentence and answer for 90 and 300 and 2. ($300 + 90 + 2 = 392$)
- Draw and complete a number line. Start at 380 and end at 390. Underline all the numbers bigger than 386. (387, 388, 389). Circle all the numbers smaller than 384. (383, 382, 381)
- Write 226 in words. (two hundred and twenty-six)

6. Reflection on lesson

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Date:

Lesson Topic: Numbers 400 - 500**Teacher's notes**

CAPS Topics: 1.1 Count objects 1.2 Count forwards and backwards 1.3 Number symbols and number names 1.4 Describe, compare and order numbers 1.16 Mental Mathematics

Lesson vocabulary: Describe, compare, whole numbers, smaller than, greater than, more than, fewer than, equal to, smallest, greatest, ordinal numbers, place, position, number symbols, number names

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Describe and compare whole numbers up to 50 using smaller than, greater than, more than, fewer than and is equal to, as well as smallest to greatest and greatest to smallest.
- Identify, recognise, write and read number symbols 0 to 150 and number names 0 to 50.

Assessment

Formal Task 1 Activity 2: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 10s from any given multiple between 0 and 500. E.g. 458, 468, 478, ...

Mental maths activity - 10 minutes

	Arrange these numbers from smallest to biggest.	Answer		Arrange these numbers from smallest to the biggest.	Answer
1.	458, 421, 312, 497	312, 421, 458, 497	6.	35, 10, 98, 105	10, 35, 98, 105
2.	78, 54, 65, 102, 0	0, 54, 65, 78, 102	7.	98, 57, 123, 451	57, 98, 123, 451
3.	104, 56, 201, 354	56, 104, 201, 354	8.	89, 54, 105, 60	54, 60, 89, 105
4.	498, 365, 105, 32	32, 105, 365, 498	9.	78, 105, 64, 201	64, 78, 105, 201
5.	487, 500, 124, 305	124, 305, 487, 500	10.	89, 52, 500, 487	52, 89, 487, 500

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes

Resources: Number boards, counters

Concepts:

- Describe and compare whole numbers up to 500 using smaller than, greater than, more than, fewer than and is equal to, as well as smallest to greatest and greatest to smallest.
- Use ordinal numbers to show order, place and position
- Identify, recognise, write and read number symbols 0 to 100 and number names 0 to 250.

Activity 1

Individual work.

Ask the learners to place counters on these numbers and write them from the

- smallest to the biggest: 401, 421, 410, 420, 402 (401, 402, 410, 420, 421)

Date:

- biggest to the smallest: 401, 421, 410, 420, 402 (421, 420, 412, 402, 401)

Activity 2

Give each learner a 401–500 number board. Ask them to place counters on following numbers:

- 412, 420, 402, 401, 421
- The numbers that are in between 415 and 420 (416, 417, 418, 419)
- The numbers that are in between 499 and 496 (498, 497)
- The numbers that are in between 434 and 439 (435, 436, 437, 438)

Activity 3

Still using the 401-500 number board, ask the learners the following questions. Each time ask them how they came to the answer.

What is the 10th number? (410), 20th number? (420), 30th number? (430), 40th number? (440), 100th number? (500)

Ask randomly: *What is the 41st number? (441), 62nd number? (462) 38th number? (438) etc.*

Problem solving: I have a number between 410 and 420.

The number ends on a five. *What is my number?* (415) Show it with base ten blocks.

Remediation: Ask the learners to place a counter on 483 on the number board and to read out the number. Remind them not to say ‘four eighty-three’ but ‘four hundred and eighty-three’. Ask the learners to show you a number: That is bigger than 483 and one that is smaller than 483. Ask them to show you 483 with the base ten blocks.

Enrichment: See Enrichment Activity Cards 3.1-3.4.

4. Classwork activity (Group/independent work) – 25 minutes

1. Do the following questions 1 to 3 on a 401-500 number board and questions 4 and 5 in your maths book.
2. Colour any five numbers that have 6 tens in red.
3. Colour any five numbers that have 7 ones in orange.
4. Write these numbers from the smallest to the biggest: 415, 455, 405, 451, 450 (405, 415, 450, 451, 455)
5. Write these numbers from the biggest to the smallest: 499, 409, 419, 490, 401 (401, 409, 419, 490, 499)
6. Write 237 in words. (two hundred and thirty-seven)
7. Complete DBE Worksheet 43a (Page 100)

5. Homework activity – 5 minutes

Do the following questions in your homework book.

1. Write down a number that is bigger than 424, but smaller than 429. (425/426/427/428)
2. Write these numbers from the biggest to the smallest: 423, 403, 413, 433 (433, 423, 413, 403)
3. Write the same numbers from the smallest to the biggest. (403, 413, 423, 433)
4. Write 245 in words. (two hundred and forty-five)

6. Reflection on lesson

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Date:

Lesson Topic: Numbers 401 - 500**Teacher's notes**

CAPS Topics: 1.1 Count objects 1.2 Count forwards and backwards 1.3 Number symbols and number names 1.4 Describe, compare and order numbers 1.16 Mental Mathematics

Lesson vocabulary: Describe, compare, whole numbers, smaller than, greater than, more than, fewer than, equal to, smallest, greatest, ordinal numbers, place, position, number symbols, number names.

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Counting forwards and backwards from 0 – 200.
- Describe and compare whole numbers up to 50 using smaller than, greater than, more than, fewer than and is equal to, as well as smallest to greatest and greatest to smallest.
- Identify, recognise, write and read number symbols 0 to 150 and number names 0 to 50.

Assessment

Formal Task 1 Activity 2: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 5s from any number between 0 and 500. E.g. 105, 110, 115

Mental maths activity - 10 minutes

	Arrange these numbers from the biggest to the smallest.	Answer		Arrange these numbers from the biggest to the smallest.	Answer
1.	78, 105, 98, 305, 2	305, 105, 98, 78, 2	6.	154, 210, 87, 95	210, 154, 95, 87
2.	89, 54, 102, 305	305, 102, 89, 54	7.	45, 78, 102, 421	421, 102, 78, 45
3.	368, 500, 487, 120	500, 487, 368, 120	8.	87, 35, 201, 50, 62	201, 87, 62, 50, 35
4.	78, 54, 105, 307	307, 105, 78, 54	9.	78, 105, 48, 352	352, 105, 78, 48

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes

Resources: Slates, base ten blocks, flard cards, number cards, number lines

Concepts:

- Describe and compare whole numbers up to 500 using smaller than, greater than, more than, fewer than and is equal to, as well as smallest to greatest and greatest to smallest.
- Use ordinal numbers to show order, place and position
- Identify, recognise, write and read number symbols 0 to 100 and number names 0 to 250.

Activity 1: Learners work in pairs.

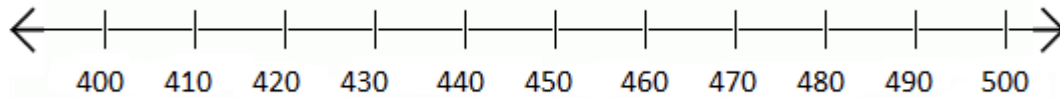
Write 406 on the board. Ask learners to:

- Read the number.
- Write the number on your slate.
- Show the number with your base ten blocks.
- Show the number with your flard cards.

Date:

Activity 2

Draw a 400 -500 number line on the board (demarcations in 5's: 400, 405, 410.....300).



Ask learners to come up to the board and help you to place the following numbers on the number line 494, 483, 464, 403, 422

Activity 3

Give learners cards for the numbers 450 to 470 (450, 452, 454470) in random order.

Ask learners to place the numbers cards in the correct order.

Remediation: Counting: Give learners base ten blocks to use to count up to 100. In tens: 10, 20, 30, 40, 50, 60, 70, 80, 90. Count up to 500 using the base ten blocks: 100, 200, 300, 400, 500. Learners also use the base ten blocks to show you 472. Tell them to show you the number that is: one smaller than 472 (471) one bigger than 472 (473).

Enrichment: See Enrichment Activity Cards 3.1 - 3.4.

4. Classwork activity (Group/independent work) – 25 minutes

Do the following questions in your maths book.

1. Write a number sentence and the answer for 400 blocks and 20 blocks and 9 blocks. ($400 + 20 + 9 = 429$)
2. Write a number sentence and the answer for 400 and 80 and 1. ($400 + 80 + 1 = 481$)
3. Draw and complete a number line. Start at 490 and end at 500. Circle all the numbers smaller than 495. (491, 492, 493, 494) Underline all the numbers bigger than 495. (496, 497, 498, 499)
4. Write 238 in words. (two hundred and thirty-eight)
5. Write 212 in words. (two hundred and twelve)
6. Complete DBE Worksheet 35a (pages 80 and 81)

5. Homework activity – 5 minutes

Do the following questions in your homework book.

1. Write a number sentence and answer for 400 blocks and 60 blocks and 2 blocks. ($400 + 60 + 2 = 462$)
2. Write a number sentence and answer for 90 and 400 and 2. ($400 + 90 + 2 = 492$)
3. Draw and complete a number line. Start at 480 and end at 490. Circle all the numbers bigger than 486. (487, 488, 489) Underline all the numbers smaller than 484. (483, 482, 481)
4. Write 207 in words. (two hundred and seven)

6. Reflection on lesson

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Date:

Lesson Topic: 3-D objects**Teacher's notes****CAPS Topics:** 1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 3.2 3-D objects**Lesson vocabulary:** 2-D shapes, 3-D objects, ball shapes, spheres, box shapes, prisms, cylinders, pyramids, cones, curved surfaces.**Prior knowledge**

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Recognise and name 3-D objects in the classroom and pictures – ball shapes (spheres), box shapes (prisms), cylinders.
- Describe, sort and compare 3-D objects in terms of: size, objects that roll and objects that slide.

Assessment

Formal Task 1 Activity 2: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 2s from any number between 0 and 500. E.g. 102, 104, 106,

Mental maths activity - 10 minutes

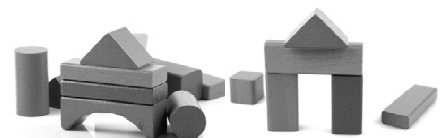
	Answer the following:	Answer		Answer the following:	Answer
1.	What is 1 more than 450?	451	6.	What are 1 less than 400?	399
2.	What is 3 more than 500?	503	7.	What are 2 less than 65?	63
3.	What are 4 more than 322?	326	8.	What are 6 less than 78?	72
4.	What are 5 more than 487?	492	9.	What are 3 less than 491?	487
5.	What are 10 more than 78?	88	10.	What are 10 less than 450?	440

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes**Resources:** a variety of building blocks**Concepts:**

- Recognise and name 3-D objects in the classroom and pictures – ball shapes (spheres), box shapes (prisms), cylinders, pyramids, cones.
- Describe, sort and compare 3-D objects in terms of: 2-D shapes that make up the faces of 3-D objects and flat or curved surfaces.

**Activity 1:** Learners work individually.

Give learners a variety of 3-D shapes e.g. cylinders (closed on both ends), pyramids, cubes, rectangular prisms.

1. Demonstrate and ask learners to hold up the cylinder. Ask the following questions:

- *How many sides does the shape have?*
- *Tell me about the shape of each side.* (Square, circle, flat, curved, etc.)
- Do this with each shape.

Date:

2. Hold up a cylinder and a cone and ask:

- *What can you tell me about them?* (Both have flat and curved surfaces)
- *What is the same?* (Both have flat and curved surfaces)
- *What is different?* (The cylinder has two flat surfaces but the cone has one flat surface. The cone has one pointy end. Both ends of the cylinder are flat.)

3. Do the same with the:

- Cone and the pyramid
- Cone and sphere
- Prism and pyramid
- Sphere and prism (cube)

4. Sort shapes into those that can roll and those that can slide.

Remediation: Get learners to sort a variety of examples of each 2-D shape (different kind of triangles, rectangles etc.) and explain why they sorted them the way they did.

Enrichment: See Enrichment Activity Cards 3.1-3.4.

4. Classwork activity (Group/independent work) – 25 minutes

Complete this table in your maths books:

Shape	Draw all the sides
	
	
	
	
	

5. Homework activity – 5 minutes

Do the following questions in your homework book.

1. Draw a picture using only shapes that can roll.
2. Draw a picture using only shapes that can slide.
3. Draw a picture using shapes that can roll and slide. Name the different shapes that you have used.
4. Draw a picture of an object in your house that can slide.

6. Reflection on lesson

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Date:

Lesson Topic: Geometric patterns**Teacher's notes**

CAPS Topics: 1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 2.1 Geometric patterns

Lesson vocabulary: Geometric patterns, physical objects, predictable, increasing patterns.

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Identify, describe in words and copy geometric patterns in nature, from modern everyday life and from our cultural heritage.

Assessment

Formal Task 1 Activity 2: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 5s from any given number between 0 and 500. E.g. 301, 306, 311, ...

Mental maths activity - 10 minutes

	Answer the following:	Answer		Answer the following:	Answer
1.	What are 2 more than 444?	446	6.	What are 1 less than 154?	153
2.	What are 5 less than 65?	60	7.	What are 5 more than 487?	192
3.	What are 6 more than 98?	104	8.	What are 3 less than 458?	455
4.	What are 10 less than 154?	144	9.	What are 1 more than 78?	79
5.	What are 3 more than 111?	114	10.	What are 2 less than 186?	184

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes

Resources: Geometric pattern cards and strips, pictures from old magazines/ newspapers for the classwork activity.

Concepts:

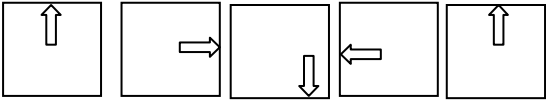
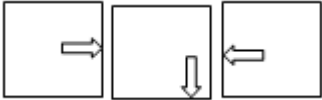
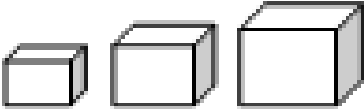
- Copy, extend and describe in words, and create own simple patterns made with physical objects and drawings of lines, shapes or objects.
- The range of patterns are simple patterns in which shapes or groups of shapes are repeated in exactly the same way and patterns where the number or size of shapes in each stage changes in a predictable way, i.e. regular increasing patterns.

Use geometric pattern cards and strips like the ones below. Show learners one card/pattern at a time. Ask learners to describe the pattern, extend the pattern and draw their own patterns.

Activity 1

Type of pattern and example	Questions or Instructions to learners
Patterns with one shape/object, but the colours of the shape/object change in a regular way.	Describe the pattern. (They are all triangles- black, grey, white, black, grey, white....)

Date:

	What will the next three shapes look like? (black, grey, white triangles) Draw them.  Make your own pattern with a different shape and your own colours.
Patterns where the position of the shape/object changes Example 1:  Example 2: 	Describe the pattern. Example 1 – (Triangles in pairs where the one is the symmetrical image of the other.) The next three shapes will look like this:  Example 2 – (A square with an arrow inside. The arrow points top, right, down, left, top) What will the next three shapes look like? Draw them.  Make your own pattern with a different shape and your own colours.
Patterns with a single kind of shape, that increases or decreases in size. 	Describe the pattern. (The pattern is made of cube blocks that get bigger and bigger.) What will the next three shapes look like? Draw them.  Make your own pattern with a different shape and your own colours.

Remediation: Concrete: Use wooden shapes that are similar to the ones on the geometric pattern cards. Show the first step of the pattern. Tell the learners to copy this pattern using their cards. Extend the pattern. Learners now copy it using their cards.

Enrichment: See Enrichment Activity Cards 3.1-3.4.

4. Classwork activity (Group/independent work) – 25 minutes

Do the following questions in your maths book.

1. Draw five different patterns.
2. Paste pictures that show a pattern. Describe the pattern.

5. Homework activity – 5 minutes

No homework.

6. Reflection on lesson

Date:

Lesson Topic: Problem solving Strategies: Building up and breaking down**Teacher's notes****CAPS Topics:** 1.1 Count objects 1.2 Count forwards and backwards 1.7, 1.13 Addition and subtraction 1.16 Mental Mathematics 1.6 Problem Solving Techniques**Lesson vocabulary:** Addition, subtraction, add ten, add hundred, tens, units, increase, decrease**Prior knowledge**

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Solve word problems in context and explain own solution to problems involving addition and subtraction with answers up to 99, using the appropriate symbols +, -, =, $\square$

Assessment

Formal Task 1 Activity 2: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 2s from any given number between 0 and 500. E.g. 103, 105, 107, ...

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	$5+4-3=$	6	6.	$8+2-4=$	6
2.	$4+5-2=$	7	7.	$7+3-3=$	7
3.	$2+4-5=$	1	8.	$9+1-9=$	1
4.	$7+0-7=$	0	9.	$3+3-0=$	6
5.	$8+1-0=$	9	10.	$2+5-6=$	1

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes**Resources:** Base ten blocks, place value cards.**Concepts:**

- Recall addition and subtraction facts to 10. (Mental mathematics)
- Use the following techniques when solving problem and explain solutions to problems:• building up and breaking down numbers

Activity 1: Learners work in pairs.

Ask the learners to show you the number with their base ten blocks. Then ask them to add 10.

Learners do the same with their place value cards. Ask the learners: *What is $65 + 10$? What happened to the tens?* Repeat this with $42 + 10 = \dots$ and $180 + 10 = \dots$

Number	Show it with base ten blocks	Add 10	Show it with place value cards	Add 10	Answer
65					75
124					134

Date:

Activity 2

Do a similar activity as activity 1 but add 100.

Number	Show it with base ten blocks	Add 100	Show it with place value cards	Add 100	Answer
100					200
5					105
40					140

Activity 3

Write the following numbers on the board. 126. Point to the number and ask the learners to:

- *Add ten to the number ,*
- *What do you get? (136)*
- *What would happen if you subtracted 10 from 126? (The two tens would decrease by ten).*
- *What would you get? (116)*

Now let's add hundred to the number (pointing at 126) what do you get? (226)

- *What do you notice when you add hundred to a number? (the hundreds digit increases by one)*
- Do the same with 275 and 439.

Remediation:

Using 100-400 number boards children count in 10s beginning on the non-multiple e.g. 122, 132, 142, 152,.... Now do the same with hundreds. 105, 205, 305...

Enrichment: See Enrichment Activity Cards 4.1 – 4.4.**4. Classwork activity (Group/independent work) – 25 minutes**

1. Copy this table and complete it in your maths book.

		Add 10	Subtract 10	Add 100	Subtract 100
1	271	(281)	(261)	(371)	(171)
2	542	(552)	(532)	(642)	(452)
3	326	(336)	(346)	(426)	(226)
4	188	(198)	(178)	(288)	(88)

2. Complete DBE Worksheet 35b (Page 82)

5. Homework activity – 5 minutes

Do the following patterns in your homework book.

- | | | |
|-----------------|--------------------|-----------------------|
| • $1 + 1 = (2)$ | • $10 + 10 = (20)$ | • $100 + 100 = (200)$ |
| • $1 + 2 = (3)$ | • $10 + 20 = (30)$ | • $100 + 200 = (300)$ |
| • $2 + 2 = (4)$ | • $20 + 20 = (40)$ | • $200 + 200 = (400)$ |

6. Reflection on lesson

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Date:

Lesson Topic: Problem solving Strategies: Building up and breaking down numbers

Teacher's notes

CAPS Topics: 1.1 Count objects 1.2 Count forwards and backwards 1.7, 1.13 Addition and subtraction 1.16 Mental Mathematics , 1.6 Problem Solving Techniques

Lesson vocabulary: Addition, subtraction, appropriate symbols

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Solve word problems in context and explain own solution to problems involving addition and subtraction with answers up to 99, using the appropriate symbols +, -, =, $\square$

Assessment

Formal Task 1 Activity 2: Assess a group of learners today.

1. Mental maths

Counting - 5 minutes

- Count forwards and backwards in 5s from any given number between 0 and 500. E.g. 404, 409, 414, ...

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	$7 - 3 + 6 =$	10	6.	$5 - 3 + 8 =$	10
2.	$9 - 1 + 0 =$	8	7.	$10 - 3 + 0 =$	8
3.	$3 - 0 + 3 =$	6	8.	$8 - 5 + 2 =$	5
4.	$10 - 9 + 5 =$	6	9.	$6 - 3 + 1 =$	4
5.	$9 - 5 + 4 =$	8	10.	$7 - 7 + 9 =$	9

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes

Resources: Base ten blocks, place value cards.

Concepts:

- Use the following techniques when solving problem and explain solutions to problems: building up and breaking down numbers

Activity 1:

- Revise breaking up numbers in to hundreds, tens and units
e.g. $324 = 300 + 20 + 4$
- Do the same with 218, 345 and 399.

Activity 2:

- Do the following addition sums with your learners on the board.
- Adding three digits and three digits: breaking down both numbers. Learners also do this with their base ten blocks and place value cards (as in the previous lesson).
 $223 + 136$
 $200 + 20 + 3 + 100 + 30 + 6$

Date:

$$\begin{aligned}
 &= (200 + 100) + (20 + 30) + (3 + 6) && \text{(grouping hundreds together, tens together and units together)} \\
 &= 300 + 50 + 9 \\
 &= 359
 \end{aligned}$$

- Adding three digits and two digits: (Also show it with base ten blocks and place value cards)
 $324 + 82$
 $= 300 + 20 + 4 + 80 + 2$
 $= 300 + (20 + 80) + (4 + 2)$ (grouping hundreds together, tens together and units together)
 $= 300 + 100 + 6$
 $= 406$
- Do the same with $164 + 233 = \dots$ and $209 + 222 = \dots$

Remediation: Use base ten blocks and place value cards to work with one and two digit numbers doing addition, then move on to addition of two-digit and three –digit numbers.

e.g. $20+3=\dots$, $20 + 12=\dots$, $45+ 13=\dots$, $42+ 51=\dots$

Enrichment: See Enrichment Activity Cards 4.1- 4.4

4. Classwork activity (Group/independent work) – 25 minutes

Do the following questions in your maths book.

1. Solve the following: $225 + 53 = \underline{\hspace{2cm}}$
2. Solve the following: $264 + 132 = \underline{\hspace{2cm}}$
3. Solve the following: $164 + 85 = \underline{\hspace{2cm}}$
4. Solve the following: $175 + 116 = \underline{\hspace{2cm}}$
5. Complete DBE Worksheet 38b (Page 91)

5. Homework activity – 5 minutes

Do the following questions in your homework book.

1. Solve the following: $221 + 42 = \underline{\hspace{2cm}}$
2. Solve the following: $253 + 123 = \underline{\hspace{2cm}}$
3. Solve the following: $166 + 83 = \underline{\hspace{2cm}}$
4. Solve the following: $171 + 65 = \underline{\hspace{2cm}}$

6. Reflection on lesson

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Date:

Lesson Topic: Problem solving Strategies: Adding three digits to three digits: Breaking down the second number**Teacher's notes**

CAPS Topics: 1.1 Count objects 1.2 Count forwards and backwards 1.7, 1.13 Addition and subtraction 1.16 Mental Mathematics, 1.6 Problem solving Techniques breaking down the second number

Lesson vocabulary: Addition, subtraction, counting on, grouping, hundreds, tens, units

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Solve word problems in context and explain own solution to problems involving addition and subtraction with answers up to 99, using the appropriate symbols +, -, =, $\square$
- Practice number bonds to 30.

Assessment

Formal Task 1 Activity 2: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 2s from any given number between 0 and 500. E.g. 388, 390, 392

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	$54+10=$	64		$254+100=$	354
2.	$77+10=$	87		$177+100=$	277
3.	$121+10=$	131		$121+100=$	221
4.	$128+10=$	138		$128+100=$	228
5.	$166+10=$	176		$166+100=$	266

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes

Resources: Number lines, counters, number cards.

Concepts:

- Use the following techniques when solving problem and explain solutions to problems
Adding three digits to three digits: breaking down the second numbers

Activity 1

This strategy involves adding three digits to three digits: keeping the first number whole and breaking down the second numbers. (Also show it with base ten blocks and place value cards)

$$\begin{array}{rcl}
 323 & + & 136 = \dots\dots\dots \\
 & \swarrow \quad \searrow \quad \searrow & \\
 323 & + & (100 + 30 + 6) \\
 = & (323 + 100) & + 30 + 6
 \end{array}$$

Note to teacher: The brackets around the numbers are used in the calculation strategy while the brackets around the strategy points are for you information.

(first add the hundreds)

Date:

$$= (423 + 30) + 6$$

$$= 453 + 6$$

$$= 459$$

(then add the tens to what you have)
(now add the ones)

Also do these examples with the children continuously questioning them about why they are grouping numbers in the way they suggest.

141 + 345 =..... 141 + (300+40+5) (141+300)+40+5 (441+40)+5 481+5 486	324 + 125 =..... 324 +(100+20+5) (325+100) +20+5 (425+20)+5 445+5 450	177+ 122=..... 177 + (100+20+2) (177+100) + 20+2 (277+20)+2 297+2 299
--	--	--

Remediation: Work with two digit numbers e.g. $25+13 = (25 + 10 + 3) = (35+3 =38)$. Do repeated examples using different pairs of numbers to help the learners understand the strategy of breaking down numbers. This will also reinforce their understanding of place value.

Enrichment: See Enrichment Activity Cards 4.1- 4.4

4. Classwork activity (Group/independent work) – 25 minutes

Do the following in your maths book.

Remember to keep the first number whole and break up the second number.

1. $205 + 222 =$
2. $374 + 108 =$
3. Portia had 241 stickers and her friends gave her 252 stickers for her birthday. How many stickers does she have?
4. Write the number symbol for three hundred and fourteen
5. Write 418 in words
6. DBE Workbook (Page 91).

5. Homework activity – 5 minutes

Do the following in your maths book.

Remember to keep the first number whole and break up the second number.

1. $325 + 172 =$
2. $177 + 32 =$
3. $204 + 203 =$
4. Write the number symbol for three hundred and eight
5. Write 209 in words

6. Reflection on lesson

--

Date:

Lesson Topic: Directions**Teacher's notes**

CAPS Topics: 1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 3.1 Position, orientation and views.

Lesson vocabulary: Directions, turn, left, right, forwards, backwards

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Follow directions to move around the classroom and to place one object in relation to another.

Assessment

Formal Task 1 Activity 2: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 5s from any given multiple between 0 and 200. e.g. 83, 88, 93, 98, 103..., ...

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	$5 + 3 =$	8	6.	$1 + 4 =$	5
2.	$2 + 2 =$	4	7.	$5 + 1 =$	6
3.	$10 + 0 =$	10	8.	$5 + 5 =$	10
4.	$6 + 1 =$	7	9.	$9 + 1 =$	10
5.	$8 + 1 =$	9	10.	$7 + 1 =$	8

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes

Resources: Beacons. If you don't have beacons, select any object which you can use as a marker.

Concepts:

- Follow directions and give directions to move around the classroom and school.

Activity 1: Learners work in groups of 4.

Take the learners outside and give them basic instructions. Divide the learners into groups and give each group some beacons. After each instruction the groups will place a beacon.

- Walk 5 steps forward and place a beacon.
- Turn right and walk 3 steps. Place a beacon.
- Turn left and walk 4 steps. Place a beacon.
- Turn right and walk 3 steps. Place a beacon.
- Turn right and walk 10 steps. Place a beacon.

Activity 2: Learners work in groups of 4.

Ask the groups to go back on their route, using the beacons to guide them.

Remediation: Give the learners some directions: • *Stand next to the beacon.* • *Walk two steps forwards.* • *Turn right* • *Walk three steps forwards* • *Turn right* • *Walk two steps forward* • *Turn right.*

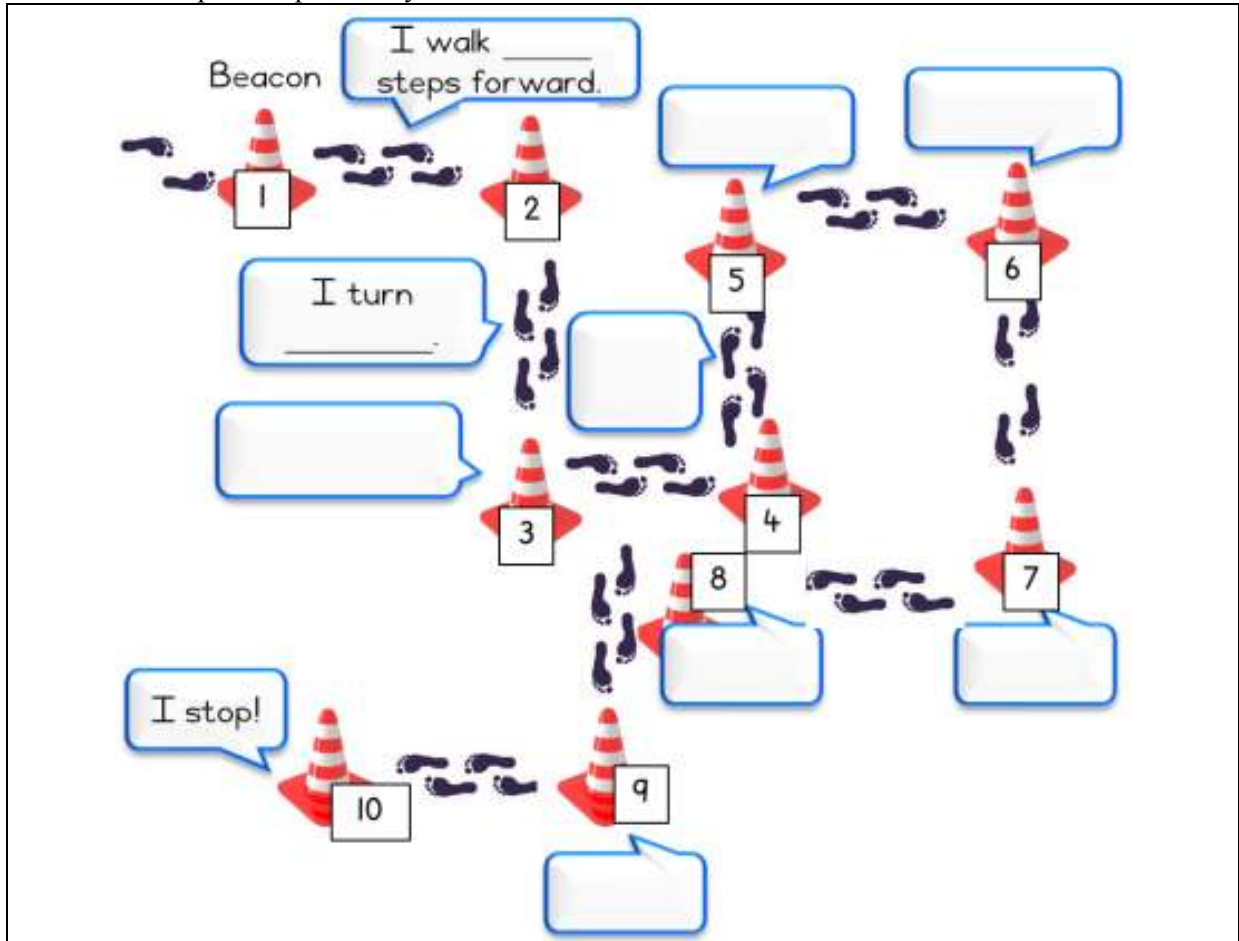
Date:

Once the concepts of '*steps forward*' and '*turn right*' are established, introduce: '*turn left*'. Only when this is understood, introduce the combination of '*turn right*' and '*turn left*' together.

Enrichment: See Enrichment Activity Cards 4.1 – 4.4.

4. Classwork activity (Group/independent work) – 25 minutes

Look at the map of the path that you have walked



In your maths book complete the speech bubbles showing the path that you walked. The first steps have been done for you.

Steps from Beacon 1 to Beacon 2	I walked four steps forward and then I turned right
Steps from Beacon 2 to Beacon 3	
Steps from Beacon 3 to Beacon 4	
Steps from Beacon 4 to Beacon 5	
Steps from Beacon 5 to Beacon 6	
Steps from Beacon 6 to Beacon 7	
Steps from Beacon 7 to Beacon 8	
Steps from Beacon 8 to Beacon 9	
Steps from Beacon 9 to Beacon 10	

5. Homework activity – 5 minutes

No homework.

6. Reflection on lesson

--

Date:

Lesson Topic: Problem solving Strategies: Number lines**Teacher's notes****CAPS Topics:** 1.1 Count objects 1.2 Count forwards and backwards 1.7 1.13 Addition and subtraction 1.16 Mental Mathematics , 1.6 Problem solving Techniques**Lesson vocabulary:** Addition, subtraction, double**Prior knowledge**

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Solve word problems in context and explain own solution to problems involving addition and subtraction with answers up to 99, using the appropriate symbols +, -, =, $\square$
- Practice number bonds to 30.

Assessment

Formal Task 1 Activity 2: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 100s between 0 and 500. E.g. 100, 200, 300, 400, 500

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	$5 - \underline{\quad} = 3$	2	6.	$1 + \underline{\quad} = 7$	6
2.	$3 + \underline{\quad} = 10$	7	7.	$10 - \underline{\quad} = 5$	5
3.	$10 - \underline{\quad} = 10$	0	8.	$10 - \underline{\quad} = 3$	7
4.	$2 + \underline{\quad} = 10$	8	9.	$4 + \underline{\quad} = 10$	6
5.	$9 - \underline{\quad} = 3$	6	10.	$9 - \underline{\quad} = 5$	4

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

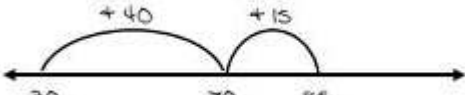
3. Lesson content – concept development – 30 minutes**Resources:** Number lines, base ten blocks**Concepts:**

- Use the following techniques when solving problem and explain solutions to problems: number lines

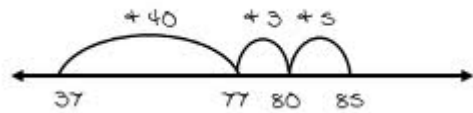
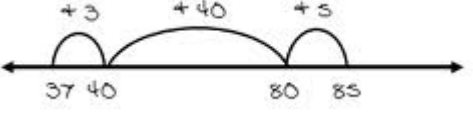
Activity 1

Revise with the learners:

- We use number lines to represent numbers and we can also use them to show number sentences.
- Draw a 1 – 100 number line (marked in 10s) on the board and then show the addition of 37 and 48 to your learners using the illustrations below to guide your explanation:
There are many different ways you could count on using the number line:

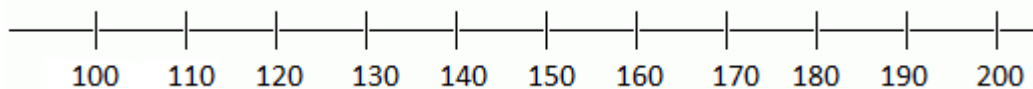
	Add the tens by counting on 40 from 30 Add the units by counting on $7 + 8 = 15$ from there to get the total of 85.
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Date:

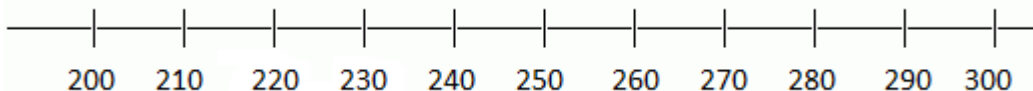
	Add 40 onto 37 first. Add 3 from the remaining 8 units to take you to 80. Add the last 5 units
	Add 3 to 37 to take you to 40. You still need to add 45. Add 40 to take you to 80. Add the final 5 units, to get the total of 85.

Activity 2: Choose other pairs of numbers to add using the number line: (show different ways that this can be done)

- $145 + 28$. (Use a 100-200 number line)



- $203 + 67$. (Use a 200-300 number line)



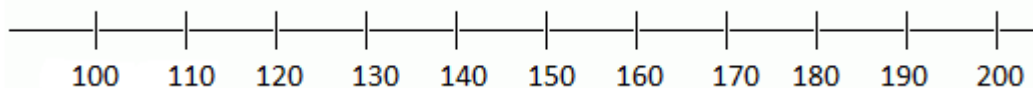
Remediation: Work with number lines from 0-100 to add smaller number using the same method.

Enrichment: See Enrichment Activity Cards 5.1- 5.4.

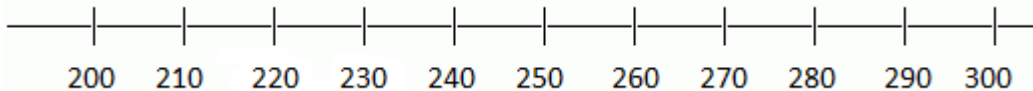
4. Classwork activity (Group/independent work) – 25 minutes

Do the following questions in your maths book.

1. Use a 100-200 number line to calculate: $124 + 25$ (179)



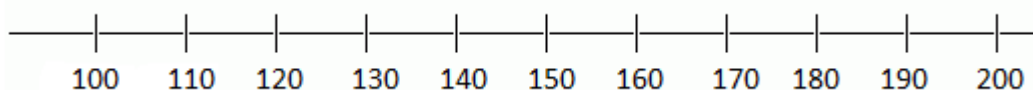
2. Use a 200-300 number line to calculate: $216 + 59$ (275)



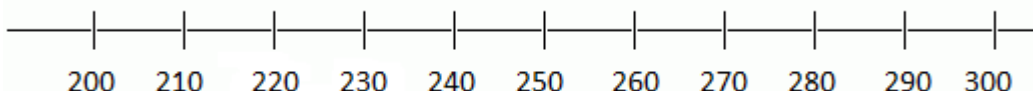
5. Homework activity – 5 minutes

Do the following questions in your homework book.

1. Use a 100-200 number line to calculate: $131 + 66$ (197)



2. Use a 200-300 number line to calculate: $269 + 19$ (288)



6. Reflection on lesson

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Date:

Lesson Topic: Working with tens**Teacher's notes****CAPS Topics:** 1.1 Count objects 1.2 Count forwards and backwards 1.8 1.14 Repeated addition leading to multiplication 1.16 Mental Mathematics**Lesson vocabulary:** Multiplication, multiply, total, tens, rounding off, array, group**Prior knowledge**

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Solve word problems in context and explain own solution to problems involving repeated addition and multiplication with answers up to 50.

Assessment

Formal Task 2 Activity 2: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Group to at least 500 everyday objects in groups of 10 to estimate and then to count.
- Count forwards and backwards in 10s between 100 and 500.

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	$10+3=$	13	6.	$10+0=$	10
2.	$10+2=$	12	7.	$10+1=$	11
3.	$10+6=$	16	8.	$10+4=$	14
4.	$10+10=$	20	9.	$10+7=$	17
5.	$10+5=$	15	10.	$10+9=$	19

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes**Resources:** Counters, multiplication table, pictures, spider diagram.**Concepts:**

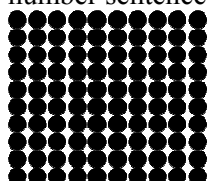
- Solve number problems in context and explain own solution to problems involving multiplication with answers up to 75, using appropriate symbols $\times$, $=$, $\square$
- Revision of working with ten (arrays, rounding off to the nearest ten, multiplication, repeated subtraction); spider diagrams

This lesson revises a variety of strategies for working with 10s.

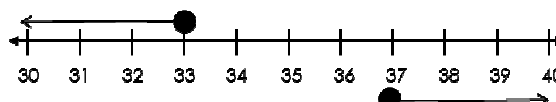
Work through the activities with your learners to help them to remember what they have already done.

Activity 1

- Using arrays:** Draw or pack the counters out on a desk. How many counters are in each row? (10)
- Let us count: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100. How can I write it as an addition number sentence? $10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 = 100$
- How can I write it as a multiplication number sentence? $10 \times 10 = 100$

**Activity 2**

- Rounding off:** Is 33 closer to 30 or 40? (30)
- Is 37 closer to 30 or 40? (40)
- Learners need to understand that 35 is halfway between 30 and 40. We say that the nearest 10 to 45 is 40, because we round up when the number is halfway between two 10s..



Date:

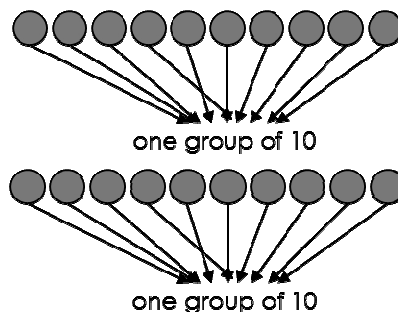
Activity 3

- **The multiplication table can be introduced:** Chanting of the tables can be done. Learners do not have to know the tables in Grade 3. The focus is on the language, which allows a mental image for grouping. (E.g. one 10 is ten, two 10s is 20 etc.)

x	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

Activity 4

- **Repeated subtraction:** In order to calculate $20 \div 10 = \underline{\quad}$, learners need to use their pictures showing grouping or sharing. ($20 - 10 \rightarrow 10 - 10 \rightarrow 0$)

**Remediation:**

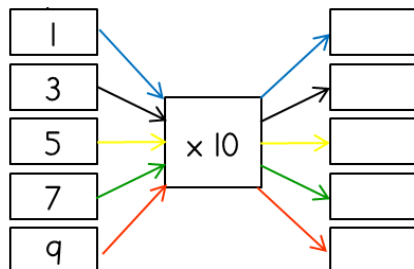
Practical Problem solving activity: The teacher has to order books for 6 children. If each child needs 10 books, how many books must the teacher order? Pack it out with counters/draw the pictures. Count the books: (10, 20, 30...60)

Enrichment: See Enrichment Activity Cards 5.1-5.4

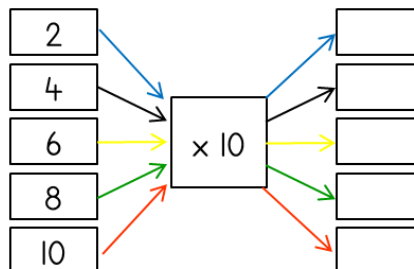
4. Classwork activity (Group/independent work) – 25 minutes

Do the following questions in your maths book.

1. Complete the spider diagram.



2. Complete the spider diagram.



3. A vegetable garden has 10 rows of plants. Every row has the same number of plants. If there is a total of 30 plants, how many plants are in each row? (3)
4. How many cars are needed to transport 40 learners, if four learners can fit into a car? (10)
5. Tony has 30 sweets. He eats 3 sweets every day. For how many days can he eat sweets? (10)
5. Round off 36 to the nearest ten. (40)
6. Complete DBE Worksheet 34 (pages 78 and 79)

5. Homework activity – 5 minutes

Do the following questions in your homework book.

1. David sells bags with ten oranges in each bag. He has 40 oranges. *How many bags can he fill?* (4)
2. A school pool is 10 metres long. Luvuyo swims 6 laps. *How far did he swim?* (60 metres)

6. Reflection on lesson

Date:

Lesson Topic: Time**Teacher's notes****CAPS Topics:** 1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 4.1 Time**Lesson vocabulary:** Time, 12-hour time, hours, half hours, quarters, minutes, analogue, digital, calendars, am, pm, analogue clock, digital clock.**Prior knowledge**

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Tell 12 – hour time in: Hours, half hours, quarters and minutes on analogue clocks.
- Calculate length of time and passing of time.

Assessment

Formal Task 2 Activity 2: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 5s from any number between 0 and 500. E.g. 101, 106, ...

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	$\underline{\quad} + 4 = 14$	10	6.	$\underline{\quad} + 3 = 13$	10
2.	$5 + \underline{\quad} = 15$	10	7.	$\underline{\quad} + 7 = 13$	6
3.	$10 + \underline{\quad} = 16$	6	8.	$\underline{\quad} + 8 = 18$	10
4.	$9 + \underline{\quad} = 12$	3	9.	$\underline{\quad} + 10 = 17$	7
5.	$1 + \underline{\quad} = 12$	11	10.	$9 + \underline{\quad} = 14$	5

22. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes**Resources:** Clocks, pictures of clocks (analogue and digital)**Concepts:**

- Tell 12 – hour time in: Hours, half hours, quarters and minutes on analogue clocks and digital clocks and instruments that show time e.g. cell phones
- Use clocks to calculate length of time in hours or half hours.

Activity 1: Whole class activity.Draw the clocks on the board or make use of real life ones. Ask learners to look at the clocks and describe the difference. *Which clock do you prefer to use? Why?* (Discuss)**Activity 2:** Revise the following with the learners.

- Draw/give learners the following clocks to read the times.
- Discuss the different categories – full hours, half hours and quarter hours. Call up different learners to read the times and to explain how they do this.

Hours: 08:00, 11:00, 12:00, 04:00.	   
• <i>Where is the long hand and the short hand when you read hours?</i>	
Half hours: 07:30, 10:30, 02:30, 06:30	   
• <i>Where is the long hand and the short hand when you read half an hours?</i>	

Date:

Quarter past: 04:15, 09:15, 12:15, 10:15. • What does quarter past mean? • Link this with counting in fives. • Let us count: 5, 10, 15.	 04:15  09:15  12:15  10:15
Quarter to: 01:45, 02:45, 09:45, 10:45. • What does quarter to mean? • Let us count: 5, 10, 15, 20, 25, 30, 35,...	 01:45  02:45  09:45  10:45

Activity 3: Ask the learners to solve this problem in pairs.

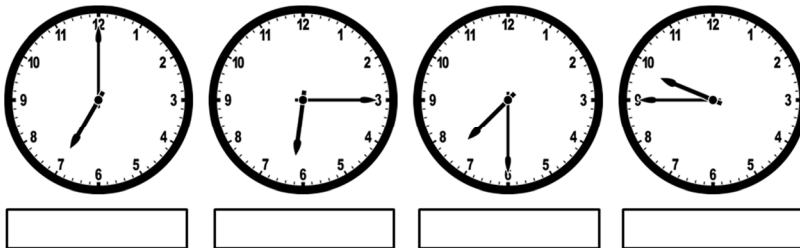
- It is 8 o'clock. At half past 9 it will be break time. How long is it before break time?
- Learners should draw analogue clocks to show the two times and then calculate the answer.
- It is 1 o'clock. At quarter to 3 will be the end of school time. How long is it before the end of the school day?

Remediation: Draw/give learners the following clocks: count the minutes: 5, 10, 15 ...60. (Hour)
 Count the minutes: 5, 10, 15, 20, 25, 30 (Half an hour) Count the minutes: 5, 10, 15 (Quarter of an hour)
 Count the minutes: 5, 10, 15 ...45 (Three quarters of an hour)

Enrichment: See Enrichment Activity Cards 6.1 – 6.4.**4. Classwork activity (Group/independent work) – 25 minutes**

Do the following questions in your maths book.

1. What is the time?



2. Write the time on the digital clocks.

Quarter past two

Quarter to nine

Half past nine

Seven o' clock



3. I left my home at seven this morning and arrived back from school at three o' clock. How many hours did I leave my home?
4. Complete DBE Worksheet 54a no 1 (Page 122)

5. Homework activity – 5 minutes

Do the following questions in your homework book.

1. Draw a clock showing quarter to three
2. Draw a clock showing half past six
3. Draw clock showing quarter past 7
4. Draw a digital clock showing quarter past 11.
5. Draw a digital clock showing 9 o'clock
6. Draw a digital clock showing quarter to 5
7. We had a picnic from ten o'clock to half past three the afternoon on Sunday. How many hours was the picnic?

6. Reflection on lesson

Mathematics Assessment Task 1**Grade 3**

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

Total Marks: 25

1. Write a number sentence and the answer for: 100 and 1 and 80.

(2)

2. Write 231 in words.

(1)

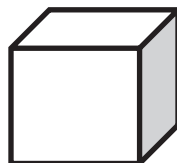
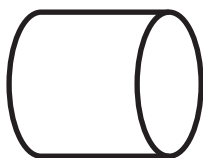
3. Colour any three numbers that are smaller than 276 in red.

(3)

222	277	269	276	297	300	212	247	279	218
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

4. Circle the object that can slide and the draw a cross over the object that can roll and slide.

(2)



5. Draw the shapes that make up this pyramid: (3)



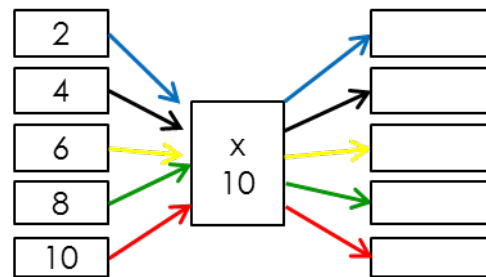
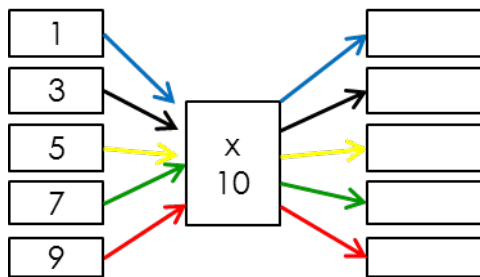
6. Complete the table by adding and subtracting:

(4)

532	+10		-10		+100		-100	
-----	-----	--	-----	--	------	--	------	--

7. Complete the spider diagrams.

(5)



8. You have only 3 roses, but you would like to give your mom 10 times more. How many roses do you want to give her? Write a number sentence and the answer.

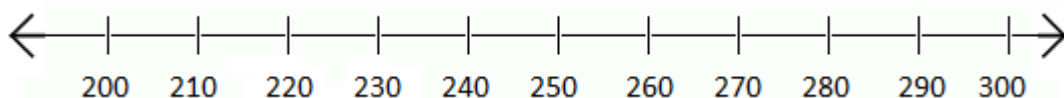
(2)

9. $195 + 16 = \underline{\hspace{2cm}}$

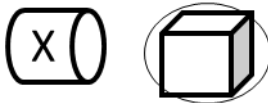
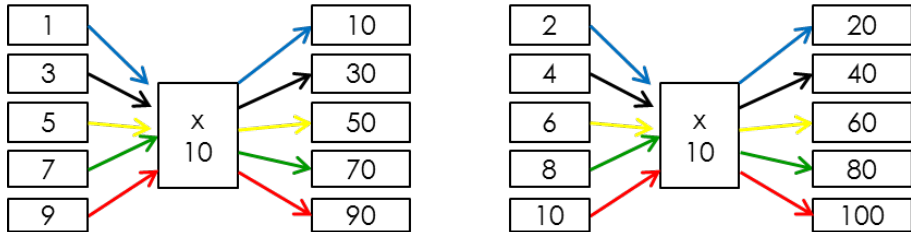
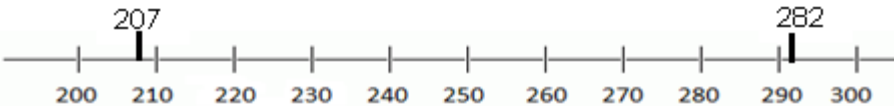
(1)

10. Show where you would find the numbers 207 and 282 on the number line below:

(2)



Grade 3 Lesson 22 – Written Assessment I Memo

Question	Marks										
1. $100 + 80 + 1 = 181$ 1 mark number sentence; 1 mark correct answer.	(2)										
2. two hundred and thirty-one 1 mark correct wording	(1)										
3. 1 mark per correct shaded block (max 3) blocks: <table><tr><td>222</td><td>277</td><td>269</td><td>276</td><td>297</td><td>300</td><td>212</td><td>247</td><td>279</td><td>218</td></tr></table>	222	277	269	276	297	300	212	247	279	218	(3)
222	277	269	276	297	300	212	247	279	218		
4. 1 mark for correct indication given per shape. 	(2)										
5. 1 mark triangles (2 marks if there are 4 triangles); 1 mark square 	(3)										
6. 1 mark for each correct answer. <table><tr><td>532</td><td>+10</td><td>542</td><td>-10</td><td>532</td><td>+100</td><td>632</td><td>-100</td><td>532</td></tr></table>	532	+10	542	-10	532	+100	632	-100	532	(4)	
532	+10	542	-10	532	+100	632	-100	532			
7. Half a mark per correct entry in the blocks. 	(5)										
8. $10 \times 3 = 30 / 3 \times 10 = 30$ 1 mark for the number sentence and 1 for the correct answer.	(2)										
9. $195 + 16 = 211$ Any correct working is accepted. If only the answer is given also ok.	(1)										
10. Learners must indicate the position of the two numbers. 	(2)										

Date:

Lesson Topic: Position and views**Teacher's notes**

CAPS Topics: 1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 3.1 Position, orientation and views.

Lesson vocabulary: Top view, front view, side view, position, view

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Describe the position of one objects in relation to another e.g. on top of, in front of, behind, left, right, up, down, next to.
- Follow directions to move around the classroom and to place one object in relation to another.

Assessment

Formal Task 1 Activity 2: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 2s from any given multiple between 0 and 500. E.g. 499, 497, 495

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	Double 10	20		What is half of 20	10
2.	Double 12	24		What is half of 18	9
3.	Double 5	10		What is half of 80	40
4.	Double 20	40		What is half of 50	25
5.	Double 100	200		What is half of 400	200

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes

Resources: Objects, like caps and cans, pictures.

Concepts:

- Identify and name different views of the same object.

Activity 1

Do this is a whole class activity.

Show the learners a cap.

- Show the cap in different positions and ask them which side is the front, back and sides of the cap.
- *Which view did we not look at?* (The top view) Show learners the top view.

Activity 2

Learners place their bags on their tables

- Ask them to show you the front view. (the view they can see from where they are standing)
- Ask them to show you the top view. (the view they can see if they looked over the top)
- *What about the side view....how many side views are there?* (usually four sides for a rectangular prism shaped bag)
- *Is it the same as the front view? Why?*

Date:

Activity 3

Learners work in pairs facing each other. Place one bag and one book on their tables between them. Each learner takes turns to describe what they see. (The views should be the opposite for each person in the pair e.g. If the book is on the right of the bag for one child it will be on the left of the bag for the other.)

Remediation: Give the learners a variety of objects and tell them to show you the: front view, side view and top view. Give learners three to four blocks to build an object. Ask them to show you the front view, side view and top view.

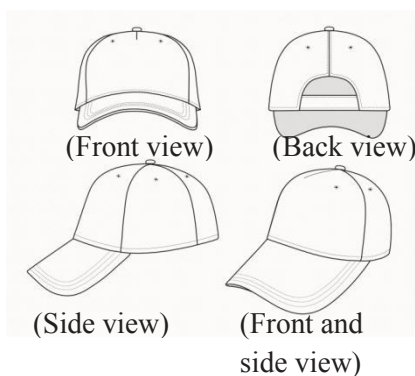
Enrichment: See Enrichment Activity Cards 5.1 – 5.4.

4. Classwork activity (Group/independent work) – 25 minutes

1. Look at the picture and make a drawing of the different views in your maths book.

	Top view	Front view	Side view
---	----------	------------	-----------

2. What view of the object do you see? Write front, back, side or top view underneath each picture.

**5. Homework activity – 5 minutes**

No homework.

6. Reflection on lesson

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Date:

Lesson Topic: Fives**Teacher's notes**

CAPS Topics: 1.1 Count objects 1.2 Count forwards and backwards 1.6 Problem solving techniques 1.13 Addition and subtraction 1.16 Mental Mathematics

Lesson vocabulary: fives, multiples of five, number patterns, counting in fives

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Use number lines as a technique to solve problems.

Assessment

Formal Task 2 Activity 2: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 5s from any given number between 0 and 500. E.g. 402, 407, 412, ...

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	$14 - \underline{\quad} = 10$	4	6.	$\underline{\quad} - 6 = 1$	7
2.	$\underline{\quad} - 1 = 9$	10	7.	$15 - \underline{\quad} = 10$	5
3.	$16 - \underline{\quad} = 10$	6	8.	$\underline{\quad} - 2 = 7$	9
4.	$\underline{\quad} - 5 = 5$	10	9.	$11 - \underline{\quad} = 4$	7
5.	$10 - \underline{\quad} = 6$	4	10.	$13 - \underline{\quad} = 7$	6

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes

Resources: Counters, number lines, number boards.

Concepts:

- Use number lines as a technique to solve problems.

Activity 1

Learners work in groups of 4.

Give learners a 1 – 100 number board.

- Ask learners to count in 5s up to 100 and place counters on the 5s. Ask *What do you notice?* (A pattern with numbers ending in 5 and 0) . Ask them to remove the counters from the number board
- Ask the learners to place a counter on 1 and then count 5 blocks forwards and place the next counter on.... (6) Continue with this pattern. *What do you notice?*
- Do the same starting with 2, 3 and 4. *Does the pattern remain the same if you count in 5s? Does it matter which number you start on?* (No, we still get two columns each time.)

Counting in five from 5.	Counting in fives from 1.	Counting in fives from 2
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Date:

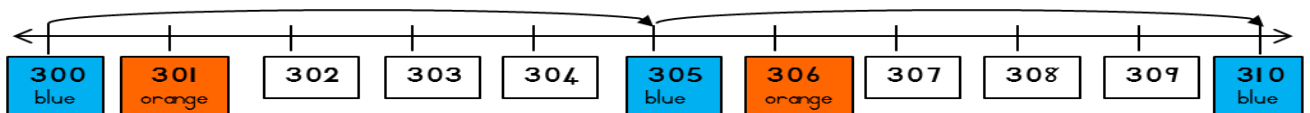
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Activity 2

Learners work in groups of 4.

Give learners number lines to complete. Tell them the beginning and the end numbers for the number lines. (300 – 320), (420– 440) and (480 – 500)

- Colour the first number 300 blue. Count in 5s and colour all the numbers that you land on in blue as well.
- Colour the second numbers 301 orange. Count in 5s and colour all the numbers that you land on in orange. *What do you notice?* (That we can start anywhere and count in fives)
- Do the same with number lines 420–430 and 490–500. What do you notice?



Remediation: Give the learners number lines and tell them to complete the intervals: 120 – 130, 260 – 270, 340 – 350 and 490 – 500. Tell them to show counting in 5s, by drawing hoops.

Enrichment: See Enrichment Activity Cards 6.1–6.4.

4. Classwork activity (Group/independent work) – 25 minutes

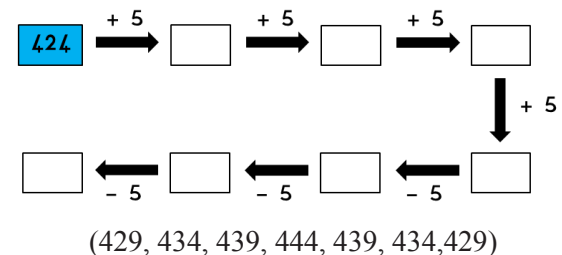
Do the following questions in your maths book.

1. Colour the sequence of numbers made by adding 5, starting with 452.

451	452	453	454	455	456	457	458	459	460
461	462	463	464	465	466	467	468	469	470
471	472	473	474	475	476	477	478	479	480

(452, 457, 462, 467, 472, 477)

2. Complete the following



5. Homework activity – 5 minutes

Complete DBE Worksheet 53b Numbers 1, 2 and 4 (Page 121).

6. Reflection on lesson

Date:

Lesson Topic: Fives**Teacher's notes**

CAPS Topics: 1.1 Count objects 1.2 Count forwards and backwards 1.14 Repeated addition leading to multiplication 1.15 Division 1.16 Mental Mathematics

Lesson vocabulary: Multiplication, multiply, total, divide, total, group, number sentence

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Solve word problems in context and explain own solution to problems involving repeated addition and multiplication with answers up to 50.

Assessment

Formal Task 2 Activity 2: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 5s from any number between 0 and 500. E.g. 105, 110, 115,

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	$13 - 10 =$	3	6.	$14 - 10 =$	4
2.	$15 - 10 =$	5	7.	$17 - 10 =$	7
3.	$16 - 10 =$	6	8.	$12 - 10 =$	2
4.	$20 - 10 =$	10	9.	$10 - 10 =$	0
5.	$11 - 10 =$	1	10.	$18 - 10 =$	8

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes

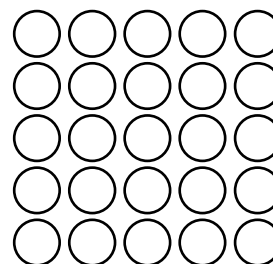
Resources: Counters, multiplication table, pictures, spider diagram.

Concepts:

- Solve number problems in context and explain own solution to problems involving multiplication with answers up to 75, using appropriate symbols $\times$, $=$, $\square$
- Multiply 2, 4, 5, 10, and 3 to a total of 50.
- Divide numbers to 50 by 2, 4, 5, 10, 4

Activity 1: Whole class activity**Using arrays:**

- Draw the array on the right on the board. Ask the learners.
- How many counters are in each row? (5)
- Let us count: 5, 10, 15, 20, 25.
- Let us write an addition number sentence: $5 + 5 + 5 + 5 + 5 = 25$
- A multiplication number sentence: $5 \times 4 = 25 / 4 \times 5 = 25$
- A division number sentence: $20 \div 5 = 4 / 20 \div 4 = 5$.



Date:

Activity 2: Learners work in pairs. The multiplication table:

- Reciting tables can be done. Learners do not have to know the tables off by heart in Grade 3 but they can start to spend time learning some of the multiples.
- Let learners show the following on the multiplication board one 5 is five, two 5s are 10 etc.

Activity 3: Problem solving:

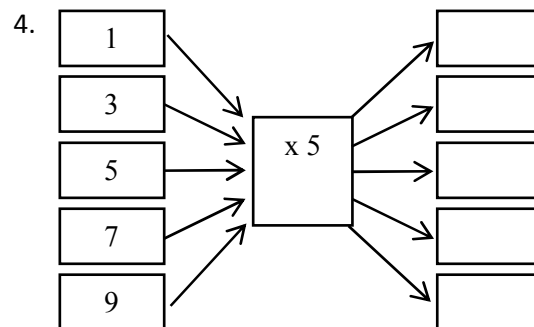
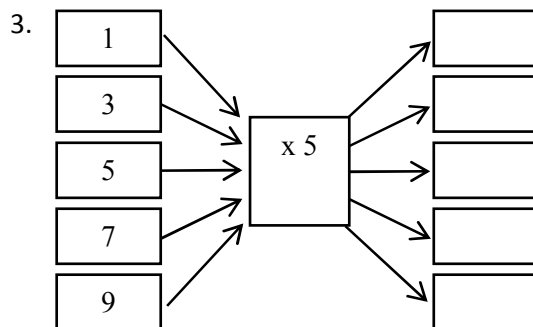
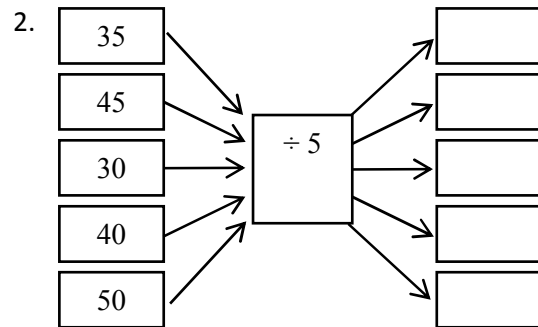
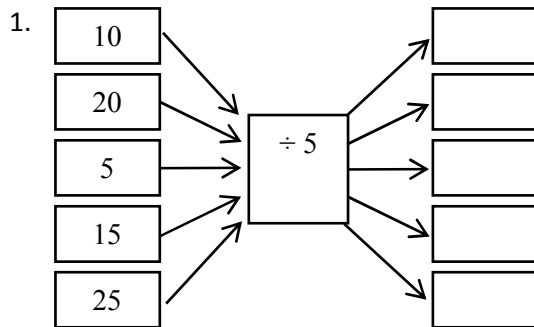
- My dad planted 5 fruit trees in a row. He planted 6 rows. *How many fruit trees did he plant?*
- Let us write it as an addition number sentence: $5 + 5 + 5 + 5 + 5 + 5 = \square$
- We can say there are 6 rows with 5 trees each. (Draw a picture if necessary.)
- Previously we said that 6 groups of 5 is the same as 6×5 . So we can say 6 rows of 5 is the same as $6 \times 5 =$
- Let us write it as a multiplication number sentence: $6 \times 5 = \square$

Remediation: Ask learners to make groups of 5 with their counters. Number sentence: $5 + 5 + 5 + 5 + 5 + 5 = 30$ Number sentence: $6 \times 5 = 30$.

Enrichment: See Enrichment Activity Cards 5.1 – 5.4

4. Classwork activity (Group/independent work) – 25 minutes

Do the following questions in your maths book. Your teacher will do the first spider diagram with you.

**5. Homework activity – 5 minutes**

Complete DBE Worksheet 53a (Page 120).

6. Reflection on lesson

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Date:

Lesson Topic: Twos**Teacher's notes**

CAPS Topics: 1.1 Count objects 1.2 Count forwards and backwards 1.8 1.14 Repeated addition leading to multiplication 1.16 Mental Mathematics

Lesson vocabulary: Twos, multiples of twos, counting in twos

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Use number lines as a technique to solve problems.

Assessment

Formal Task 2 Activity 2: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 2s from any given multiple between 0 and 500. E.g. 400, 402, 406, ...

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	- 2= 10	12	6.	- 2= 17	19
2.	- 2= 18	20	7.	- 2= 11	13
3.	- 2=13	15	8.	- 2= 14	16
4.	- 2=16	18	9.	- 2= 8	10
5.	- 2=15	17	10.	- 2=12	14

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes

Resources: Counters, number lines, number boards.

Concepts:

- Use number lines and number boards as a technique to solve problems.

Activity 1: Learners work in groups of 4.

Give learners a 1 – 100 number board.

- Ask learners to count in 2s up to 100 and place counters on the 2s. Ask: *What do you notice?* (A pattern with counters on every second column, all the even numbers are covered).
- Ask the learners to place a counter on 1 and then count 2 blocks forwards and place the next counter on every second number. Ask: *What do you notice?* (All the odd numbers have counters on them).

Count in twos from 2.

1	3	5	7	9
11	13	15	17	19
21	23	25	27	29
31	33	35	37	39
41	43	45	47	49
51	53	55	57	59
61	63	65	67	69
71	73	75	77	79
81	83	85	87	89
91	93	95	97	99

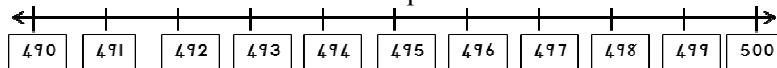
Count in twos from 1

2	4	6	8	10
12	14	16	18	20
22	24	26	28	30
32	34	36	38	40
42	44	46	48	50
52	54	56	58	60
62	64	66	68	70
72	74	76	78	80
82	84	86	88	90
92	94	96	98	100

Date:

Activity 2: Learners work in pairs

Give learners number lines to complete.



- Ask them the beginning and the end numbers of the number line.
- Ask them to colour in the first number, 490 blue. Count in 2s and colour these numbers blue as well.
- Colour 491 in orange. Count in 2s and colour these numbers orange. *What do you notice?* (We are following the same pattern that we did on the number boards) We can also count in twos on a number line).

Remediation: Give the learners number lines and tell them to complete the intervals: 120 – 130, 260 – 270, 340 – 350 and 490 – 500. Ask them to show counting in 2s, by using hoops.

What will happen if I start on 121, 261, 341 and 491 counting in 2s? (We will count on a different set of numbers/ on odd numbers).

Enrichment: See Enrichment Activity Cards 6.1-6.4.

4. Classwork activity (Group/independent work) – 25 minutes

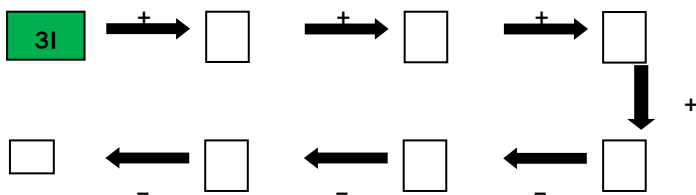
Do the following questions in your maths book.

1. Start with the first number and colour every second number.

401	402	403	404	405	406	407	408	409	410
411	412	413	414	415	416	417	418	419	420
421	422	423	424	425	426	427	428	429	440
431	432	433	434	435	436	437	438	439	450

(401, 403, 405, 407, 409,
411, 413, 415, 417, 419,
421, 423, 425, 427, 429,
431, 433, 435, 437, 439)

2. Complete the following:



(321, 323, 325, 327, 329,
321, 319)

5. Homework activity – 5 minutes

Complete DBE Worksheet 51b (Page 117)

6. Reflection on lesson

Date:

Lesson Topic: Twos**Teacher's notes****CAPS Topics:** 1.1 Count objects 1.2 Count forwards and backwards 1.14 Repeated addition leading to multiplication 1.16 Mental Mathematics**Lesson vocabulary:** Twos, multiples of two, counting in twos, addition number sentence, multiplication number sentence, repeated addition**Prior knowledge**

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Solve word problems in context and explain own solution to problems involving repeated addition and multiplication with answers up to 50.

Assessment

Formal Task 2 Activity 2: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

Count forwards and backwards in 2s from any number between 0 and 500. E.g. 102, 104, ...

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	---- + 12=20	8	6.	---- + 10=20	10
2.	---- + 1= 20	19	7.	---- + 17=20	3
3.	---- + 12=20	8	8.	---- + 13=20	7
4.	---- + 3= 20	17	9.	---- + 16=20	4
5.	---- + 20=20	0	10.	---- + 8 =20	12

2. Homework/Corrections – 15 minutes

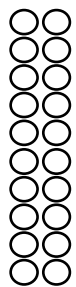
Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes**Resources:** Counters, multiplication table, pictures, spider diagram.**Concepts:**

- Solve number problems in context and explain own solution to problems involving multiplication with answers up to 75, using appropriate symbols x, =, $\square$
- Multiply 2, 4, 5, 10, and 3 to a total of 50.

Activity 1: Whole class.**Using arrays:**

- Draw or pack the counters out on a desk. How many counters are in each row? (2)
- Let us count: 2, 4, 6, 8, 10, 12, 14, 16, 18 and 20.
- Let us write an addition number sentence: $(2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = 20)$.
- A multiplication number sentence? $(2 \times 10 = 20/10 \times 2 = 20)$
- The inverse of multiplication is division. What would a division number sentence look like? $(20 \div 2 = 10)$.



Date:

Activity 2: Whole class. Solve the problem with your learners:

A vegetable garden has 4 rows of plants. Each row has 2 plants. *How many plants are there in the garden?*

- Let us write it as an addition number sentence: $(2 + 2 + 2 + 2 = \square)$
- We can count: 2, 4, 6, 8 ...plants
- We can say there are 4 rows with 2 plants in each row. Draw a picture if necessary.
- Previously we said that 4 groups of 2 is the same as 4×2 . So we can say 4 rows of 2 is the same as $4 \times 2 =$
- Let us write it as a multiplication number sentence: $4 \times 2 = \square$

Make up other word problems that involve multiplication of two.

Activity 3: Learners work in pairs. Use this activity for consolidation of the $2 \times$ tables.

The multiplication table.

- Chanting of the tables can be done.
Learners do not have to know the tables in Grade 3.
- The focus is on the language, which allows a mental image for grouping. (E.g. one 2 is two, two 2s are 4 etc.)

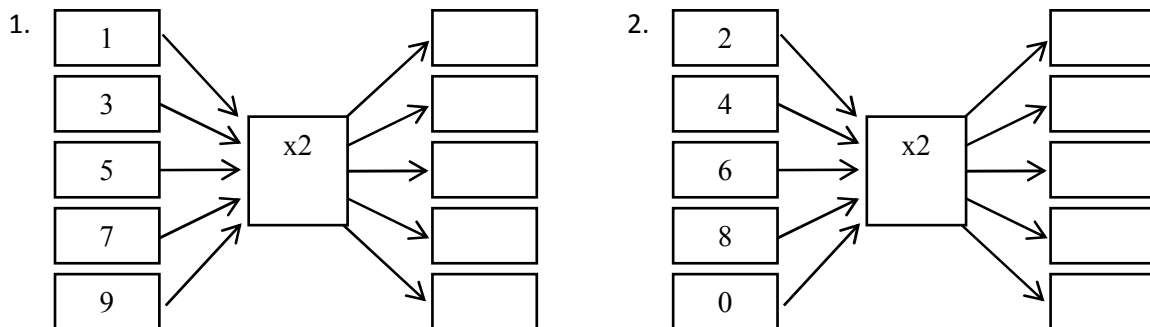
$\times$	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

Remediation: Ask learners to make 6 groups of 2 with their counters. Then write this as an addition Number sentence: $(2 + 2 + 2 + 2 + 2 + 2 = 12)$ and as a multiplication number sentence: $(6 \times 2 = 12)$.

Enrichment: See Enrichment Activity Cards 6.1-6.4.

4. Classwork activity (Group/independent work) – 25 minutes

Complete the spider diagrams in your maths books. Your teacher will do the first spider diagram with you.



- The Grade R teacher has to order tyres for 12 bicycles. If each bicycle needs two tyres, how many tyres must the Grade R teacher order? $(12 \times 2 = 24)$
- If two learners fit into a car how many cars are needed to transport 24 learners,? $(24 \div 2 \div 2 \div 2 \div 2 \div 2 \div 2 \div 2 \div 2 \div 2 = 0, 12 \text{ cars.})$

5. Homework activity – 5 minutes

Do the following questions in your homework book. Complete DBE Worksheet 51a (Page 116).

6. Reflection on lesson

Date:

Lesson Topic: Threes**Teacher's notes**

CAPS Topics: 1.1 Count objects 1.2 Count forwards and backwards 1.6 Problem solving techniques 1.13 Addition and subtraction 1.16 Mental Mathematics

Lesson vocabulary: Threes, multiples of three, number pattern

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Use number lines as a technique to solve problems.

Assessment

Formal Task 2 Activity 2: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 3s from any given number between 0 and 500. E.g. 303, 306, 309, ...

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	$10 + \underline{\quad} = 12$	2	6.	$20 + \underline{\quad} = 20$	0
2.	$19 + \underline{\quad} = 20$	1	7.	$17 + \underline{\quad} = 20$	3
3.	$11 + \underline{\quad} = 14$	3	8.	$5 + \underline{\quad} = 12$	7
4.	$15 + \underline{\quad} = 17$	2	9.	$3 + \underline{\quad} = 15$	12
5.	$10 + \underline{\quad} = 20$	10	10.	$13 + \underline{\quad} = 16$	3

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes

Resources: 1 – 100 number board, counters, number lines, number boards.

Concepts:

- Use number lines as a technique to solve problems.

Activity 1

Learners work in pairs.

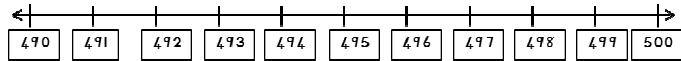
Give learners a 1 – 100 number board.

- Ask the learners to place counters on the 3s. Let them count forwards and backwards in 3s up to 100. Ask them to remove the counters from the number board.
- Ask the learners to place a counter on 1 and then count from 1 in 3s up to 100. Let them count forwards and backwards in 3s from 1.
- Do the same activity starting on 2 and 3. *What is the difference in the patterns on the number boards when you count in 2s and when you count in 3s?* (When we count in twos the numbers are on a straight (vertical) line but when we count in threes the numbers are on the diagonals.)

Date:

Activity 2: Learners work in pairs.

Give learners number lines to complete.



- Give them the beginning and the end numbers for a number line e.g. 490 – 500.
- Colour the first number 490 blue. Count in 3s and colour these numbers blue as well.
- Colour the second numbers 491 orange. Count in 3s and colour these numbers orange. What do you notice?
- Do the same with number lines from 300 to 310 and 420 to 430.

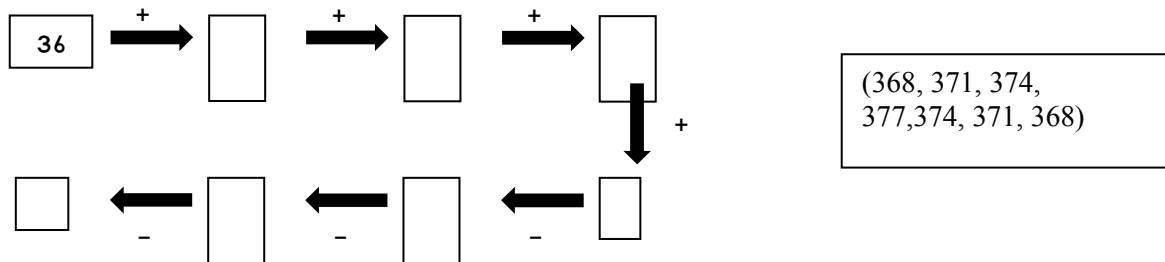
Remediation: Give learners sets of about 30 counters and allow them to group the counters into groups of 3. Ask the learners to count in threes all of the counters that they have grouped. Give the learners number lines and tell them to complete the intervals: 120 – 130, 260 – 270, 340 – 350 and 490 – 500. Ask them to show counting in 3s, by using hoops.

Enrichment: See Enrichment Activities 7.1. – 7.4.

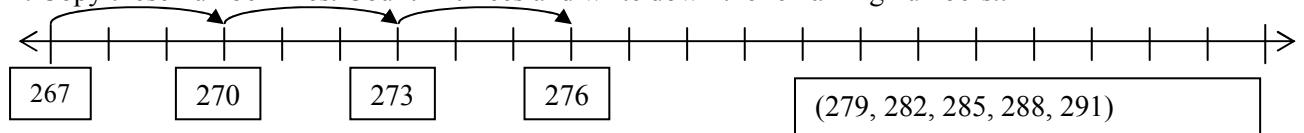
4. Classwork activity (Group/independent work) – 25 minutes

Do the following activities in your maths book.

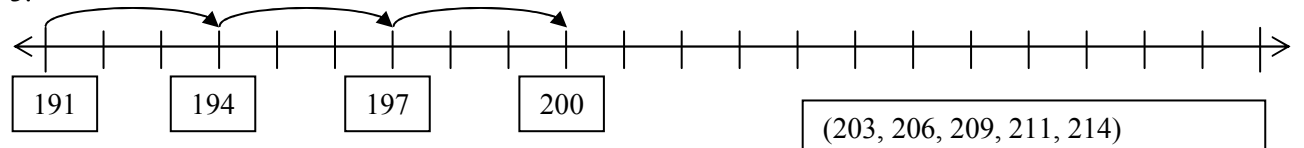
1. Complete the following:



2. Copy these number lines. Count in threes and write down the remaining numbers..



3.



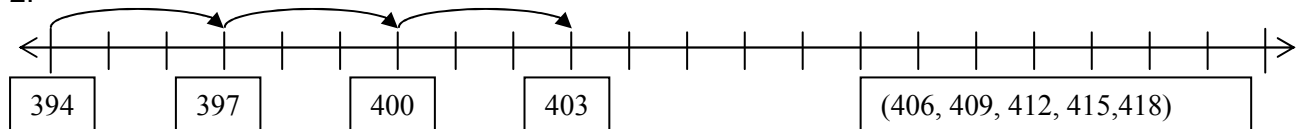
5. Homework activity – 5 minutes

Do the following activities in your homework book.

1. Complete the following: 454 (+3) ____ (+3) ____ (+3) ____ (+3) ____ (-3) ____ (-3) ____ (-3) ____ .

(457, 460, 463, 466, 463, 460, 457)

2.



6. Reflection on lesson

Date:

Lesson Topic: Threes**Teacher's notes**

CAPS Topics: 1.1 Count objects 1.2 Count forwards and backwards 1.5 Division 1.8, 1.14 Repeated addition leading to multiplication 1.16 Mental Mathematics

Key words: Threes, multiples of threes, addition number sentence, multiplication number sentence

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Solve word problems in context and explain own solution to problems involving repeated addition and multiplication and sharing with answers up to 50.

Assessment

Formal Task 2 Activity 2: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 3s from any number between 0 and 500. E.g. 103, 106, 109, ...

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	$12+3 =$	15	6.	$.... - 1 = 10$	9
2.	$19 - 6 =$	13	7.	$20+....=20$	0
3.	$15+....= 20$	5	8.	$10 -= 7$	3
4.	$18 -=10$	8	9.	$....+1 = 12$	11
5.	$.....+2= 20$	18	10.	$.... - 5 = 0$	5

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes

Resources: Counters, multiplication table, pictures, spider diagram.

Concepts:

- Solve number problems in context and explain own solution to problems involving multiplication with answers up to 75, using appropriate symbols $\times$, $=$, $\square$
- Multiply 2, 4, 5, 10, and 3 to a total of 50.



Activity 1: Do this as a whole class activity. Learners work in pairs.

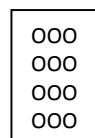
Using arrays:

- Draw the array on the board and ask learners to pack the counters out on their desks.
- How many counters are there in each row? (3) How many rows? (10)
- Let us count how many counters there are altogether: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30 (30)
- Ask learners to write an addition number sentence: $(3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 = 30)$.
- Ask learners to write a multiplication number sentences: $(3 \times 10 = 30 / 10 \times 3 = 30)$
- Ask learners to write a division number sentence: $(30 \div 3 = 10)$.

Activity 2**Problem solving:**

A vegetable garden has 4 rows of plants. Each row has 3 plants.

How many plants are there in the garden? Pack it out with counters. $(4 \times 3 = 12)$



Date:

- Let us write it as an addition number sentence: $(3 + 3 + 3 + 3 = 12)$
- We can count in threes : (3, 6, 9, 12) plants
- We can say there are 4 rows with 3 plants in each row. Draw a picture if necessary.
- Previously we said that 4 groups of 3 is the same as 4×3 . So we can say 4 rows of 3 is the same as $4 \times 3 = 12$
- Let us write it as a multiplication number sentence: $4 \times 3 = \square$

Make up other work problems that involve multiples of 3 for your learners to solve.

Activity 3: Learners work in pairs. Use this activity for consolidation of the $3 \times$ tables.

The multiplication table:

- Chanting of the tables can be done. Learners do not have to know the tables in Grade 3.
- The focus is on the language, which allows a mental image for grouping. (E.g. one 3 is three, two 3s are six etc.)

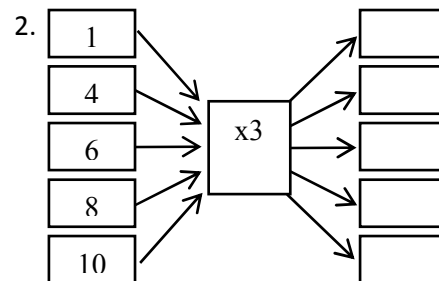
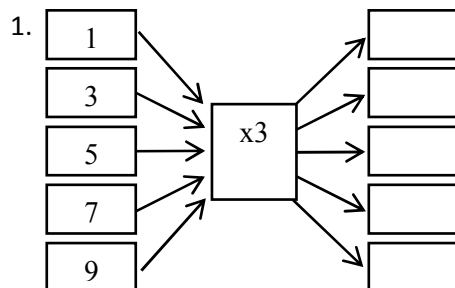
x	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

Remediation: Ask learners to make six groups of 3 with their counters. Write an addition number sentence: $(3 + 3 + 3 + 3 + 3 + 3 = 18)$. Write a multiplication number sentence: $(6 \times 3 = 18)$.

Enrichment: See Enrichment Activity Cards 6.1-6.4

4. Classwork activity (Group/independent work) – 25 minutes

Do the following questions in your maths book. Your teacher will do the first spider diagram with you.



- The nursery school teacher has to order tyres for 9 tricycles. If each tricycle needs three tyres, how many tyres must the nursery school teacher order? $(9 \times 3 = 27)$
- Marlene has 30 sweets. This is twice as many as Jacob has. How many sweets does Jacob have? $(30 \div 2 = 15)$

5. Homework activity – 5 minutes

Do the following questions in your homework book.

Complete DBE Worksheet 55a (Page 124).

6. Reflection on lesson

Date:

Lesson Topic: Fours**Teacher's notes**

CAPS Topics: 1.1 Count objects 1.2 Count forwards and backwards 1.6 Problem solving techniques 1.13 Addition and subtraction 1.16 Mental Mathematics

Lesson vocabulary: Fours, multiples of four, number patterns

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Use number lines as a technique to solve problems.

Assessment

Formal Task 2 Activity 2: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 3s from any given number between 0 and 500. E.g. 401, 405, 409, ...

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	$14 - \underline{\quad} = 9$	5	6.	$13 + \underline{\quad} = 14$	1
2.	$16 + \underline{\quad} = 18$	2	7.	$9 - \underline{\quad} = 7$	2
3.	$12 - \underline{\quad} = 5$	7	8.	$14 + \underline{\quad} = 6$	20
4.	$11 + \underline{\quad} = 15$	4	9.	$15 - \underline{\quad} = 8$	7
5.	$10 - \underline{\quad} = 6$	4	10.	$7 + \underline{\quad} = 14$	7

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes

Resources: Counters, number lines, number boards.

Concepts:

- Use number lines as a technique to solve problems.

Activity 1: Learners work in pairs.

Give learners a 1 – 100 number board.

- Ask them to place counters on the 4s. Let them count forwards and backwards in 4s up to 100. Ask them to remove the counters from the number board.
- Ask the learners to place a counter on 1 and then count from 1 in 4s up to 100. Let them count forwards and backwards in 3s from 1. Do the same activity starting on 2 and 3. *Does the pattern on the board stay the same when you count in 2s?*

Date:

Counting in fours from 4

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Counting in fours from 1

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Counting in fours from 2

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

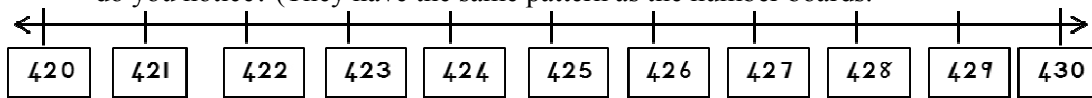
Counting in fours from 3

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Activity 2: Learners work in pairs

Give learners a number line to complete. Give them the beginning and the end numbers for the number line 420- 430.

- Colour the first number, 420, blue. Count in 4s and colour these numbers blue as well.
- Colour the second number, 421, orange. Count in 4s and colour these numbers orange. What do you notice? (They have the same pattern as the number boards.



Remediation: Give the learners number lines and ask them to complete the intervals: 120 – 130, 260 – 270, 340 – 350 and 490 – 500. Ask them to show counting in 4s, by using hoops. *What will happen if I start on 121, 261, 341, and 491 counting in 4s?*

Enrichment: See Enrichment Activity Cards 7.1-7.4

Note: This classroom activity includes patterns of twos, threes, fours, fives and tens.

4. Classwork activity (Group/independent work) – 25 minutes

Do the following activities in your maths book.

1. *What is the next number in this pattern?*

- 314, 318, 322, ... (326)
 - 151, 156, 161, ... (166)
 - 133, 136, 139, ... (142)
 - 228, 230, 232, ... (234)
 - 373, 383, 393, ... (403)
 - 243, 241, 239, ... (237)
 - 161, 156, 151, ... (146)
 - 218, 208, 198, ... (188)
 - 152, 148, 144, ... (140)
 - 325, 322, 319, ... (316)

- What is the difference between the patterns in the column on the left and the patterns in the column on the right on the right? (We are counting forwards on the left and backwards on the right.)
- DBE Workbook. (Page 125).

5. Homework activity – 5 minutes

Do the following activities in your homework book.

- Draw and complete a number line. Fill in the numbers then use hoops to show counting in multiples of 4: 394, 398, 402, 406, ____, ____, ____, ____ (410, 414, 418, 422)
- Complete the following: 454 (+4) ____ (+4) ____ (+4) ____ (+4) ____ (-4) ____ (-4) ____ (-4) ____ . (458, 462, 466, 470, 466, 462, 458)

6. Reflection on lesson

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Date:

Lesson Topic: Fours**Teacher's notes****CAPS Topics:** 1.1 Count objects 1.2 Count forwards and backwards 1.5 Division 1.14 Repeated addition leading to multiplication 1.16 Mental Mathematics**Lesson vocabulary:** Fours, multiples of four, addition number sentence, multiplication number sentence**Prior knowledge**

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Solve word problems in context and explain own solution to problems involving repeated addition and multiplication with answers up to 50.

Assessment

Formal Task 2 Activity 2: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 4s from any number between 0 and 500. E.g. 104, 108, ...

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	Half of 12	6	6.	Double 9	18
2.	Double 12	24	7.	$3+3+3=$	9
3.	Half of 6	3	8.	$3+3+3+3+3=$	12
4.	Double 6	12	9.	Three more than fifteen	18
5.	Half of 9	$4\frac{1}{2}$	10.	Three less than twelve	9

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes**Resources:** Counters, multiplication table, pictures, spider diagram.**Concepts:**

- Solve number problems in context and explain own solution to problems involving multiplication with answers up to 75, using appropriate symbols $\times$, $=$, $\square$
- Multiply 2, 4, 5, 10, and 3 to a total of 50.

**Activity 1: Whole class activity.****Using arrays:**

- Draw or pack the counters out on a desk. Ask 'How many counters are in each row?' (4)
- Let us count: (4, 8, 12, 16, 20, 24, 28, 32, 36, 40).
- Let us write an addition number sentence? ($4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 = 40$).
- What is a shorter way to write this? (As a multiplication number sentence)
- What will a multiplication number sentence look like? ($4 \times 10 = 40$ or $10 \times 4 = 40$)
- The inverse of multiplication is division. What would a division number sentence look like? ($40 \div 4 = 10$).

Activity 2

Solve the problem with your learners. A vegetable garden has 5 rows of plants. Each row has 4 plants.

Date:

- Let us write it as an addition number sentence: $4 + 4 + 4 + 4 + 4 = \square$
- We can count: 4, 8, 12, 16, 20 plants
- We can say there are 5 rows with 4 plants each. Draw a picture if necessary.
- Previously we said that 5 groups of 4 is the same as 5×4 . So we can say 5 rows of 4 is the same as $5 \times 4 = (20)$. Let us write it as a multiplication number sentence: $5 \times 4 = \square$

Make up more word problems for your learners to solve that involve multiples of 4.

Activity 3: Learners work in pairs. Use this activity for consolidation of the 4x tables.

The multiplication table:

- Chanting of the tables can be done. Learners do not have to know the tables in Grade 3. The focus is on the language, which allows a mental image for grouping.
- Learners use their fingers to show one 4 is four, two 4s are eight etc.

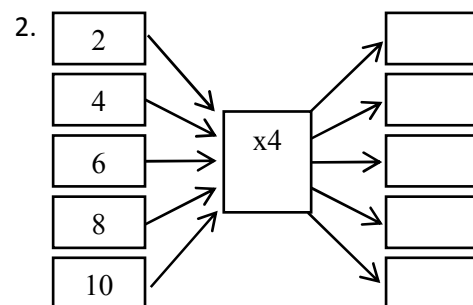
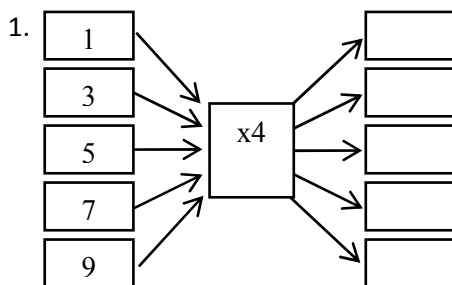
x	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

Remediation: Ask learners to make 6 groups of 4 with their counters. Then write this as an addition Number sentence ($4 + 4 + 4 + 4 + 4 + 4 = 24$) and a multiplication number sentence ($6 \times 4 = 24$).

Enrichment: See Enrichment Activity Cards 7.1-7.4

4. Classwork activity (Group/independent work) – 25 minutes

Do the following questions in your maths book. Your teacher will do the first spider diagram with you.



- The taxi owner has to order tyres for 7 taxis. If each taxi needs four tyres, how many tyres must the taxi owner order? ($6 \times 4 = 24$)
- How many cars are needed to transport 24 learners, if four learners fit into a car? (6 cars)
- Tony has 40 sweets. He eats four sweets every day. For how many days can eat sweets? (40 divided by 4 = 10)

5. Homework activity – 5 minutes

Complete DBE Worksheet 55b (Page 125)

6. Reflection on lesson

Date:

Lesson Topic: Sharing leading to fractions**Teacher's notes****CAPS Topics:** 1.1 Count objects 1.2 Count forwards and backwards 1.10 Sharing leading to division 1.16 Mental Mathematics**Lesson vocabulary:** Equal sharing, grouping, fraction**Prior knowledge**

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Use and name fractions in familiar contexts including halves, quarters, thirds and fifths.
- Recognise fractions in diagrammatic form and write fractions as 1 half, 2 thirds.

Assessment

Formal Task 2 Activity 2: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 100s between 0 and 1 000. E.g. 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	$3 + 17 =$	20	6.	$0 + 20 =$	20
2.	$5 + 12 =$	17	7.	$4 + 10 =$	14
3.	$6 + 11 =$	17	8.	$7 + 11 =$	18
4.	$1 + 19 =$	20	9.	$9 + 10 =$	19
5.	$2 + 12 =$	14	10.	$10 + 1 =$	11

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

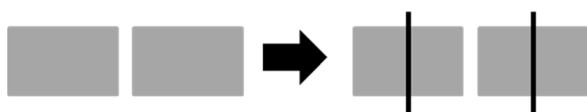
3. Lesson content – concept development – 30 minutes**Resources:** Unifix blocks, items to share/pictures of items.**Concepts:**

- Solve and explain solutions to practical problems that involve equal sharing and grouping up to 75 with answers that include unitary and non-unitary fractions e.g. half, quarter, three quarters, two fifths.

Activity 1: Learners work in pairs.

Do these activities practically or use drawings:

- Ask the learners how we can share two chocolate bars equally between 4 friends.
- Give them pictures to represent the chocolates.
- What fraction of the chocolate bars did each learner get? (one half)



Date:

Activity 2

- Give the learners unifix blocks. Ask them to make 4 chocolate bars using the unifix cubes. Each chocolate should be made using 3 blocks.



- Ask the learners to share the chocolates amongst three children.
- What fraction of the chocolate will each child get? (one and one third)



- Discuss the answer – are there different ways of breaking up the chocolates to share it out? (yes – you could break up all of the chocolates and share the pieces, each child will get four small pieces which is equal to one and one third as well.)

Remediation: Do the same with: 5 chocolates shared equally amongst 4 children (one and one quarter each) and 6 chocolates shared equally amongst 5 children (one and one fifth each). (Do this using drawings and unifix each time.)

Enrichment: See Enrichment Activity Cards 7.1-7.4.

4. Classwork activity (Group/independent work) – 25 minutes

Do the following activities in your maths book.

Draw pictures to show all your answers.

1. Share 8 chocolate bars amongst 3 friends so that they all get the same amount of chocolate and there is nothing left over. (2 and one third)
2. Find one quarter of 20 sweets. (five)
3. Grandmother gives Kiki R12. Kiki wants to save a third of the money. *How much money should she save?* (R4)
4. Complete DBE Worksheet 57a (Page 128).

5. Homework activity – 5 minutes

Do the following activities in your homework book. Draw a picture each time to show your answers.

1. I have 20 balloons at my party. Three quarters of them popped. *How many balloons do I have left over?* (5)
2. *Six sweets will make up what fraction of 24 sweets?* (one quarter)
3. Show two fifths of 25. (10)
4. Share 50 Smarties equally between 10 children. *What fraction will each child get?* (one fifth)

6. Reflection on lesson

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Date:

Lesson Topic: Fractions**Teacher's notes****CAPS Topics:** 1.1 Count objects 1.2 Count forwards and backwards 1.10 Sharing leading to division 1.16 Mental Mathematics**Lesson vocabulary:** Equal sharing, grouping, fractions**Prior knowledge**

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Use and name fractions in familiar contexts including halves, quarters, thirds and fifths.
- Recognise fractions in diagrammatic form and write fractions as 1 half, 2 thirds.

Assessment

Formal Task 2 Activity 2: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 50s between 0 and 500. E.g. 50, 100, 150, 200, 250, 300, 350, 400, 450, 500

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	$12 - 5 =$	7	6.	$13 - 8 =$	5
2.	$14 - 6 =$	8	7.	$16 - 7 =$	9
3.	$15 - 8 =$	7	8.	$18 - 10 =$	8
4.	$11 - 3 =$	8	9.	$19 - 9 =$	10
5.	$10 - 5 =$	5	10.	$10 - 0 =$	10

2. Homework/Corrections – 15 minutes

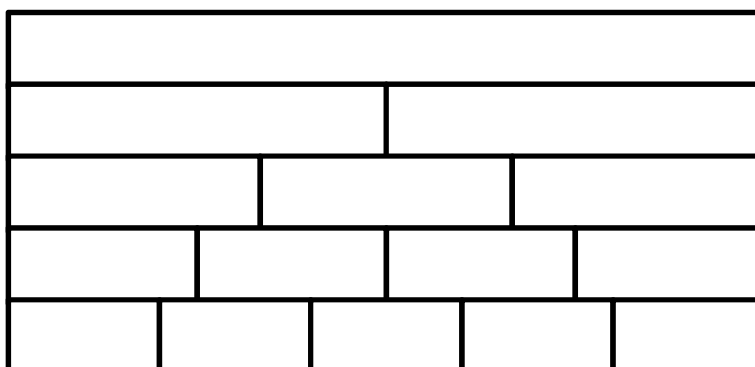
Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes**Resources:** Fraction wall, fraction strips (or Cuisenaire rods if you have them), scrap paper**Concepts:**

- Solve and explain solutions to practical problems that involve equal sharing and grouping up to 75 with answers that include unitary and non-unitary fractions e.g. half, quarter, three quarters, two fifths.

Activity 1: Whole class activity

- Draw this fraction wall on the board (showing halves, thirds, quarters and fifths).
- Write the word names of the fraction parts into the fraction wall with the help of your learners.



Date:

- *How many halves/thirds/quarters/fifths equal a whole?* (discuss each one separately- 2,3,4,5)
- *How many quarters in one half?* (2)
- *Which is bigger – one half or two fifths?* (one half)
- *Which is bigger – one half or two thirds?* (two thirds)
- *Which is bigger – two thirds or three quarters?* (three quarters)
- Ask the learners to compare other pairs of fractions – they make up a sentence such as: *One half is less than one half.*

Activity 2: Learners work in groups of four

Give each group 30 counters. Ask them to find the following fraction parts using the counters:

- *What is one fifth of 30?* (6)
- *What is two fifths of 30?* (12)
- *What is one quarter of 28?* (7)
- *What is three quarters of 28?* (21)
- *What is one third of 30?* (10)
- *What is two thirds of 30?* (20)

Remediation: Give the learners fraction strips or Cuisenaire rods. Ask them to put down the large strips. (This is a whole). Ask the learners to place two equal strips below the whole that are the same length. (1 whole is the same as two halves) Do the same with: 3 strips – one whole is the same as three thirds. 4 strips – one whole is the same as four quarters. 5 strips – one whole is the same as five fifths. Use groups of counters to find fraction parts as well. (e.g. one quarter of four counters = 1 counter; one quarter of 12 counters = 3 counters etc. *How do I find quarters? I take my whole and divide it up into four parts of equal size.*)

Enrichment: See Enrichment Activity Cards 7.1-7.4.

4. Classwork activity (Group/independent work) – 25 minutes

Do the following activities in your maths book. Refer to the fraction board for the first 3 questions.

1. How many quarters in one half? (two)
2. Which is bigger – two thirds or one half? (two thirds)
3. Which is bigger – one half or three fifths? (three fifths)
4. What is one quarter of 40? (10)
5. What is three quarters of 40? (30)
6. What is one third of 75? (25)
7. What is two thirds of 75? (50)
8. Complete DBE Worksheet 57b (Page 129).
9. Complete DBE Worksheet 59 (Page 132).

5. Homework activity – 5 minutes

No homework

6. Reflection on lesson

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Date:

Lesson Topic: Length**Teacher's notes****CAPS Topics:** 1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 4.2 Length**Lesson vocabulary:** Hand span, paces, foot lengths, finger width, measure, length, height, width**Prior knowledge**

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Estimate, measure, compare, order and record length using metres (either metre sticks or metre lengths of string) as the standard unit of length

Assessment

Formal Tasks 2 Activity 2. Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 5s from any given number between 0 and 500. E.g. 401, 403, 405...

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	15+.....= 20	5	6.	18+.....= 20	2
2.	20+.....= 20	0	7.	11+.....= 20	9
3.	17+.....= 20	3	8.	19+.....= 20	1
4.	16+.....= 20	4	9.	10+.....= 20	10
5.	12+.....= 20	8	10.	14+.....= 20	6

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes**Resources:** DBE Workbook, hands, feet, pencils, triangle cut-out shapes.**Concepts:**

- Describe the length of objects by counting and stating how many informal units long they are and use language to talk about the comparison e.g. longer, shorter, taller, wider.

Activity 1: Individual work

Ask the learners that it is important to use the same object so that we have the same size or length when we measure, and that there should be no gaps between these objects.

- Ask the learners what they think people used to use for measuring length before there were rulers (hand spans, foot lengths or paces).
- Ask if anyone knows how we use our hand spans to measure. Show the learners how to place one object (hand span) next to the other, and then move the first one to the other side of the second one. Emphasise where we start and how to avoid gaps.
- Ask learners to measure the length of their desk using hand spans.

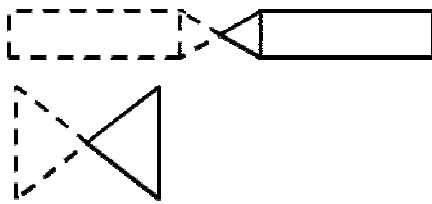
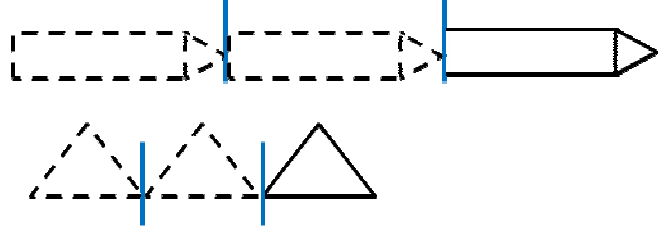


Date:

- Ask: *What should we do if there is a bit left over at the end?* (We estimate to get $\frac{1}{4}$ or $\frac{1}{2}$ or $\frac{3}{4}$ hand spans which we add to the total.)
- Now ask learners to: *Measure the length of the classroom using foot lengths.*

Activity 2

- Learners measure the length and width of their maths book.
- Learners work in pairs using one object e.g. a pencil or a triangular building block as a non-standard measuring unit.
- Learners measure by flipping the unit over or sliding it along and marking each end point.
- Ask the learners for their measurements and to say whether they flipped or slid their pencils/triangular building blocks.

Pencil or triangle flipped over**sliding pencil or triangle****Remediation:**

Work with learners individually physically helping them to understand what is meant by no gaps between objects.

Enrichment: See Enrichment Activity Cards 8.1-8.4.

4. Classwork activity (Group/independent work) – 25 minutes

Do the following questions 1 and 2 practically and the rest in your maths book.

1. Use hand spans to measure the height of your desk.
2. Use hand spans to measure the width of your desk.
3. Use a pencil to measure the height of the classroom door.
4. Use a pencil to measure the width of the classroom door.
5. Use finger widths to measure the length of your maths book.
6. Use finger widths to measure the width of your maths book.
7. Use hand spans to measure the length of your maths book.
8. Use hand spans to measure the width of your maths book.
9. Why do you get different measurements for the length and width of your maths book when you measure these using your finger width and then you hand span?

5. Homework activity – 5 minutes

No homework

6. Reflection on lesson

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Date:

Lesson Topic: Data**Teacher's notes**

CAPS Topics: 1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 5.4 Collect and organise data 5.5 Represent data 5.6 Analyse and interpret data

Lesson vocabulary: Data, organise, tables, bar graph, axis/axes, label, graph title

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Analyse data from representations provided.
- Draw at least one pictograph with one-to-one correspondence.

Assessment

Formal Task 2 Activity 2: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 50s between 0 and 1 000. E.g. 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 1 000

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	7+ <u> </u> = 12	5	6.	4+ <u> </u> = 14	10
2.	1+ <u> </u> = 20	19	7.	9+ <u> </u> = 18	9
3.	9+ <u> </u> = 15	6	8.	6+ <u> </u> = 14	8
4.	2+ <u> </u> = 16	14	9.	8+ <u> </u> = 16	8
5.	3+ <u> </u> = 13	10	10.	0+ <u> </u> = 10	10

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes

Resources: DBE Workbook, pictures, old magazines, cut-outs of t- shirts (6 green, 10 yellow, 8 blue, 12 pink)

Concepts:

- Collect data about the class or school to answer questions posed by the teacher.
- Organise data supplied by teacher or book in lists, tallies and tables.
- Represent data in a pictograph or bar graph and analyse data from representations.

Note: This lesson works well if the entire lesson is done in small groups of 8-12 learners and each child participates actively in all the activities.

Activity 1: Sort data

Place cardboard cut-outs of the following items randomly on the board: 6 green t-shirts, 10 yellow t-shirts, 8 blue t-shirts and 12 pink t-shirts.

Get some children to draw washing baskets on the board in the same colours as the t-shirts.

- Ask learners to sort and place the t-shirts into the matching coloured basket.
- Count how many t-shirt there are of each colour and write the number on the washing basket.

Activity 2: Transfer data onto a table format

- Learners draw tables in their maths books. Show them how to transfer the data from the baskets to the tables.

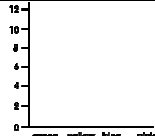
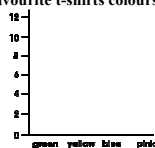
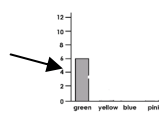
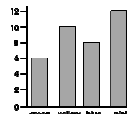
Colour of the t-shirts	Number of t-shirts
green	6
yellow	10

Date:

blue	8
pink	12

Activity 3: Represent the data in a bar graph

Take the learners through each of the following steps:

1.	Draw the axes of the graph	
2.	Label the axes. Point out that the spaces between the numbers should be the same. The spaces between the colours should also be the same.	
3.	Remind learners that a story has a title. <i>So what do you think the title of a bar graph should be?</i> (Our class favourite t-shirt colour) <i>Where will you write the title of the graph? Above or below the graph</i>	Our class favourite t-shirts colours 
4.	Represent data on the bar graph by drawing the bars. The height of the bars needs to match the number of t-shirts. We have 6 green t-shirts, so how will we represent this on the bar graph? (Look at the numbers on the axis with the numbers and match this)	Our class favourite t-shirts colours 
5.	Do the same for all the other t-shirts.	Our class favourite t-shirts colours 
6.	Learners analyse the data by answering questions such as a) <i>What is the most popular colour for t-shirts in our class?</i> (pink) b) <i>Which colour do the fewest children like?</i> (green) c) <i>Do more learners like yellow or blue?</i> (blue) d) <i>By how many more?</i> (two) e) <i>How many children are there in our class?</i> (36) f) <i>Is there anything else that you can tell me about the graph?</i> (e.g. Nobody likes black t-shirts)	

Remediation: Give the learners a container with colour counters. First tell them to sort it according to the colours. Tell them to draw a pictograph by giving them a template and key. Ask them how many counters are there of each colour: blue, green, yellow and red.

Enrichment: See Enrichment Activity Cards 8.1-8.4

4. Classwork activity (Group/independent work) – 25 minutes

1. Complete DBE Worksheet 36 (Pages 84 & 85)

5. Homework activity – 5 minutes

No homework

6. Reflection on lesson

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Date:

Lesson Topic: Value of money and making up totals**Teacher's notes****CAPS Topics:** 1.1 Count objects 1.2 Count forwards and backwards 1.11 Money 1.16 Mental Mathematics**Lesson vocabulary:** Money, coins, bank notes, Rands, cents, totals, value, change**Prior knowledge**

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Recognise and identify the South African coins 5c, 10c, 20c, 50c, R1, R2, R5 and bank notes R10, R20 and R50.
- Solve money problems involving totals and change in cents up to 90c and rand to R99.

Assessment

Formal Tasks 2 Activity 2. Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 5s from any given number between 0 and 500. E.g. 402, 407, 412, ...

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	$12 - \underline{\quad} = 4$	8	6.	$14 - \underline{\quad} = 6$	8
2.	$15 - \underline{\quad} = 10$	5	7.	$11 - \underline{\quad} = 10$	1
3.	$18 - \underline{\quad} = 9$	9	8.	$16 - \underline{\quad} = 13$	3
4.	$13 - \underline{\quad} = 6$	7	9.	$19 - \underline{\quad} = 12$	7
5.	$10 - \underline{\quad} = 6$	4	10.	$20 - \underline{\quad} = 11$	9

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes**Resources:** DBE Workbook, cut-outs of rands and cents**Concepts:**

- Recognise and identify the South African coins and bank notes.
- Solve money problems involving totals and change in rands or cents.

Activity 1

Learners work in pairs

- Ask the learners to write 525c as Rands and cents.
- Let learners write it in expanded notation.
- $500c + 20c + 5c$
500c is equal to R5.
So we can write 525c as R5 and 25c or R5,25.

Activity 2

Learners work in groups of 4.

- Ask learners to think about all the ways in which they can make up R400 using only bank notes and to write them down? *How do you know whether you have all the solutions?*
- If learners struggle to do this activity abstractly allow them to use cut-out notes.

Date:

Activity 3

Learners work in

Tell children that you want them to solve this problem: *‘Travis has a 50c coin and four 20c coins, Toffees cost R1,20. How much change will he get if he pays with all his money?’*

- Learners select Travis’s cut-out coins 50c, 20c, 20c, 20c, 20c, *How much do we get when we add the coins together?*
- Write a number sentence, $50c + 20c + 20c + 20c + 20c$
- Add 50 c and all the 20c coins, $50c + 80c$
- This will give us 130c, *How can I write 130c in Rands?* (R1,30)
- We know now that Travis has R1,30. The toffees cost R1,20. *How much change will Travis get?* (He will get 10c change.)
- *What are the different ways in which he could get his change?*

Remediation:

Set up a simple shop in the class with items priced at amounts within the children’s number range e.g. R5,50, R2,20, R3,55. Learners take turns to be the shopkeeper. Each time a sale is made both the shopkeeper and the customer need to calculate the total and the change. .

Enrichment: See Enrichment Activity Cards 8.1- 8.4

4. Classwork activity (Group/independent work) – 25 minutes

Do the following questions in your maths book.

1. $R2,20 + R4 = \underline{\hspace{2cm}}$ (R6,20)
2. $R3,50 + R2,50 = \underline{\hspace{2cm}}$ (R6)
3. Write 525c as rands and cents, (R5,25)
4. Draw notes to show in how many different ways you can make up R400 using only bank notes,
5. Mandla pays R2,50 to take a taxi to school, *What does it cost him to get to and from school each day?* ($R2,50 \times 2 / R2,50 + R2,50 = R5,00$)
6. One pair of shoes cost R250, *How much will two pairs of shoes cost?*
7. DBE Worksheet 53b (p121)

5. Homework activity – 5 minutes

Do the following questions in your homework book.

1. $R5,75 + R3,20 = \underline{\hspace{2cm}}$ (R8,95)
2. $R3,25 + R2,75 = \underline{\hspace{2cm}}$ (R6)
3. Mandla pays R2,50 to take a taxi to school, The train costs R6 for a return ticket, Which is cheaper, the train or the taxi?(The taxi costs R5 for a return ticket while a train costs R6 for a return ticket. Therefore the taxi is cheaper.)

6. Reflection on lesson

Date:

Lesson Topic: Money - Buying and selling problems**Teacher's notes****CAPS Topics:** 1.1 Count objects 1.2 Count forwards and backwards 1.11 Money 1.16 Mental Mathematics**Lesson vocabulary:** Money, coins, bank notes, Rands, cents, totals, value, change**Prior knowledge**

In Grade 2 the learners should have learnt how to:

- Counting forwards and backwards from 0 – 200.
- Recognise and identify the South African coins 5c, 10c, 20c, 50c, R1, R2, R5 and bank notes R10, R20 and R50.
- Solve money problems involving totals and change in cents up to 90c and rand to R99.

Assessment

Formal Tasks 2 Activity 2. Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 2s from any number between 0 and 500. E.g. 102, 104, 106

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	$15 - \underline{\quad} = 10$	5	6.	$6 + \underline{\quad} = 13$	7
2.	$9 + \underline{\quad} = 14$	5	7.	$17 - \underline{\quad} = 8$	9
3.	$19 - \underline{\quad} = 12$	7	8.	$5 + \underline{\quad} = 18$	13
4.	$2 + \underline{\quad} = 14$	12	9.	$15 - \underline{\quad} = 9$	6
5.	$14 - \underline{\quad} = 6$	8	10.	$6 + \underline{\quad} = 15$	9

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes**Resources:** DBE Workbook, money cut-outs**Concepts:**

- Recognise and identify the South African coins and bank notes.
- Solve money problems involving totals and change in rands or cents.

Activity 1

- Do the following problem with your learners as a class.
- Pedro's granny gave him R5. Which 3 sweets can he buy? Choc chuckle R2,70; gums R1,80; sour worms R1,60; magic mints R2,20; toffee R1,20.
- What is the question? Which 3 sweets can he buy?*
- How much does he have? (R5)*
- Which are the other important numbers? (R2,70, R1,80, R1,40, R2,20, R1,20)*
- Write the following on the board and ask the learners to copy it in their maths books.

Choc chuckle R1,70	Gums R1,80	Sour worms R2,60	Magic mints R2,20	Toffee R1,20
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- Let learners colour/circle a possible combination e.g.

Date:

Sour worms, magic nuts and toffee

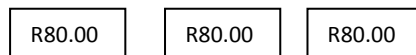
- Let them write a number sentence:
 $R2,60 + R2,20 + R1,20$
 $= R2 + R2 + R1 + 60c + 20c + 20c$
 $= R5 + 100c$ (R1)
 $= R6,00$ Too much!
- Try other combinations using the method described above until the total is R5 or less,
 (Choc chuckle + Gums+ Toffee: $R1,70 + R1,80 + R1,20 = R4,70$)

Activity 3

Damon bought 3 books for R80 each. How much change will he get for R300?

What is the question? How much change will he get from R300?

Draw it.

Number sentence: $R80,00 + R80,00 + R80,00 = R240,00$ Calculate: $R300 - R240 = R60$, (My change will be R60,00)**Remediation:**

Set up a simple shop in the class with items priced at amounts within the children's number range. e.g. R5,50, R2, 20, R3,55, Learners take turns to be the shopkeeper. Each time a sale is made both the shopkeeper and the customer need to calculate the total and the change.

Enrichment: See Enrichment Activity Cards 8.1- 8.4**4. Classwork activity (Group/independent work) – 25 minutes**

Do the following questions in your maths book.

- There are 5 chocolates in a packet. One packet of chocolates costs R1,00. Mr King needs 50 chocolates. How many packets should he buy? What will he pay? (R10,00)
- Three buses drive on a toll road and are charged R40 each. How much do they pay in total? (It is expected that learners will use repeated addition problems where the rand value is so large. $R40 + R40 + R40 = R120$)
- DBE worksheet 56b (p127).

5. Homework activity – 5 minutes

Do the following questions in your homework book.

- I have R20,00. I need to buy 5 balls. Which balls can I buy?
 Soccer balls – R5,85 each, cricket balls - R3,80 each, netball balls – R6,20 each, rugby balls R5,99 each, tennis balls – R2,75 each. (1 soccer ball, 1 cricket ball, 1 rugby ball and 2 tennis balls).
- Peter bought 4 pairs of shoes for R90 each. How much change will he get for R300? (R30)
- Three buses drive on a toll road and are charged R35 each. How much do they pay in total? (R105).

6. Reflection on lesson

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Date:

Lesson Topic: Length**Teacher's notes****CAPS Topics:** 1.2 Count forwards and backwards 1.16 Mental Mathematics 4.2 Length**Lesson vocabulary:** Length, standard unit, comparison. longer, shorter, taller, wider, width, metre, record**Prior knowledge**

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Estimate, measure, compare, order and record length using metres (either metre sticks or metre lengths of string) as the standard unit of length.

Assessment

Formal Task 2 Activity 2: Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 50s between 0 and 750. E.g. 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	$9+2=$	11	6.	$12-9=$	3
2.	$15-7=$	8	7.	$8+3=$	11
3.	$8+7=$	15	8.	$19-10=$	9
4.	$16-9=$	7	9.	$3+9=$	12
5.	$5+9=$	14	10.	$18-12=$	6

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes**Resources:** DBE Workbook, metre stick, string cut into length of one metre.**Concepts:**

- Estimate, measure, compare, order and record length using metres (either metre sticks or metre lengths of string) as the standard unit of length. (Formal measuring)

Activity 1: Learners in groups of four

- Give learners one metre lengths of string.
- Tell learners that the string is one metre long. Place it on the floor.
- Ask the learners: *Who can take a step as long as a metre?*
- Ask: *Can anyone take a step longer than a metre?*

Activity 2

In groups, ask learners to measure objects using their strings. Each group must give you:

- Five things that are shorter than a metre in length.
- Five things that are longer than a metre in length.
- Five things that are exactly a metre long.

Remediation

Date:

Learners estimate, and measure the items in the table below. Remember that they should measure and record after each estimation in order to improve their skills.

	I estimate	I measure	How close was I?
Width of classroom			
Width of the window			
Length of teacher's table			

Enrichment: See Enrichment Activity Cards 8.1-8.4

4. Classwork activity (Group/independent work) – 25 minutes

Do the following activities in your maths books. You will need a string or a metre stick when you do questions 1 to 3. Estimate first then measure to see if these objects are longer or shorter than a metre.

	Measure	I estimate		Measure
		longer than a metre	shorter than a metre	Was I right?
1	Your height			
2	The width of the chalkboard			
3	The length of your desk.			
4	Width of the doorway			
5	The height of your desk.			

5. Homework activity – 5 minutes

Do the following activities in your homework book. You will need a metre long piece of string when you do questions 1 and 2. Write down if these objects are longer or shorter than a metre. Make a drawing to show it.

1. The height of your school bag.
2. Your height.
3. Draw a picture of something in your room/house that is longer than one metre.
4. Draw a picture of something in your room/house that is shorter than one metre.

6. Reflection on lesson

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Date:

Lesson Topic: Symmetry**Teacher's notes****CAPS Topics:** 1.2 Count forwards and backwards 1.16 Mental Mathematics 3.4 Symmetry**Lesson vocabulary:** Symmetry, reflection,**Prior knowledge**

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Recognise and draw line of symmetry in 2-D geometrical and non-geometrical shapes.

Assessment

Formal Tasks 2 Activity 2. Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 3s from any number between 0 and 500. E.g. 103, 106, 109...

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	10 - = 10	0	6.	11 - = 10	1
2.	15 - = 10	5	7.	12 - = 10	2
3.	19 - = 10	9	8.	13 - = 10	3
4.	16 - = 10	6	9.	17 - = 10	7
5.	18 - = 10	8	10.	14 - = 10	4

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes**Resources:** DBE Workbook, symmetrical shape patterns, cut-outs of shapes from recycled paper**Concepts:**

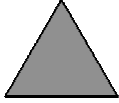
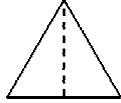
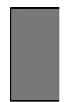
- Determine line of symmetry through paper folding and reflection.

Activity 1

Learners work in pairs.

Give the learners the following shapes cut from recycled paper. They must fold the shapes and then draw the lines of symmetry on the fold. Let them draw this table in their maths books and paste the shapes into their books.

Date:

Shape	Fold the shape	What two shapes do you think will it form?	Draw the line of symmetry
Triangle 		• 2 triangles	
Square 		• 2 rectangles	
Heart 		• 2 half hearts	

Remediation:

Give the learners the symmetrical shape patterns to cut out. Ask them to match the symmetrical sides of the shapes. Ask learners to show you the line of symmetry in the shape.

Enrichment: See Enrichment Activity Cards 9.1-9.4

4. Classwork activity (Group/independent work) – 25 minutes

Do the following in your maths book.

1. Draw the other half of the shape and show the line of symmetry. 

2. Draw the other half of the shape and show the line of symmetry. 

3. Draw the other half of the shape and show the line of symmetry. 

4. Draw the line of symmetry. 

5. Draw the line of symmetry. 

5. Homework activity – 5 minutes

Complete DBE Workbook 2 Worksheet 48a (Page 110)

6. Reflection on lesson

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Date:

Lesson Topic: Symmetry**Teacher's notes****CAPS Topics:** 1.2 Count forwards and backwards 1.16 Mental Mathematics 3.4 Symmetry**Lesson vocabulary:** Symmetry, line of symmetry, colour**Prior knowledge**

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Recognise and draw line of symmetry in 2-D geometrical and non-geometrical shapes.

Assessment

Formal Tasks 2 Activity 2. Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 3s from any given multiple between 0 and 500. E.g. 401, 404, 407, ...

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	$\underline{\quad} + 7 = 17$	10	6.	$\underline{\quad} + 0 = 10$	10
2.	$10 + \underline{\quad} = 12$	2	7.	$10 + \underline{\quad} = 18$	8
3.	$\underline{\quad} + 9 = 17$	8	8.	$\underline{\quad} + 12 = 14$	2
4.	$\underline{\quad} + 5 = 15$	10	9.	$8 + \underline{\quad} = 16$	8
5.	$10 + \underline{\quad} = 14$	4	10.	$\underline{\quad} + 10 = 15$	5

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes**Resources:** DBE Workbook, pictures, butterfly templates**Concepts:**

- Determine line of symmetry through paper folding and reflection.

Activity 1

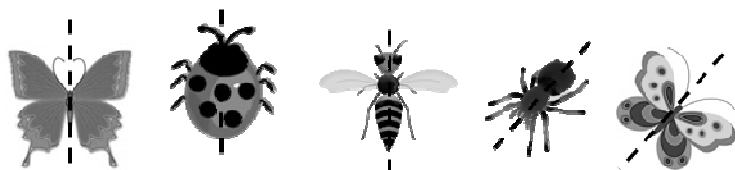
Learners work in pairs

- Ask the learners to explain to their partners in their own words what the line of symmetry is.

Activity 2

Whole class activity.

- Give the learners copies of the pictures on the following page or make basic drawings on the board.
- Ask the learners to show you where the line of symmetry will be. (Learners should not think that the line of symmetry is always from the top to the bottom (vertical)).

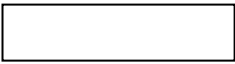


Date:

Activity 3

Learners work in groups of four.

- Give each group cut outs of the shapes in the table.
- Ask them to fold their paper in as many ways as they can and to count all the lines of symmetry.

Shapes	Drawings of shapes and lines of symmetry
	
	

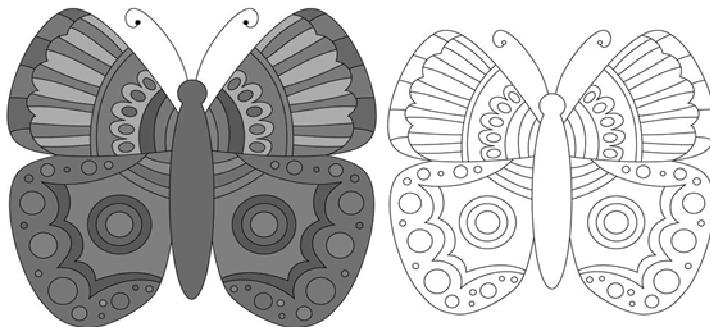
Remediation: Show learners how to use a mirror to test for a line of symmetry. (The image in the mirror should be the other half of the image otherwise the line is not a line of symmetry).

Enrichment: See Enrichment Activity Cards 9.1- 9.4

4. Classwork activity (Group/independent work) – 25 minutes

Do the following questions in your maths book.

1. The first butterfly is coloured symmetrically. Do the same with the second butterfly, but use different colours.



2. Draw two of your own bugs and also show the lines of symmetry on it.
3. Draw a necklace (a circle) made out of different coloured beads. Show the symmetry.

5. Homework activity – 5 minutes

Complete DBE Workbook 2 Worksheet 48b (Page 111).

6. Reflection on lesson

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Date:

Lesson Topic: 50s**Teacher's notes**

CAPS Topics: 1.1 Count objects 1.2 Count forwards and backward 1.4 Describe, compare and order numbers 1.6 Problem solving techniques 1.16 Mental Mathematics

Lesson vocabulary: Whole numbers, smaller than, greater than, equal to, smallest, greatest, counting in fifties

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Describe and compare whole numbers up to 99 using smaller than, greater than, fewer than and is equal to.
- Describe and order whole numbers up to 99 from smallest to greatest and greatest to smallest.
- Use ordinal numbers to show order, place or position.
- Use techniques like number lines to solve problems.

Assessment

Formal Tasks 2 Activity 2. Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 4s from any number between 0 and 500. E.g. 104, 108, 112, ...

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	14-__= 7	7	6.	__-5= 2	7
2.	__-6= 11	5	7.	16-__= 12	4
3.	17-__= 10	7	8.	__-9= 1	10
4.	__-7= 2	9	9.	11-__= 9	2
5.	15-__= 7	8	10.	13 - __= 5	8

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes

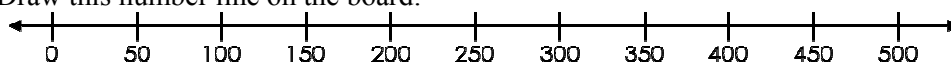
Resources: DBE Workbook, number lines, 50c cut-outs, 50 number cards

Concepts:

- Describe and compare whole numbers up to 500 using smaller than, greater than, fewer than and is equal to.
- Describe and order whole numbers up to 500 from smallest to greatest and greatest to smallest.
- Use, read and write ordinal numbers, including abbreviated form up to 31.
- Use techniques like number lines to solve problems.

Activity 1: Whole class activity

Draw this number line on the board:

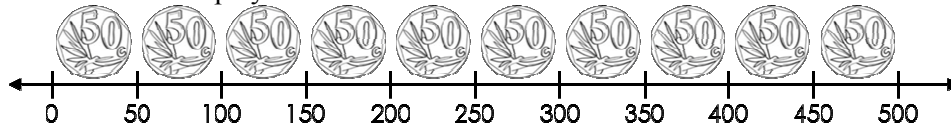


Date:

- *Let us count forwards in 50s - 50, 150, 200, 250, 300, 350, 400, 450, 500* Point to the numbers as the class is counting.
- *Let us count backwards in 50s - 500, 450, 400, 350, 300, 250, 200, 150, 50.* Point to the numbers as the class is counting.
- *What numbers do we get between 50 and 150?*

Activity 2

Place or draw 50c play coins between the intervals.



- *Show me where 150c or R.50 will be on the line.*
- *Show me where is 450c or R4.50 will be on the line.*
- *What is the total of: four 50c coins (R2), seven 50c coins (R3. 50), nine 50c coins (R4. 50)? Give your answers in Rands and cents.*

Remediation: Give the learners 0-500 (graded in 50's) number line. Tell them to count forwards and backwards in 50s. Ask questions like: If I count in 50s, which number will: come after 100, come before 100, come after 400, come before 400, come after 150, come before 450. Let them calculate this problem. I have seven 50c coins. *How much money do I have?* Learners use the cut-out coins to solve this.

Enrichment: See Enrichment Activity Cards 9.1- 9.4

4. Classwork activity (Group/independent work) – 25 minutes

Do all the questions in your maths book.

1. Draw and complete the 50s pattern: 0, 50, 100, __, __, __, __, __, __, __, __, 500 (150, 200, 250, 300, 350, 400, 450)
2. Write the next numbers: 200, 250, __, __, __ (300, 350, 400)
3. Write these numbers from the biggest to the smallest:

100	50	200	450	500
250	400	350	300	150

(50, 100, 150, 200, 250, 300, 350, 400, 450, 500)
4. I have nine 50c coins in my purse. How many cents do I have in total? How many rands do I have in total? (450c and R4, 50)

5. Homework activity – 5 minutes

Complete DBE Workbook 2 Worksheet 56 (p126).

6. Reflection on lesson

Date:

Lesson Topic: 100s**Teacher's notes**

CAPS Topics: 1.1 Count objects 1.2 Count forwards and backward 1.4 Describe, compare and order numbers 1.6 Problem solving techniques 1.16 Mental Mathematics

Lesson vocabulary: Whole numbers, smaller than, greater than, equal to, smallest, greatest, counting in hundreds

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Describe and compare whole numbers up to 99 using smaller than, greater than, fewer than and is equal to.
- Describe and order whole numbers up to 99 from smallest to greatest and greatest to smallest.
- Use ordinal numbers to show order, place or position.
- Use techniques like number lines to solve problems.

Assessment

Formal Tasks 2 Activity 2. Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 3s from any given number between 0 and 500. E.g. 401, 405, 409, ...

Mental maths activity - 10 minutes

	If I count in 50s, give me the number before the number I call out	Answer		If I count in 50s, give me the number before the number I call out	Answer
1.	400	350	6.	250	200
2.	50	0	7.	100	50
3.	150	100	8.	450	400
4.	250	200	9.	500	450
5.	550	500	10.	200	150

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes

Resources: DBE Workbook, number lines, R1 cut-outs, 100 number cards

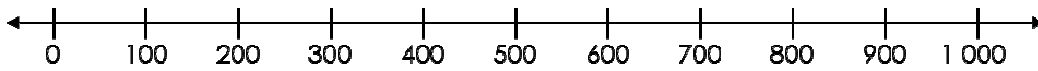
Concepts:

- Describe and compare whole numbers up to 500 using smaller than, greater than, fewer than and is equal to.
- Describe and order whole numbers up to 500 from smallest to greatest and greatest to smallest.
- Use, read and write ordinal numbers, including abbreviated form up to 31.
- Use techniques like number lines to solve problems.

Date:

Activity 1

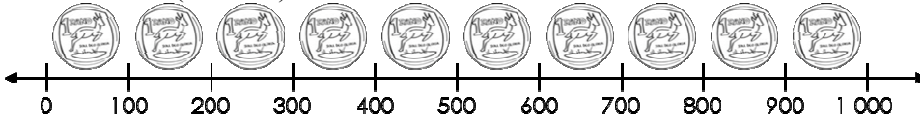
- Do this as a whole class activity with each child having their own apparatus (a number line marked in 100s (100 – 1000) number line. Ask the learners to count in 100s.



- forwards: 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000
- backwards: 900, 800, 700, 600, 500, 400, 300, 200, 100
- What numbers will be between 800 and 900? (801, 802....899),*
- What numbers will be between 200 and 300 (201, 202, 203....299)?*

Activity 2

Place R1 coins (cut-outs) between the intervals:



- Show me where 300c or R3 will be on the line.
- Show me where 700c or R7 will be on the line.
- What is the total of: four R1 coins (R4), seven R1 coins (R7), ten R1 coins (R10)? Give your answers in Rands.

Remediation: Give the learners 0-1000 (graded in 100s) number line. Ask them to count forwards and backwards in 100s. Ask questions like: If I count in 100s, which number will: come after 100, come before 200, come after 400, come before 400, come after 700, come before 1000.

Enrichment: See Enrichment Activity Cards 9.1- 9.4

4. Classwork activity (Group/independent work) – 25 minutes

Do all the questions in your maths book.

- Draw and complete the 100s number line: 0, 100, ____, ____, ____, ____, ____, ____, ____, ____, 1000 (200, 300, 400, 500, 600, 700, 800, 900)
- Write the next numbers: 200, 300, ____, ____, ____ (400, 500, 600)
- Write these numbers from the biggest to the smallest: 500, 300, 100, 800, 0, 600, 900, 1000, 200, 400, 700. (1000, 900, 800, 700, 600, 500, 400, 300, 200, 100, 0)
- Write these numbers from the smallest to the biggest: 500, 300, 100, 800, 600, 900, 1000, 200, 400, 700. (100, 200, 300, 400, 500, 600, 700, 800, 900, 1000)
- I have nine R1 coins in my purse. How many cents do I have in total? (900) . How many rands do I have in total? (R9.00)

5. Homework activity – 5 minutes

Do all the questions in your homework book.

- Draw and complete the 100s number line: 100, 200, ____, ____, ____, ____, ____, 800 (300, 400, 500, 600, 700)
- Write the next three numbers: 400, 500, ____, ____, ____ (600, 700, 800)
- When counting in 100s which number comes before 300? (200). After 300? (400)*
- When counting in 100s which number comes before 900? (800). After 900? (1000)*

6. Reflection on lesson

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Date:

Lesson Topic: Mass**Teacher's notes****CAPS Topics:** 1.1 Count objects 1.2 Count forwards and backward 1.16 Mental Mathematics 4.3 Mass**Lesson vocabulary:** Mass, kilograms, grams, light, heavy, lighter, heavier, measure, compare, balancing scale, record, order, compare**Prior knowledge**

In Grade 2 the learners should have learnt how to:

- Estimate, measure, compare, order and record mass using a balancing scale and non-standard measures e.g. blocks, bricks, etc.
- Use language to talk about the comparison e.g. light, heavy, lighter, heavier.

Assessment

Formal Tasks 2 Activity 2. Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 100s between 0 and 1 000. E.g. 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	$14 - 7 =$	7	6.	$11 - 5 =$	6
2.	$7 + 6 =$	13	7.	$10 + 9 =$	19
3.	$15 - 10 =$	5	8.	$12 - 8 =$	4
4.	$20 - 11 =$	9	9.	$13 + 6 =$	19
5.	$9 + 7 =$	16	10.	$17 - 7 =$	10

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

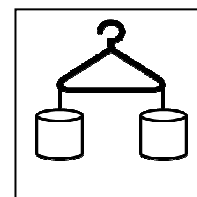
3. Lesson content – concept development – 30 minutes**Resources:** DBE Workbook, balancing scale (hanger), objects to find the mass of such as blocks, book, cup, ruler, match box, watch**Concepts:**

- Estimate, measure, compare, order and record mass using a balancing scale and non-standard measures e.g. blocks, bricks, etc.
- Use language to talk about the comparison e.g. light, heavy, lighter, heavier.

Activity 1

Small Group Activity.

Use a balancing scale, a large number (20) of building blocks of the same mass, and a variety of objects such as a book, cup, ruler, match box, watch, for this practical activity. If you don't have a commercial scale, use a hanger.



Learners need to be taught that in order to compare masses of different objects, the same unit needs to be used. For example, if a ruler has a mass of 20 blocks and a pair of scissors has a mass of 20 marbles, you cannot say whether they have the same mass or not, or which one is heavier. Tell the learners that the blocks which are all the same size and mass will be used to measure.

Date:

1. Allow each child to hold a block and sense the mass of the object.
2. Now ask them to estimate the number of blocks that will balance the mass of the book.
3. Record in the appropriate column.
4. Place the book into one of the containers in the scale.
5. Add a sufficient number of blocks into the second container of the scale until both sides balance. Record.
6. Work out the difference.
7. Do the same with all the other objects in the same sequence, that is:
Estimate → record → measure → record → calculate the difference with each item.

	Mass in blocks		
	I estimate	I measure	Difference
book			
cup			
ruler			
match box			
watch			
?			

Remediation:

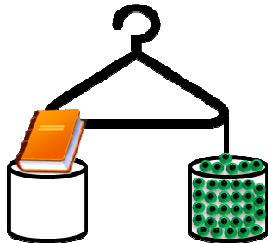
Let learners practice measuring more objects using their balancing scales. *Estimation improves with practice.*

Enrichment: See Enrichment Activity Cards 9.1- 9.4

4. Classwork activity (Group/independent work) – 25 minutes

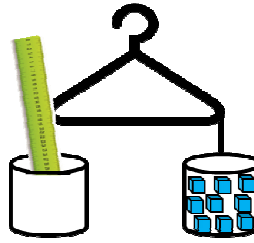
Do all the questions in your maths book.

1. What is the mass of the book?



(The book has a mass of 40 marbles.)

2. What is the mass of the ruler?



(The ruler has a mass of 9 unifix blocks.)

3. Can we compare the answers we got to 1 and 2 above? (No) Why not? (In order to compare masses of different objects, the same unit needs to be used.)

5. Homework activity – 5 minutes

No homework.

6. Reflection on lesson

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Date:

Lesson Topic: Mass**Teacher's notes****CAPS Topics:** 1.1 Count objects 1.2 Count forwards and backward 1.16 Mental Mathematics 4.3 Mass**Lesson vocabulary:** Mass, kilograms, , light, heavy, lighter, heavier, measure, compare, balancing scale, record, order, compare, calibrated, estimate, record, analogue scale**Prior knowledge**

In Grade 2 the learners should have learnt how to:

- Estimate, measure, compare, order and record mass using a balancing scale and non-standard measures e.g. blocks, bricks, etc.
- Use language to talk about the comparison e.g. light, heavy, lighter, heavier.
- Compare, order and record the mass of commercially packaged objects which have their mass stated in kilograms, e.g. 2 kilograms of rice and 1 kilogram of flour.
- Measure own mass in kilograms using a bathroom scale.

Assessment

Formal Tasks 2 Activity 2. Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Count forwards and backwards in 50s between 0 and 1 000.

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	$14 + 10 =$	24	6.	$127 - 10 =$	117
2.	$227 - 10 =$	217	7.	$308 + 100 =$	408
3.	$183 + 100 =$	283	8.	$421 - 10 =$	411
4.	$262 - 100 =$	162	9.	$157 + 10 =$	167
5.	$500 + 10 =$	510	10.	$382 - 100 =$	482

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes**Resources:** DBE Workbook, bathroom scale, kitchen scale, objects that can be used to determine mass e.g. brick, 2 l water bottles**Concepts:**

- Estimate, measure, compare, order and record mass using of school, bag, books etc. using an analogue scale.
- Use language to talk about the comparison e.g. light, heavy, lighter, heavier.
- Compare, order and record the mass of commercially packaged objects which have their mass stated in kilograms, e.g. 2 kilograms of rice and 1 kilogram of flour.
- Measure own mass in kilograms using a bathroom scale.

Activity 1: Whole class activity.

- Show the learners an analogue scale.
- *Ask the learners what we use scales for?* (We use a scale to measure the mass of an object.)

Date:



- Show them where the zero on the scale is.
- Once you put an object on the scale e.g. a school bag, the needle moves to a number which is the mass of the object.
- This number shows you the mass of the object in kilograms. Write the word *kilograms* on the board, say it aloud and ask learners to repeat *kilograms* after you. Show them how we write the abbreviation *kg*.
- Give learners a few objects to find the mass of. You can also make use of a kitchen scale.
- Children could also find out their own mass by weighing themselves - but remember that “weight” this may be sensitive issue for some learners – handle this matter sensitively.

Note for classwork: Each group of learners needs a few objects with a mass of between 1 kg and 2 kg.

Remediation: Practice more measuring activities. Point out that when they measure mass in kilograms they should try to round off the reading to the closest whole number. Go through the calibrations once again and help them with reading the mass of objects.

Enrichment: See Enrichment Activity Cards 10.1- 10.4

4. Classwork activity (Group/independent work) – 25 minutes

Do all the questions in your maths book.

1. Hold up an object that has the mass of 1 kg to get a sense of the mass.
2. Estimate and then measure the mass of the following objects.
3. Calculate the difference between your estimation and your measurement.
4. Record your answers in the table.

	Mass in blocks		
	I estimate	I measure	Difference
School bag			
10 books			
Cushion			
3 bricks			
2L bottle of water			
?			

5. Homework activity – 5 minutes

Complete DBE Workbook 2 Worksheet 44 (Pages 102 and 103)

6. Reflection on lesson

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Date:

Lesson Topic: Time and calendars**Teacher's notes**

CAPS Topics: 1.1 Count objects 1.2 Count forwards and backward 1.16 Mental Mathematics 4.1 Time

Lesson vocabulary: Time, calendars, religious festivals, public holidays, historical events, weeks, months.

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Count objects reliably to 200.
- Count forwards and backwards from 0 – 200.
- Calculate length of time and passing of time using clocks.

Assessment

Formal Tasks 2 Activity 2. Assess a group of learners today.

1. Mental maths**Counting - 5 minutes**

- Ask the learners to start at 387, count on in twos to 401.

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	$12 + \underline{\quad} = 17$	5	6.	$9 + \underline{\quad} = 18$	9
2.	$15 + \underline{\quad} = 19$	4	7.	$8 + \underline{\quad} = 15$	7
3.	$13 + \underline{\quad} = 16$	3	8.	$6 + \underline{\quad} = 15$	9
4.	$10 + \underline{\quad} = 15$	5	9.	$12 + \underline{\quad} = 14$	2
5.	$11 + \underline{\quad} = 18$	7	10.	$16 + \underline{\quad} = 20$	4

2. Homework/Corrections – 15 minutes

Reflection/remediation based on previous day's work/homework.

3. Lesson content – concept development – 30 minutes

Resources: DBE Workbook, original or copies of calendars for each learner.

Concepts:

- Read dates on calendars.
- Place birthdays, religious festivals, public holidays, historical events, school events on a calendar
- Use calendars to calculate and describe lengths of time in days or weeks or months.

Activity 1: Individual activity.

- Give the learners a copy of this year's calendar and ask them to paste it in their maths books. Let them name and write the following on the calendar:
 - Their own birthday
 - A friend's birthday
 - School events (maths test days, school sports day,

Activity 2: Work in pairs

- Learner will use their calendars to calculate and describe lengths of time in days or weeks or months. Write these questions on the board and read them to the class. Each time the learners should give the answers both as a number of days and a number of weeks and days.
 - *How long is it between your birthday and your partner's birthday?*

Date:

- *How long is it between the first maths test and the second maths test this term?*
- *How long is it between the first day of school and the school sports day?*
- *How long is it between the school sports day and the last day of term?*
- Other questions about school events that your class entered on the calendar.

Remediation:

Give the learners a 1-month calendar. Tell them to show you: the month of the calendar, the year of the calendar, and the days of the week. Ask them: *How many days are in this month? Is there anybody that has his or her birthday in this month? When and on what day will it fall? How many days is it from today? How many days ago was it?* Work with the learners to help them understand how to give answers both as a number of days and a number of weeks and days.

Enrichment: See Enrichment Activity Cards 10.1 – 10.4.

4. Classwork activity (Group/independent work) – 25 minutes

Do all the questions in your maths book.

1. Write the South African public and religious holidays on the same calendar that you used earlier.

South African public holidays calendar	
New Year's Day	Sun 1 January
Public Holiday	Monday 2 January
Human Rights Day	Wednesday 21 March
Good Friday	Friday 6 April
Family Day	Monday 9 April
Freedom Day	Friday 27 April
Workers' Day	Tuesday 1 May
Youth Day	Saturday 16 June
Women's Day	Thursday 9 August
Public Holiday	Friday 10 August
Heritage Day	Monday 24 September
Day of Reconciliation	Sunday 16 December
Christmas Day	Tuesday 25 December
Day of Goodwill	Wednesday 26 December

2. Colour the block of your favourite month in yellow. (answers will vary)
3. How many months of the year have no public/religious holidays or birthdays? Name them. (This answer will differ from learner to learner.)
4. How long is it between New Year's day and Freedom day? (answer both as a number of days and a number of weeks and days.)
5. How long is it between Youth day and Heritage day? (answer both as a number of days and a number of weeks and days.)

5. Homework activity – 5 minutes

No homework

6. Reflection on lesson

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Mathematics Assessment Task 2**Grade 3**

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

Total Marks: 30

1. Draw and extend a pattern in which the sizes of the shapes increase.

(3)

2. Calculate $52 - 37 =$ _____

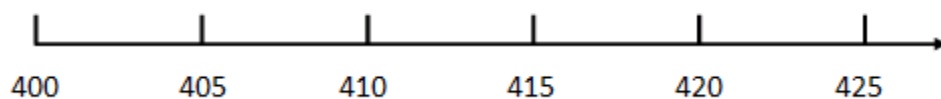
(3)

3. What are the next three terms in this number pattern?

367, 365, 363, _____, _____, _____,

(3)

4. Use the number line below to show how many 5s there are from 405 to 420



(2)

5. Draw the hands on this analogue clock to show half past 3 in the afternoon

(1)



6. Draw the hands on this analogue clock to show 8 o'clock in the evening.

(1)

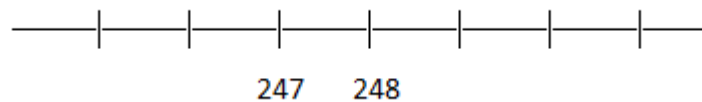


7. 75 suckers are shared amongst 2 classes. How many suckers will each class get?

(1)

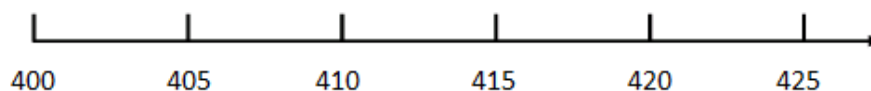
8. Complete the number line below:

(1)



9. Show where you will put the following numbers on the number line: 402, 417, 424

(3)



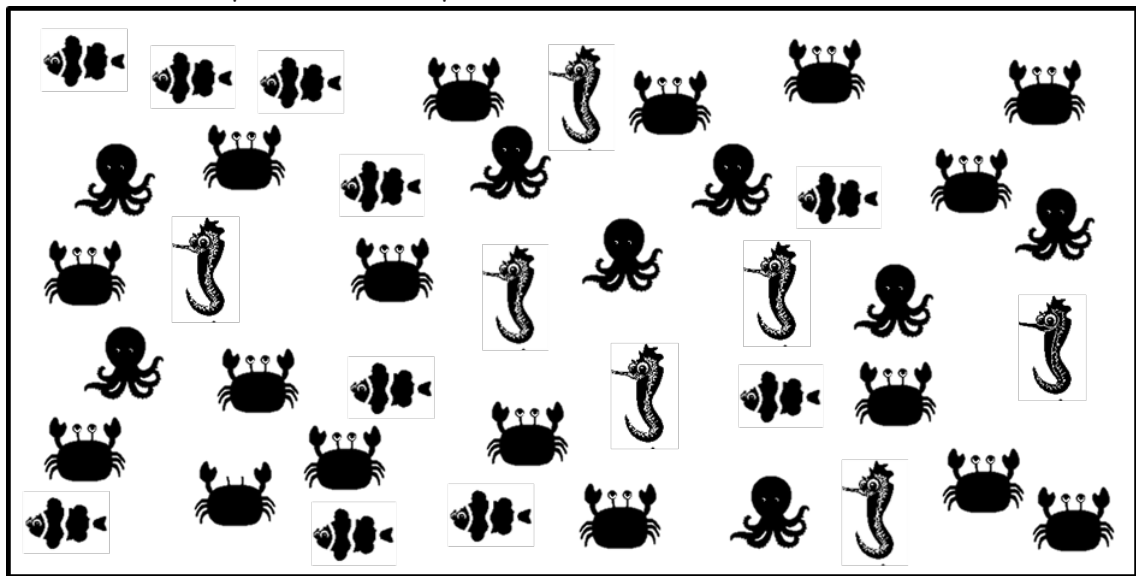
10. $6 \times 6 =$ _____

(1)

11. 8 groups of 50 is _____?

(1)

12. Use the information below to complete the pictograph.
Draw circles to represent the pictures.



(4)

Clown fish	Sea horse	Octopus	Crabs
			

13. Answer the following questions by looking at the information in the pictograph.

i) Which picture are there the most of? _____ (1)

ii) Which picture are there fewer of than Octopus?
_____ (1)

14. There are 60 people in the room. Two fifths of them are adults. How many adults are in the room?

(1)

15. Draw the line of symmetry into the shape below:

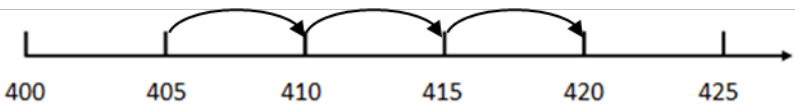
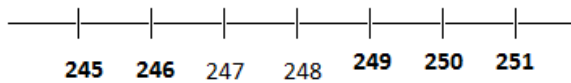
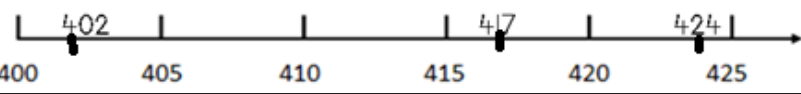
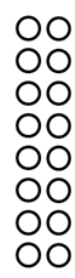
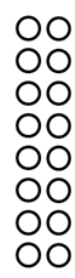
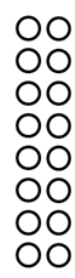
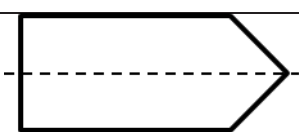


(1)

16. Make your own pattern using circles and squares

(2)

Grade 3 Lesson 46 – written Assessment 2 Memo

Question		Marks												
1. Learners answers will vary. 1 mark – pattern of shapes 1 mark – sizes of shapes increase 1 mark – at least one repetition of the pattern		(3)												
2. $52 - 37 = 15$ (accept alternative methods)		(3)												
3. 361, 259, 257		(3)												
4. 1 mark – shows three hops; 1 mark direction arrows shown 		(2)												
5. 	6. 	(1) (1) 1 mark each if both the long and the short hand are shown correctly												
7. $75 \div 2 = 37$ remainder 1. They each get 37 and there is 1 sucker left over		(1)												
8. All of the correct numbers must be marked on the number line. 		(1)												
9. Must indicate position on line 		(3)												
10. $6 \times 6 = 36$		(1)												
11. 8 groups of 50 is 400		(1)												
12. <table border="1" style="width: 100%; text-align: center;"><tr><td style="height: 150px;"></td><td style="height: 150px;"></td><td style="height: 150px;"></td><td style="height: 150px;"></td></tr><tr><td>Clown fish</td><td>Sea horse</td><td>Octopus</td><td>Crabs</td></tr><tr><td></td><td></td><td></td><td></td></tr></table>						Clown fish	Sea horse	Octopus	Crabs					(4) 1 mark for each column correctly completed - clown fish 10 - sea horse 6 - octopus 8 - crabs 16
														
Clown fish	Sea horse	Octopus	Crabs											
														
13. i. Crabs ii. Sea horses		(1) (1)												
14. 24 adults		(1)												
15. 		(1)												
16. 1 mark correct shapes; 1 correct pattern (answers will vary)		(2)												

Mental Mathematics Grade 3

Lesson 1 (Revision)	Lesson 2 (Revision)	Lesson 3 (Revision)	Lesson 4 (Revision)
Tuesday	Wednesday	Thursday	Friday
Date:	Date:	Date:	Date:
Do number bonds up to 20 with your learners.	Practise number bonds up to 20.	Practise number bonds up to 20.	Practise number bonds up to 20.

Lesson 5	Lesson 6	Lesson 7	Lesson 8	Lesson 9
Monday	Tuesday	Wednesday	Thursday	Friday
Date:	Date:	Date:	Date:	Date:
Arrange these numbers from the smallest to the biggest. • 116, 145, 120, 64 _____ • 200, 145, 87, 97, 115 _____ • 179, 58, 39, 200, 157 _____ • 89, 150, 45, 39, 55 _____ • 15, 16, 48, 102, 98 _____ • 200, 195, 199, 142 _____ • 54, 69, 32, 102, 45 _____ • 98, 65, 102, 130, 14 _____ • 89, 24, 102, 68, 31 _____ • 166, 160, 106, 161, 116 _____	Arrange these numbers from biggest to smallest. • 201, 300, 298, 187 _____ • 211, 300, 165, 122 _____ • 124, 201, 152, 98 _____ • 78, 15, 98, 87, 221 _____ • 14, 56, 102, 300 _____ • 78, 98, 125, 65 _____ • 154, 145, 123, 132 _____ • 12, 54, 89, 0, 45 _____ • 3, 4, 9, 201, 2 _____ • 154, 145, 114, 169 _____	Answer the following: • What is 1 more than 336? _____ • What is 1 more than 254? _____ • What are 2 more than 330? _____ • What is 2 more than 221? _____ • What are 3 more than 145? _____ • What is 3 less than 45? _____ • What are 2 less than 71? _____ • What is 4 less than 354? _____ • What are 10 less than 380? _____ • What is 10 less than 400? _____	Answer the following: • What is 1 more than 354? _____ • What is 1 less than 398? _____ • What are 2 more than 102? _____ • What are 2 less than 305? _____ • What are 3 more than 389? _____ • What is 3 less than 285? _____ • What are 4 more than 54? _____ • What is 4 less than 78? _____ • What are 10 more than 158? _____ • What is 10 less than 48? _____	Arrange these numbers from biggest to smallest • 143, 500, 489, 215 _____ • 450, 95, 125, 148 _____ • 94, 105, 35, 405, 0 _____ • 102, 54, 120, 320 _____ • 45, 465, 245, 105 _____ • 87, 98, 150, 306 _____ • 105, 208, 218, 12 _____ • 78, 201, 357, 94 _____ • 98, 58, 305, 51 _____ • 98, 210, 358, 450 _____

Lesson 10	Lesson 11	Lesson 12	Lesson 13	Lesson 14
Monday	Tuesday	Wednesday	Thursday	Friday
Date:	Date:	Date:	Date:	Date:
Give me the number/s between: • 457 and 460? _____ • 300 and 298? _____ • 51 and 54? _____ • 207 and 204? _____ • 45 and 48? _____ • 51 and 54? _____ • 500 and 497? _____ • 487 and 490? _____ • 124 and 126? _____ • 101 and 98? _____	Arrange these numbers from smallest to the biggest. • 458, 421, 312, 497 _____ _____ • 78, 54, 65, 102, 0 _____ _____ • 104, 56, 201, 354 _____ _____ • 498, 365, 105, 32 _____ _____ • 487, 500, 124, 305 _____ _____ • 35, 10, 98, 105 _____ _____ • 98, 57, 123, 451 _____ _____ • 89, 54, 105, 60 _____ _____ • 78, 105, 64, 201 _____ _____ • 89, 52, 500, 487 _____ _____	Arrange these numbers from the biggest to the smallest. • 78, 105, 98, 305, 2 _____ _____ • 89, 54, 102, 305 _____ _____ • 368, 500, 487, 120 _____ _____ • 78, 54, 105, 307 _____ _____ • 154, 210, 87, 95 _____ _____ • 45, 78, 102, 421 _____ _____ • 87, 35, 201, 50, 62 _____ _____ • 78, 105, 48, 352 _____ _____	Answer the following: • What is 1 more than 450? _____ • What is 3 more than 500? _____ • What are 4 more than 322? _____ • What are 5 more than 487? _____ • What are 10 more than 78? _____ • What are 1 less than 400? _____ • What are 2 less than 65? _____ • What are 6 less than 78? _____ • What are 3 less than 491? _____ • What are 10 less than 450? _____	Answer the following: • What are 2 more than 444? _____ • What are 5 less than 65? _____ • What are 6 more than 98? _____ • What are 10 less than 154? _____ • What are 3 more than 111? _____ • What are 1 less than 154? _____ • What are 5 more than 487? _____ • What are 3 less than 458? _____ • What are 1 more than 78? _____ • What are 2 less than 186? _____

Lesson 15	Lesson 16	Lesson 17	Lesson 18	Lesson 19
Monday	Tuesday	Wednesday	Thursday	Friday
Date:	Date:	Date:	Date:	Date:
Calculate the following:	Calculate the following:	Calculate the following:	Calculate the following:	Calculate the following:
• $5 + 4 - 3 =$ _____	• $7 - 3 + 6 =$ _____	• $54 + 10 =$ _____	• $5 + 3 =$ _____	• $5 - \text{ } = 3$
• $4 + 5 - 2 =$ _____	• $9 - 1 + 0 =$ _____	• $77 + 10 =$ _____	• $2 + 2 =$ _____	• $3 + \text{ } = 10$
• $2 + 4 - 5 =$ _____	• $3 - 0 + 3 =$ _____	• $121 + 10 =$ _____	• $10 + 0 =$ _____	• $10 - \text{ } = 10$
• $7 + 0 - 7 =$ _____	• $10 - 9 + 5 =$ _____	• $128 + 10 =$ _____	• $6 + 1 =$ _____	• $2 + \text{ } = 10$
• $8 + 1 - 0 =$ _____	• $9 - 5 + 4 =$ _____	• $166 + 10 =$ _____	• $8 + 1 =$ _____	• $9 - \text{ } = 3$
• $8 + 2 - 4 =$ _____	• $5 - 3 + 8 =$ _____	• $254 + 100 =$ _____	• $1 + 4 =$ _____	• $1 + \text{ } = 7$
• $7 + 3 - 3 =$ _____	• $10 - 3 + 0 =$ _____	• $177 + 100 =$ _____	• $5 + 1 =$ _____	• $10 - \text{ } = 5$
• $9 + 1 - 9 =$ _____	• $8 - 5 + 2 =$ _____	• $121 + 100 =$ _____	• $5 + 5 =$ _____	• $10 - \text{ } = 3$
• $3 + 3 - 0 =$ _____	• $6 - 3 + 1 =$ _____	• $128 + 100 =$ _____	• $9 + 1 =$ _____	• $4 + \text{ } = 10$
• $2 + 5 - 6 =$ _____	• $7 - 7 + 9 =$ _____	• $166 + 100 =$ _____	• $7 + 1 =$ _____	• $9 - \text{ } = 5$

Lesson 20	Lesson 21	Lesson 22	Lesson 23	Lesson 24
Monday	Tuesday	Wednesday	Thursday	Friday
Date:	Date:	Date:	Date:	Date:
Calculate the following: • $10 + 3 =$ _____ • $10 + 2 =$ _____ • $10 + 6 =$ _____ • $10 + 10 =$ _____ • $10 + 5 =$ _____ • $10 + 0 =$ _____ • $10 + 1 =$ _____ • $10 + 4 =$ _____ • $10 + 7 =$ _____ • $10 + 9 =$ _____	Calculate the following: • _____ + 4 = 14 • 5 + _____ = 15 • 10 + _____ = 16 • 9 + _____ = 12 • 1 + _____ = 12 • _____ + 3 = 13 • _____ + 7 = 13 • _____ + 8 = 18 • _____ + 10 = 17 • 9 + _____ = 14	Written Assessment 1	Calculate the following: • Double 10 _____ • Double 12 _____ • Double 5 _____ • Double 20 _____ • Double 100 _____ • What is half of 20 _____ • What is half of 18 _____ • What is half of 80 _____ • What is half of 50 _____ • What is half of 400 _____	Calculate the following: • $14 -$ _____ = 10 • _____ - 1 = 9 • $16 -$ _____ = 10 • _____ - 5 = 5 • $10 -$ _____ = 6 • _____ - 6 = 1 • $15 -$ _____ = 10 • _____ - 2 = 7 • $11 -$ _____ = 4 • $13 -$ _____ = 7

Lesson 25	Lesson 26	Lesson 27	Lesson 28	Lesson 29
Monday	Tuesday	Wednesday	Thursday	Friday
Date:	Date:	Date:	Date:	Date:
• $13 - 10 = \underline{\quad}$ • $15 - 10 = \underline{\quad}$ • $16 - 10 = \underline{\quad}$ • $20 - 10 = \underline{\quad}$ • $11 - 10 = \underline{\quad}$ • $14 - 10 = \underline{\quad}$ • $17 - 10 = \underline{\quad}$ • $12 - 10 = \underline{\quad}$ • $10 - 10 = \underline{\quad}$ • $18 - 10 = \underline{\quad}$	Calculate the following: • $\underline{\quad} - 2 = 10$ • $\underline{\quad} - 2 = 18$ • $\underline{\quad} - 2 = 13$ • $\underline{\quad} - 2 = 16$ • $\underline{\quad} - 2 = 15$ • $\underline{\quad} - 2 = 17$ • $\underline{\quad} - 2 = 11$ • $\underline{\quad} - 2 = 14$ • $\underline{\quad} - 2 = 8$ • $\underline{\quad} - 2 = 12$	Calculate the following: • $\underline{\quad} + 12 = 20$ • $\underline{\quad} + 1 = 20$ • $\underline{\quad} + 12 = 20$ • $\underline{\quad} + 3 = 20$ • $\underline{\quad} + 20 = 20$ • $\underline{\quad} + 10 = 20$ • $\underline{\quad} + 17 = 20$ • $\underline{\quad} + 13 = 20$ • $\underline{\quad} + 16 = 20$ • $\underline{\quad} + 8 = 20$	Calculate the following: • $10 + \underline{\quad} = 12$ • $19 + \underline{\quad} = 20$ • $11 + \underline{\quad} = 14$ • $15 + \underline{\quad} = 17$ • $10 + \underline{\quad} = 20$ • $20 + \underline{\quad} = 20$ • $17 + \underline{\quad} = 20$ • $5 + \underline{\quad} = 12$ • $3 + \underline{\quad} = 15$ • $13 + \underline{\quad} = 16$	Calculate the following: • $12 + 3 = \underline{\quad}$ • $19 - 6 = \underline{\quad}$ • $15 + \underline{\quad} = 20$ • $18 - \underline{\quad} = 10$ • $\underline{\quad} + 2 = 20$ • $\underline{\quad} - 1 = 10$ • $20 + \underline{\quad} = 20$ • $10 - \underline{\quad} = 7$ • $\underline{\quad} + 1 = 12$ • $\underline{\quad} - 5 = 0$

Lesson 30	Lesson 31	Lesson 32	Lesson 33	Lesson 34
Monday	Tuesday	Wednesday	Thursday	Friday
Date:	Date:	Date:	Date:	Date:
Calculate the following: • $14 - \underline{\quad} = 9$ • $16 + \underline{\quad} = 18$ • $12 - \underline{\quad} = 5$ • $11 + \underline{\quad} = 15$ • $10 - \underline{\quad} = 6$ • $13 + \underline{\quad} = 14$ • $9 - \underline{\quad} = 7$ • $14 + \underline{\quad} = 6$ • $15 - \underline{\quad} = 8$ • $7 + \underline{\quad} = 14$	Calculate the following: • Half of 12 $\underline{\quad}$ • Double 12 $\underline{\quad}$ • Half of 6 $\underline{\quad}$ • Double 6 $\underline{\quad}$ • Half of 9 $\underline{\quad}$ • Double 9 $\underline{\quad}$ • $3 + 3 + 3 = \underline{\quad}$ • $3 + 3 + 3 + 3 + 3 = \underline{\quad}$ • Three more than fifteen $\underline{\quad}$ • Three less than twelve $\underline{\quad}$	Calculate the following: • $3 + 17 = \underline{\quad}$ • $5 + 12 = \underline{\quad}$ • $6 + 11 = \underline{\quad}$ • $1 + 19 = \underline{\quad}$ • $2 + 12 = \underline{\quad}$ • $0 + 20 = \underline{\quad}$ • $4 + 10 = \underline{\quad}$ • $7 + 11 = \underline{\quad}$ • $9 + 10 = \underline{\quad}$ • $10 + 1 = \underline{\quad}$	Calculate the following: • $12 - 5 = \underline{\quad}$ • $14 - 6 = \underline{\quad}$ • $15 - 8 = \underline{\quad}$ • $11 - 3 = \underline{\quad}$ • $10 - 5 = \underline{\quad}$ • $13 - 8 = \underline{\quad}$ • $16 - 7 = \underline{\quad}$ • $18 - 10 = \underline{\quad}$ • $19 - 9 = \underline{\quad}$ • $10 - 0 = \underline{\quad}$	Calculate the following: • $15 + \underline{\quad} = 20$ • $20 + \underline{\quad} = 20$ • $17 + \underline{\quad} = 20$ • $16 + \underline{\quad} = 20$ • $12 + \underline{\quad} = 20$ • $18 + \underline{\quad} = 20$ • $11 + \underline{\quad} = 20$ • $19 + \underline{\quad} = 20$ • $10 + \underline{\quad} = 20$ • $14 + \underline{\quad} = 20$

Lesson 35	Lesson 36	Lesson 37	Lesson 38	Lesson 39
Monday	Tuesday	Wednesday	Thursday	Friday
Date:	Date:	Date:	Date:	Date:
Calculate the following:	Calculate the following:	Calculate the following:	Calculate the following:	Calculate the following:
• $7 + \underline{\quad} = 12$	• $12 - \underline{\quad} = 4$	• $15 - \underline{\quad} = 10$	• $9 + 2 = \underline{\quad}$	• $10 - \underline{\quad} = 10$
• $1 + \underline{\quad} = 20$	• $15 - \underline{\quad} = 10$	• $9 + \underline{\quad} = 14$	• $15 - 7 = \underline{\quad}$	• $15 - \underline{\quad} = 10$
• $9 + \underline{\quad} = 15$	• $18 - \underline{\quad} = 9$	• $19 - \underline{\quad} = 12$	• $8 + 7 = \underline{\quad}$	• $19 - \underline{\quad} = 10$
• $2 + \underline{\quad} = 16$	• $13 - \underline{\quad} = 6$	• $2 + \underline{\quad} = 14$	• $16 - 9 = \underline{\quad}$	• $16 - \underline{\quad} = 10$
• $3 + \underline{\quad} = 13$	• $10 - \underline{\quad} = 6$	• $14 - \underline{\quad} = 6$	• $5 + 9 = \underline{\quad}$	• $18 - \underline{\quad} = 10$
• $4 + \underline{\quad} = 14$	• $14 - \underline{\quad} = 6$	• $6 + \underline{\quad} = 13$	• $12 - 9 = \underline{\quad}$	• $11 - \underline{\quad} = 10$
• $9 + \underline{\quad} = 18$	• $11 - \underline{\quad} = 10$	• $17 - \underline{\quad} = 8$	• $8 + 3 = \underline{\quad}$	• $12 - \underline{\quad} = 10$
• $6 + \underline{\quad} = 14$	• $16 - \underline{\quad} = 13$	• $5 + \underline{\quad} = 18$	• $19 - 10 = \underline{\quad}$	• $13 - \underline{\quad} = 10$
• $8 + \underline{\quad} = 16$	• $19 - \underline{\quad} = 12$	• $15 - \underline{\quad} = 9$	• $3 + 9 = \underline{\quad}$	• $17 - \underline{\quad} = 10$
• $0 + \underline{\quad} = 10$	• $20 - \underline{\quad} = 11$	• $6 + \underline{\quad} = 15$	• $18 - 12 = \underline{\quad}$	• $14 - \underline{\quad} = 10$

Lesson 40	Lesson 41	Lesson 42	Lesson 43	Lesson 44
Monday	Tuesday	Wednesday	Thursday	Friday
Date:	Date:	Date:	Date:	Date:
Calculate the following: • $\underline{\quad} + 7 = 17$ • $10 + \underline{\quad} = 12$ • $\underline{\quad} + 9 = 17$ • $\underline{\quad} + 5 = 15$ • $10 + \underline{\quad} = 14$ • $\underline{\quad} + 0 = 10$ • $10 + \underline{\quad} = 18$ • $\underline{\quad} + 12 = 14$ • $8 + \underline{\quad} = 16$ • $\underline{\quad} + 10 = 15$	Calculate the following: • $14 - \underline{\quad} = 7$ • $\underline{\quad} - 6 = 11$ • $17 - \underline{\quad} = 10$ • $\underline{\quad} - 7 = 2$ • $15 - \underline{\quad} = 7$ • $\underline{\quad} - 5 = 2$ • $16 - \underline{\quad} = 12$ • $\underline{\quad} - 9 = 1$ • $11 - \underline{\quad} = 9$ • $13 - \underline{\quad} = 5$	If I count in 50s, give me the number before the number I call out. • 400 $\underline{\quad}$ • 50 $\underline{\quad}$ • 150 $\underline{\quad}$ • 250 $\underline{\quad}$ • 550 $\underline{\quad}$ • 250 $\underline{\quad}$ • 100 $\underline{\quad}$ • 450 $\underline{\quad}$ • 500 $\underline{\quad}$ • 200 $\underline{\quad}$	Calculate the following: • $14 - 7 = \underline{\quad}$ • $7 + 6 = \underline{\quad}$ • $15 - 10 = \underline{\quad}$ • $20 - 11 = \underline{\quad}$ • $9 + 7 = \underline{\quad}$ • $11 - 5 = \underline{\quad}$ • $10 + 9 = \underline{\quad}$ • $12 - 8 = \underline{\quad}$ • $13 + 6 = \underline{\quad}$ • $17 - 7 = \underline{\quad}$	Calculate the following: • $14 + 10 = \underline{\quad}$ • $227 - 10 = \underline{\quad}$ • $183 + 100 = \underline{\quad}$ • $262 - 100 = \underline{\quad}$ • $500 + 10 = \underline{\quad}$ • $127 - 10 = \underline{\quad}$ • $308 + 100 = \underline{\quad}$ • $421 - 10 = \underline{\quad}$ • $157 + 10 = \underline{\quad}$ • $382 - 100 = \underline{\quad}$

Grade 3 Term 2
Mental Maths

Lesson 45	Lesson 46			
Monday	Tuesday			
Date:	Date:			
Calculate the following: • 12 + ____ = 17 • 15 + ____ = 19 • 13 + ____ = 16 • 10 + ____ = 15 • 11 + ____ = 18 • 9 + ____ = 18 • 8 + ____ = 15 • 6 + ____ = 15 • 12 + ____ = 14 • 16 + ____ = 20	Mathematics Assessment Task 2			

Classwork

Classwork Lesson 5	Monday	Date:
- Write a number sentence and the answer for: 100 blocks and 20 blocks and 9 blocks. - Write a number sentence and the answer for: 100 and 80 and 1. - How many tens are in 260? - How many hundreds are in 99? - How many ones are there in 45? - Write 128 in words. - Write 105 in words. - Complete DBE Worksheet 33b (Page 77).		
Classwork Lesson 6	Tuesday	Date:
- Colour any five numbers that are smaller than 276 in red. - Colour any five numbers that are bigger than 276 in orange. - Write these numbers from the smallest to the biggest: 215, 255, 205, 251, 250 - Write these numbers from the biggest to the smallest: 299, 209, 219, 290, 201 - Write 237 in words. - Complete DBE Worksheet 33a (Page 76)		
Classwork Lesson 7	Wednesday	Date:
- Write a number sentence and the answer for 200 blocks and 20 blocks and 9 blocks. - Write a number sentence and the answer for 200 and 80 and 1. - Draw and complete a number line. Start at 290 and end at 300. Circle all the numbers smaller than 295. Underline all the numbers bigger than 295. - Write 233 in words. - Write 204 in words.		

Classwork Lesson 8	Thursday	Date:
1. Look in the magazines, pamphlets and newspapers for pictures of two objects that look like each of the following shapes • balls. • boxes • cylinders 2. Paste them in your maths book and write down why you have chosen that picture. 3. Draw a cylinder balancing on a box.		
Classwork Lesson 9	Friday	Date:
Do the following questions 1 to 3 orally on a 301-400 number board and questions 4 and 5 in your maths book. 1. Colour any five numbers that are smaller than 376 in red. 2. Colour any five numbers that are bigger than 376 in orange. 3. Write these numbers from the smallest to the biggest: 315, 355, 305, 351, 350 4. Write these numbers from the biggest to the smallest: 399, 309, 319, 390, 301 5. Write 237 in words. 6. Complete DBE Worksheet 41a (Page 96)		
Classwork Lesson 10	Monday	Date:
1. Write a number sentence and the answer for 300 blocks and 20 blocks and 9 blocks. 2. Write a number sentence and the answer for 300 and 80 and 1. 3. Draw and complete a number line. Start at 390 and end at 400. Underline all the numbers smaller than 395. Circle all the numbers bigger than 395. 4. Write 233 in words. 5. Write 244 in words. 6. Complete DBE Worksheet 41b (Page 97)		

Classwork Lesson 11	Tuesday	Date:
1. Do the following questions 1 to 3 on a 401-500 number board and questions 4 and 5 in your maths book. 2. Colour any five numbers that have 6 tens in red. 3. Colour any five numbers that have 7 ones in orange. 4. Write these numbers from the smallest to the biggest: 415, 455, 405, 451, 450 5. Write these numbers from the biggest to the smallest: 499, 409, 419, 490, 401 6. Write 237 in words. 7. Complete DBE Worksheet 43a (Page 100)		

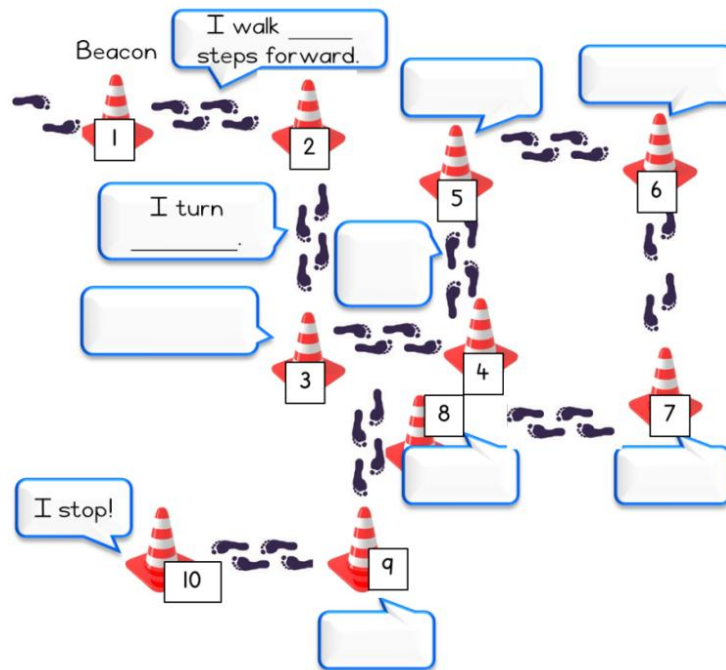
Classwork Lesson 12	Wednesday	Date:
1. Write a number sentence and the answer for 400 blocks and 20 blocks and 9 blocks. 2. Write a number sentence and the answer for 400 and 80 and 1. 3. Draw and complete a number line. Start at 490 and end at 500. Circle all the numbers smaller than 495. Underline all the numbers bigger than 495. 4. Write 238 in words. 5. Write 212 in words. 6. Complete DBE Worksheet 35a (pages 80 and 81)		

Classwork Lesson 13	Thursday	Date:
Complete this table in your maths books:		
Shape	Draw all the sides	
	○ ○ □	
		
		
		
		

Classwork Lesson 14	Friday	Date:			
1. Draw five different patterns. 2. Paste pictures that show a pattern. Describe the pattern.					
Classwork Lesson 15	Monday	Date:			
1. Copy this table and complete it in your maths book.					
		Add 10	Subtract 10	Add 100	Subtract 100
1	271				
2	542				
3	326				
4	188				
2. Complete DBE Worksheet 35b (Page 82)					
Classwork Lesson 16	Tuesday	Date:			
1. Solve the following: $225 + 53 = \underline{\hspace{2cm}}$ 2. Solve the following: $264 + 132 = \underline{\hspace{2cm}}$ 3. Solve the following: $164 + 85 = \underline{\hspace{2cm}}$ 4. Solve the following: $175 + 116 = \underline{\hspace{2cm}}$ 5. Complete DBE Worksheet 38b (Page 91)					
Classwork Lesson 17	Wednesday	Date:			
1. Remember to keep the first number whole and break up the second number. 2. $205 + 222 =$ 3. $374 + 108 =$ 4. Portia had 241 stickers and her friends gave her 252 stickers for her birthday. How many stickers does she have? 5. Write the number symbol for three hundred and fourteen 6. Write 418 in words.					
7. DBE Workbook (Page 91).					

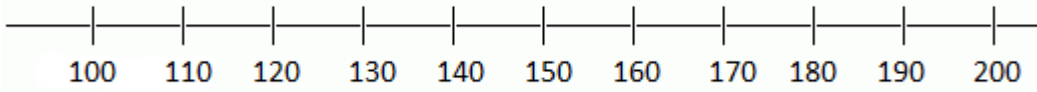
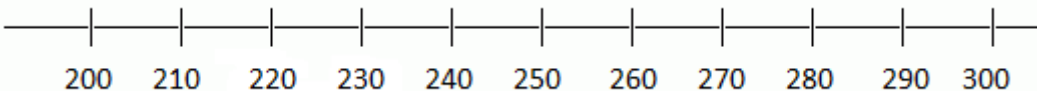
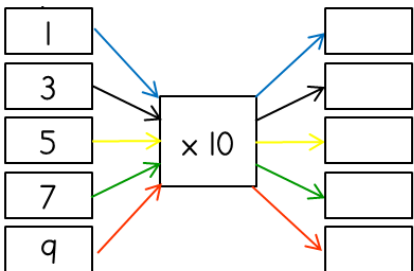
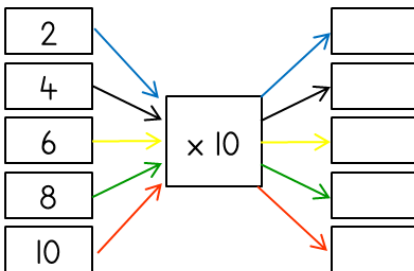
Classwork Lesson 18**Thursday****Date:**

Look at the map of the path that you have walked



In your maths book complete the speech bubbles showing the path that you walked. The first steps have been done for you.

Steps from Beacon 1 to Beacon 2	I walked four steps forward and then I turned right
Steps from Beacon 2 to Beacon 3	
Steps from Beacon 3 to Beacon 4	
Steps from Beacon 4 to Beacon 5	
Steps from Beacon 5 to Beacon 6	
Steps from Beacon 6 to Beacon 7	
Steps from Beacon 7 to Beacon 8	
Steps from Beacon 8 to Beacon 9	
Steps from Beacon 9 to Beacon 10	

Classwork Lesson 19	Friday	Date:
1. Use a 100-200 number line to calculate: $124 + 25$ 		
2. Use a 200-300 number line to calculate: $216 + 59$ 		
Classwork Lesson 20	Monday	Date:
1. Complete the spider diagram. 		
2. Complete the spider diagram. 		
3. A vegetable garden has 10 rows of plants. Every row has the same number of plants. If there is a total of 30 plants, how many plants are in each row?		
4. How many cars are needed to transport 40 learners, if four learners can fit into a car?		
5. Tony has 30 sweets. He eats 3 sweets every day. For how many days can he eat sweets?		
6. Round off 36 to the nearest ten.		
7. Complete DBE Worksheet 34(pages 78 and 79)		

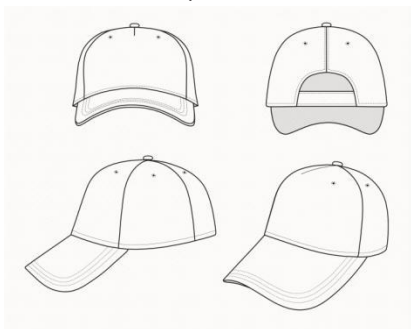
Classwork Lesson 21	Tuesday	Date:
1. What is the time?     2. Write the time on the digital clocks. Quarter past 2 : Quarter to nine : Half past nine : Seven o' clock : 3. I left my home at seven this morning and arrived back from school at three o' clock. How many hours did I leave my home? 4. Complete DBE Worksheet 54a no 1 (Page 122)		
Classwork Lesson 22	Wednesday	Date:
Mathematics Assessment Task 1		

Classwork Lesson 23**Thursday****Date:**

1. Look at the picture and make a drawing of the different views in your maths book.

	Top view	Front view	Side view
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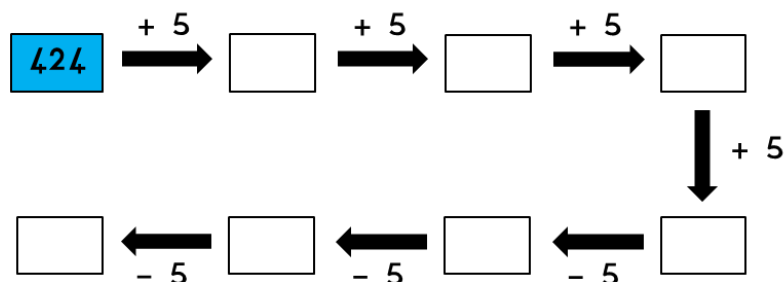
2. What view of the object do you see? Write front, back, side or top view underneath each picture.

**Classwork Lesson 24****Friday****Date:**

1. Colour the sequence of numbers made by adding 5 starting with 452.

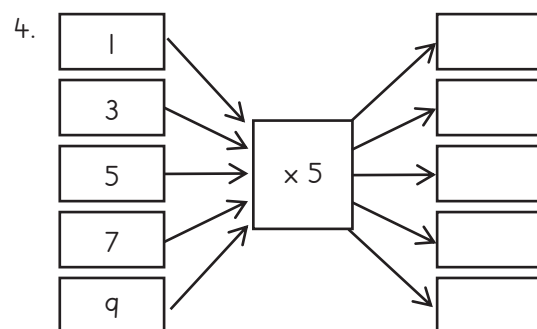
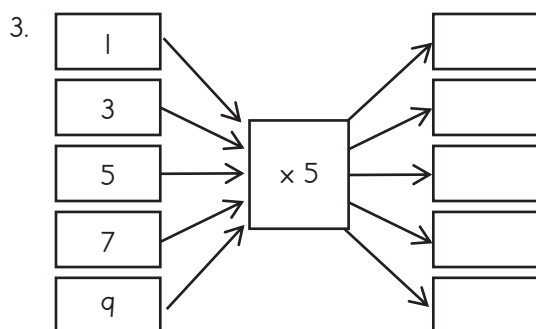
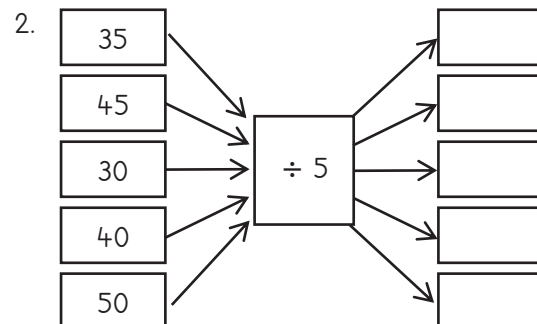
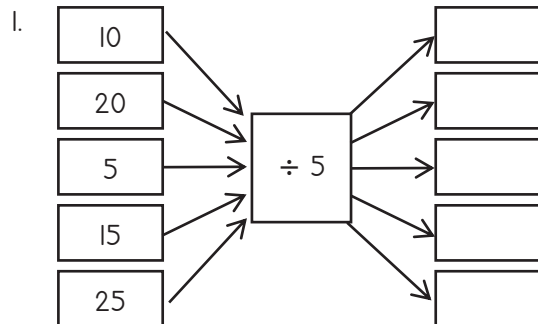
451	452	453	454	455	456	457	458	459	460
461	462	463	464	465	466	467	468	469	470
471	472	473	474	475	476	477	478	479	480

2. Complete the following



Classwork Lesson 25**Monday****Date:**

Do the following questions in your maths book. Your teacher will do the first spider diagram with you.

**Classwork Lesson 26****Tuesday****Date:**

Do the following questions in your maths book.

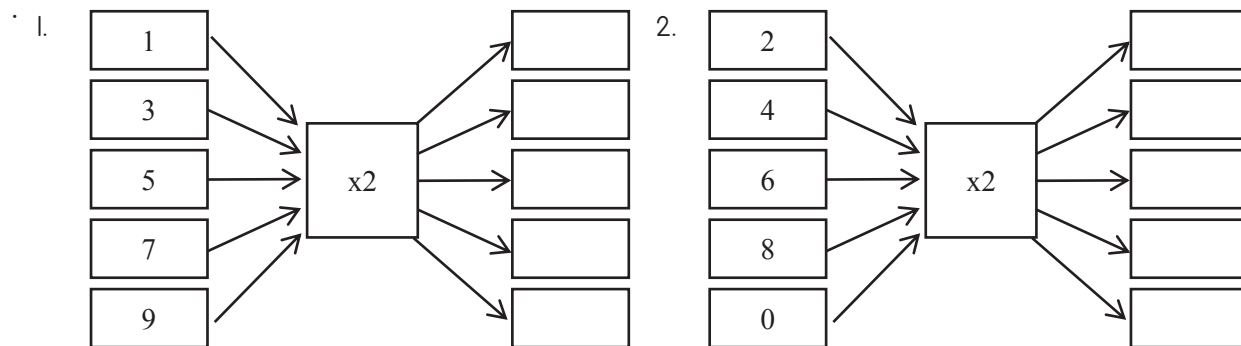
1. Start with the first number and colour every second number.

	401	402	403	404	405	406	407	408	409	410
319	411	412	413	414	415	416	417	418	419	420
	421	422	423	424	425	426	427	428	429	440
	431	432	433	434	435	436	437	438	439	450

2. Complete the following:

Classwork Lesson 27**Wednesday****Date:**

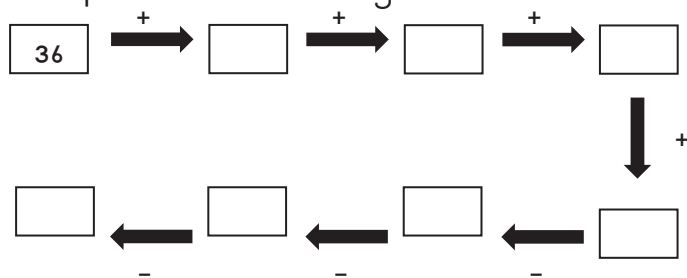
Complete the spider diagrams in your maths books. Your teacher will do the first spider diagram with you.



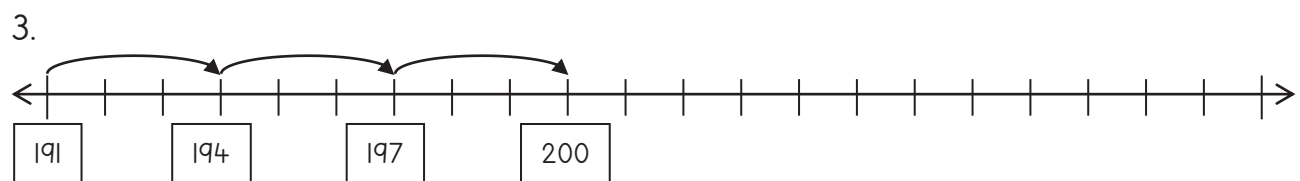
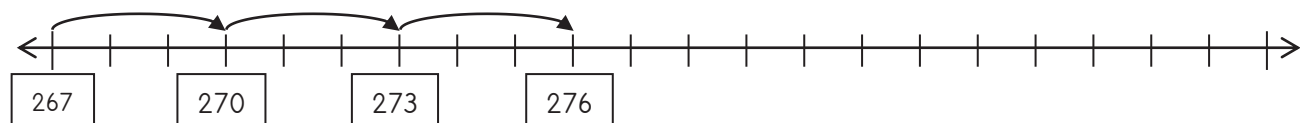
3. The Grade R teacher has to order tyres for 12 bicycles. If each bicycle needs two tyres, how many tyres must the Grade R teacher order?
4. If two learners fit into a car how many cars are needed to transport 24 learners?

Classwork Lesson 28**Thursday****Date:**

1. Complete the following:

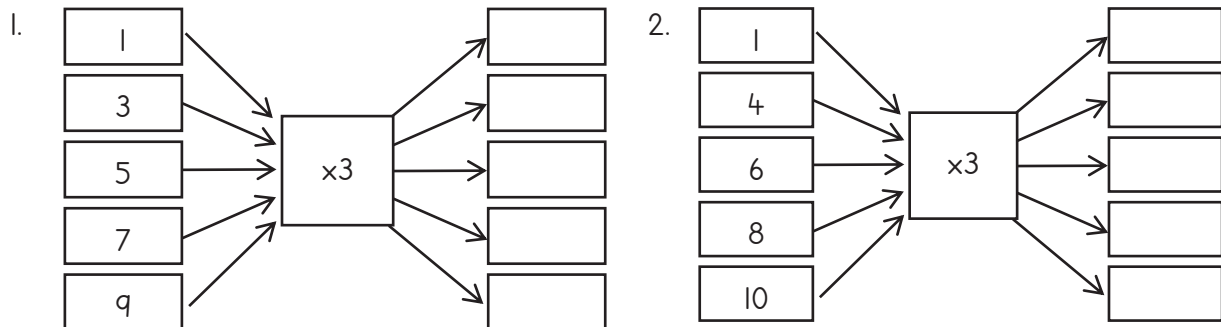


2. Copy these number lines. Count in threes and write down the remaining numbers.



Classwork Lesson 29	Friday	Date:
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Do the following questions in your maths book. Your teacher will do the first spider diagram with you.



3. The nursery school teacher has to order tyres for 9 tricycles. If each tricycle needs three tyres, how many tyres must the nursery school teacher order?
4. Marlene has 30 sweets. This is twice as many as Jacob has. How many sweets does Jacob have?

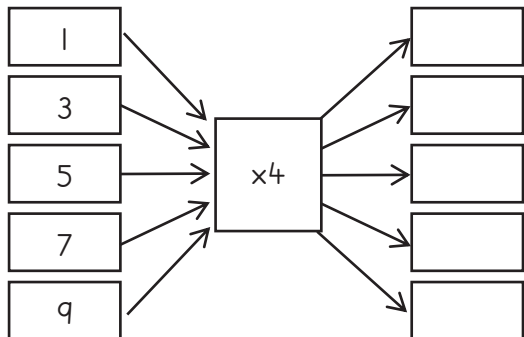
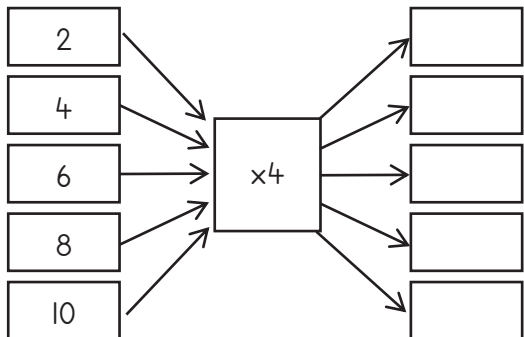
Classwork Lesson 30	Monday	Date:
----------------------------	---------------	--------------

1. What is the next number in this pattern?

- | | |
|--|--|
| <ul style="list-style-type: none"> • 314, 318, 322, ... • 151, 156, 161, ... • 133, 136, 139, ... • 228, 230, 232, ... • 373, 383, 393, ... | <ul style="list-style-type: none"> • 243, 241, 239, ... • 161, 156, 151, ... • 218, 208, 198, ... • 152, 148, 144, ... • 325, 322, 319, ... |
|--|--|

2. What is the difference between the patterns in the column on the left and the patterns in the column on the right on the right?

3. DBE Workbook. (Page 124).

Classwork Lesson 31	Tuesday	Date:
Do the following questions in your maths book. Your teacher will do the first spider diagram with you.		
1.  2. 		
3. The taxi owner has to order tyres for 7 taxis. If each taxi needs four tyres, how many tyres must the taxi owner order? 4. How many cars are needed to transport 24 learners, if four learners fit into a car? 5. Tony has 40 sweets. He eats four sweets every day. For how many days can eat sweets?		
Classwork Lesson 32	Wednesday	Date:
Draw pictures to show all your answers. 1. Share 8 chocolate bars amongst 3 friends so that they all get the same amount of chocolate and there is nothing left over. 2. Find one quarter of 20 sweets. 3. Grandmother gives Kiki R12. Kiki wants to save a third of the money. How much money should she save? 4. Complete DBE Worksheet 57a (Page 128).		
Classwork Lesson 33	Thursday	Date:
1. How many quarters in one half? 2. Which is bigger – two thirds or one half? 3. Which is bigger – one half or three fifths? 4. What is one quarter of 40? 5. What is three quarters of 40? 6. What is one third of 75? 7. What is two thirds of 75? 8. Complete DBE Worksheet 57b (Page 129). 9. Complete DBE Worksheet 59 (Page 132).		

Classwork Lesson 34	Friday	Date:
1. Use hand spans to measure the height of your desk. 2. Use hand spans to measure the width of your desk. 3. Use a pencil to measure the height of the classroom door. 4. Use a pencil to measure the width of the classroom door. 5. Use finger widths to measure the length of your maths book. 6. Use finger widths to measure the width of your maths book. 7. Use hand spans to measure the length of your maths book. 8. Use hand spans to measure the width of your maths book. 9. Why do you get different measurements for the length and width of your maths book when you measure these using your finger width and then your hand span?		
Classwork Lesson 35	Monday	Date:
Complete DBE Workbook 2 Worksheet 36 (Pages 84 n 85)		
Classwork Lesson 36	Tuesday	Date:
1. $R2,20 + R4 = \underline{\hspace{2cm}}$ 2. $R3,50 + R2,50 = \underline{\hspace{2cm}}$ 3. Write 525c as rands and cents. 4. Draw notes to show in how many different ways you can make up R400 using only bank notes. 5. Mandla pays R2,50 to take a taxi to school. What does it cost him to get to and from school each day? 6. One pair of shoes cost R250. How much will two pairs of shoes cost?		
Classwork Lesson 37	Wednesday	Date:
1. There are 5 chocolates in a packet. One packet of chocolates costs R1,00. Mr King needs 50 chocolates. How many packets should he buy? What will he pay? 2. Three buses drive on a toll road and are charged R40 each. How much do they pay in total?		

Classwork Lesson 38**Thursday****Date:**

Do the following activities in your maths books. You will need a string or a metre stick when you do questions 1 to 3. Estimate first then measure to see if these objects are longer or shorter than a metre.

	Measure	I estimate		I measure
		longer than a metre	shorter than a metre	Was I right?
1	Your height			
2	The width of the chalkboard			
3	The length of your desk.			
4	Width of the doorway			
5	The height of your desk.			

Classwork Lesson 39**Friday****Date:**

1. Draw the other half of the shape and show the line of symmetry.



2. Draw the other half of the shape and show the line of symmetry.



3. Draw the other half of the shape and show the line of symmetry.



4. Draw the line of symmetry.

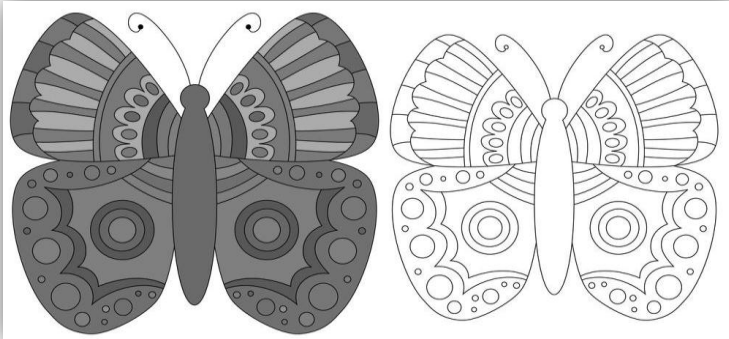


6. Draw the line of symmetry.



Classwork Lesson 40**Monday****Date:**

1. The first butterfly is coloured symmetrically. Do the same with the second butterfly, but use different colours.



2. Draw two of your own bugs and also show the lines of symmetry on it.
 3. Draw a necklace (a circle) made out of different coloured beads. Show the symmetry.

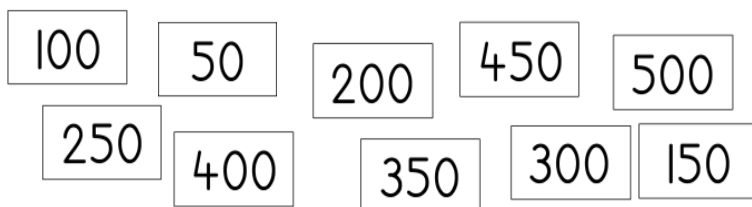
Classwork Lesson 41**Tuesday****Date:**

1. Draw and complete the 50s pattern:

0, 50, 100, _____, _____, _____, _____, _____, _____, _____, 500

2. Write the next numbers: 200, 250, _____, _____, _____

3. Write these numbers from the biggest to the smallest:



4. I have nine 50c coins in my purse. How many cents do I have in total? How many rands do I have in total?

Classwork Lesson 42	Wednesday	Date:
1. Draw and complete the 100s number line: 0, 100, _____, _____, _____, _____, _____, _____, _____, _____ 1000 2. Write the next numbers: 200, 300, _____, _____, _____ 3. Write these numbers from the biggest to the smallest: 500, 300, 100, 800, 0, 600, 900, 1000, 200, 400, 700. 4. Write these numbers from the smallest to the biggest: 500, 300, 100, 800, 600, 900, 1000, 200, 400, 700. 5. I have nine R1 coins in my purse. How many cents do I have in total? How many rands do I have in total?		

Classwork Lesson 43	Thursday	Date:
1. What is the mass of the book?  2. What is the mass of the ruler?  3. Can we compare the answers we got to 1 and 2 above? Why not?		

Classwork Lesson 44	Friday	Date:
1. Hold up an object that has the mass of 1 kg to get a sense of the mass. 2. Estimate and then measure the mass of the following objects. 3. Calculate the difference between your estimation and your measurement. 4. Record your answers in the table.		
	Mass in blocks	
	I estimate	I measure
School bag		
10 books		
Cushion		
3 bricks		
2L bottle of water		

Classwork Lesson 45	Monday	Date:
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1. Write the South African public and religious holidays on the same calendar that you used earlier.

South African public holidays calendar	
New Year's Day	Sun 1 January
Public Holiday	Monday 2 January
Human Rights Day	Wednesday 21 March
Good Friday	Friday 6 April
Family Day	Monday 9 April
Freedom Day	Friday 27 April
Workers' Day	Tuesday 1 May
Youth Day	Saturday 16 June
Women's Day	Thursday 9 August
Public Holiday	Friday 10 August
Heritage Day	Monday 24 September
Day of Reconciliation	Sunday 16 December
Christmas Day	Tuesday 25 December
Day of Goodwill	Wednesday 26 December

2. Colour the block of your favourite month in yellow.

3. How many months of the year have no public/religious holidays or birthdays? Name them.

4. How long is it between New Year's day and Freedom day?

5. How long is it between Youth day and Heritage day?

Classwork Lesson 46	Tuesday	Date:
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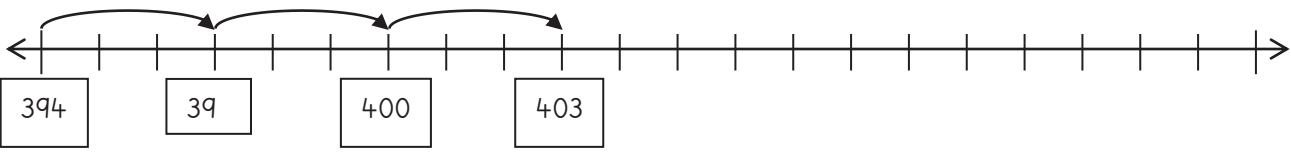
Mathematics Assessment Task 2

Homework

Homework Lesson 5	Monday	Date:
1. Write a number sentence and answer for: 100 blocks and 60 blocks and 2 blocks. 2. Write a number sentence and answer for: 90 and 100 and 2. 3. Draw and complete a number line. Start at 180 and end at 190. Write in all the numbers bigger than 186. Write in all the numbers smaller than 184. 4. Write 176 in words.		
Homework Lesson 6	Tuesday	Date:
1. Write down a number that is bigger than 224, but smaller than 229. 2. Write these numbers from the biggest to the smallest: 223, 203, 213, 233 3. Write the same numbers from the smallest to the biggest. 4. Write 215 in words.		
Homework Lesson 7	Wednesday	Date:
1. Write a number sentence and answer for 200 blocks and 60 blocks and 2 blocks. 2. Write a number sentence and answer for 90 and 200 and 2. 3. Draw and complete a number line. Start at 280 and end at 290. Circle all the numbers bigger than 286. Underline all the numbers smaller than 284. Write 226 in words.		
Homework Lesson 8	Thursday	Date:
Do the following questions in your homework book. Draw a picture using only box-shaped objects. 1. Draw a picture using box-shaped and cylinder-shaped objects. 2. Draw a picture using ball-shaped and cylinder-shaped objects. 3. Draw a cylinder balancing on a box.		
Homework Lesson 10	Monday	Date:
1. Write a number sentence and answer for 300 blocks and 60 blocks and 2 blocks. 2. Write a number sentence and answer for 90 and 300 and 2. 3. Draw and complete a number line. Start at 380 and end at 390. Underline all the numbers bigger than 386. Circle all the numbers smaller than 384. 4. Write 226 in words.		
Homework Lesson 11	Tuesday	Date:
1. Write down a number that is bigger than 424, but smaller than 429. 2. Write these numbers from the biggest to the smallest: 423, 403, 413, 433 3. Write the same numbers from the smallest to the biggest. 4. Write 245 in words.		

Homework Lesson 12	Wednesday	Date:
1. Write a number sentence and answer for 400 blocks and 60 blocks and 2 blocks. 2. Write a number sentence and answer for 90 and 400 and 2. 3. Draw and complete a number line. Start at 480 and end at 490. Circle all the numbers bigger than 486. Underline all the numbers smaller than 484. 4. Write 207 in words.		
Homework Lesson 13	Thursday	Date:
1. Draw a picture using only shapes that can roll. 2. Draw a picture using only shapes that can slide. 3. Draw a picture using shapes that can roll and slide. Name the different shapes that you have used. 4. Draw a picture of an object in your house that can slide.		
Homework Lesson 15	Monday	Date:
Do the following patterns in your homework book. • $1 + 1 =$ • $10 + 10 =$ • $100 + 100 =$ • $1 + 2 =$ • $10 + 20 =$ • $100 + 200 =$ • $2 + 2 =$ • $20 + 20 =$ • $200 + 200 =$		
Homework Lesson 16	Tuesday	Date:
1. Solve the following: $221 + 42 =$ _____ 2. Solve the following: $253 + 123 =$ _____ 3. Solve the following: $166 + 83 =$ _____ 4. Solve the following: $171 + 65 =$ _____		
Homework Lesson 17	Wednesday	Date:
Remember to keep the first number whole and break up the second number. 1. $325 + 172 =$ 2. $177 + 32 =$ 3. $204 + 203 =$ 4. Write the number symbol for three hundred and eight 5. Write 209 in words		

Homework Lesson 19	Friday	Date:
1. Use a 100-200 number line to calculate $131 + 66$. 3. Use a 200-300 number line to calculate $269 + 19$.		
Homework Lesson 20	Monday	Date:
1. David sells bags with ten oranges in each bag. He has 40 oranges. How many bags can he fill? 2. A school pool is 10 metres long. Luvuyo swims 6 laps. How far did he swim?		
Homework Lesson 21	Tuesday	Date:
1. Draw a clock showing quarter to three 2. Draw a clock showing half past six 3. Draw clock showing quarter past 7 4. Draw a digital clock showing quarter past eleven : 5. Draw a digital clock showing 9 o'clock : 6. Draw a digital clock showing quarter to 5 : 7. We had a picnic from ten o'clock to half past three the afternoon on Sunday. How many hours was the picnic?		

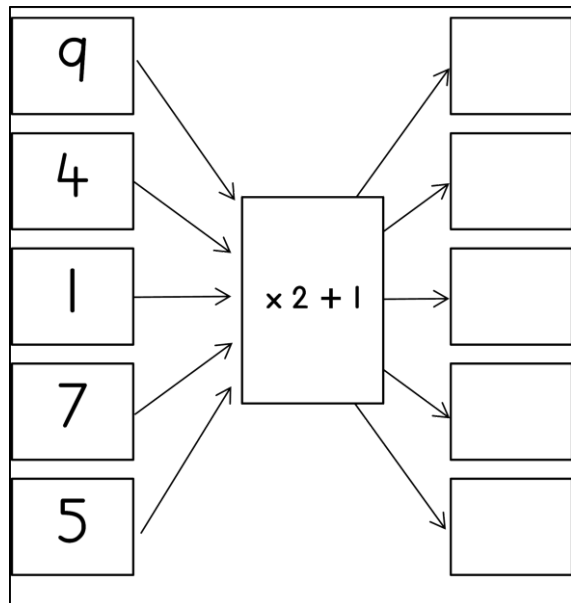
Homework Lesson 22	Wednesday	Date:
Mathematics Assessment Task 1		
Homework Lesson 24	Friday	Date:
Complete DBE Worksheet 53b Numbers 1, 2 and 4 (Page 121).		
Homework Lesson 25	Monday	Date:
Complete DBE Worksheet 53a (Page 120).		
Homework Lesson 26	Tuesday	Date:
Complete DBE Worksheet 51b (Page 117)		
Homework Lesson 27	Wednesday	Date:
Do the following questions in your homework book. Complete DBE Worksheet 51a (Page 116).		
Homework Lesson 28	Thursday	Date:
1. Complete the following: 454 (+3) _____ (+3) _____ (+3) _____ (+3) _____ (-3) _____ (-3) _____ (-3) _____. 2. 		
Homework Lesson 29	Friday	Date:
Complete DBE Worksheet 55a (Page 124).		
Homework Lesson 30	Monday	Date:
1. Draw and complete a number line. Fill in the numbers then use hoops to show counting in multiples of 4: 394, 398, 402, 406, _____, _____, _____, _____ 2. Complete the following: 454 (+4) _____ (+4) _____ (+4) _____ (+4) _____ (-4) _____ (-4) _____ (-4) _____.		
Homework Lesson 31	Tuesday	Date:
Complete DBE Worksheet 55b (Page 125)		

Homework Lesson 32	Wednesday	Date:
1. I have 20 balloons at my party. Three quarters of them popped. How many balloons do I have left over? 2. Six sweets will make up what fraction of 24 sweets? 3. Show two fifths of 25. 4. Share 50 Smarties equally between 10 children. What fraction will each child get?		
Homework Lesson 36	Tuesday	Date:
1. $R5.75 + R3.20 =$ _____ 2. $R3.25 + R2.75 =$ _____ 3. Mandla pays R2.50 to take a taxi to school. The train costs R6 for a return ticket. Which is cheaper, the train or the taxi?		
Homework Lesson 37	Wednesday	Date:
1. I have R20.00. I need to buy 5 balls. Which balls can I buy? Soccer balls – R5. 85 each, cricket balls - R3. 80 each, netball balls – R6. 20 each, rugby balls R5. 99 each, tennis balls – R2. 75 each. 2. Peter bought 4 pairs of shoes for R90 each. How much change will he get for R300? 3. Three buses drive on a toll road and are charged R35 each. How much do they pay in total?		
Homework Lesson 38	Thursday	Date:
Do the following activities in your homework book. You will need a metre long piece of string when you do questions 1 and 2. Write down if these objects are longer or shorter than a metre. Make a drawing to show it. 1. The height of your suitcase. 2. Your height. 3. Draw a picture of something in your room/house that is longer than one metre. 4. Draw a picture of something in your room/house that is shorter than one metre.		
Homework Lesson 39	Friday	Date:
Complete DBE Workbook 2 Worksheet 48a (Page II0)		
Homework Lesson 40	Monday	Date:
Complete DBE Workbook 2 Worksheet 48b (Page III).		
Homework Lesson 41	Tuesday	Date:
Complete DBE Workbook 2 Worksheet 56 (Page I26).		

Homework Lesson 42	Wednesday	Date:
1. Draw and complete the 100s number line: 100, 200, _____, _____, _____, _____, _____, 800 2. Write the next three numbers: 400, 500, _____, _____, _____ 3. When counting in 100s which number comes before 300? After 300? 4. When counting in 100s which number comes before 900? After 900?		
Homework Lesson 44	Friday	Date:
Complete DBE Workbook 2 Worksheet 44 (Pages 102 and 103)		

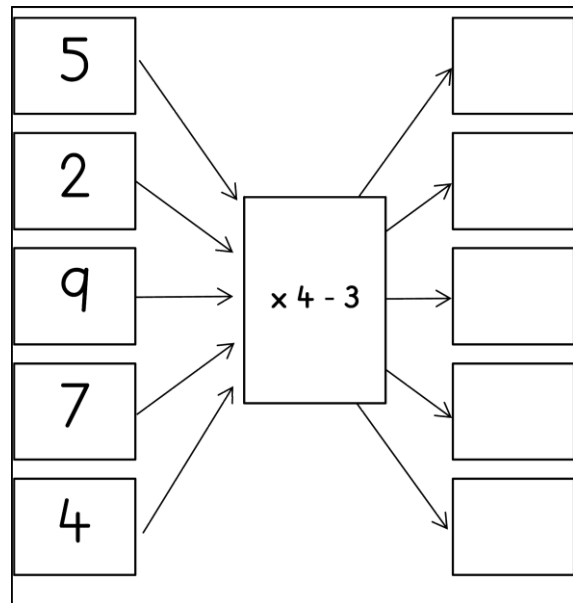
Enrichment Activity 1.1

Fill in the output numbers.



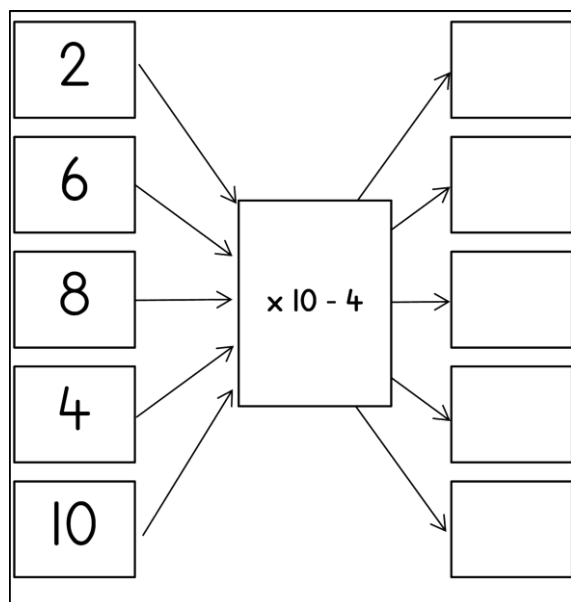
Enrichment Activity 1.2

Fill in the output numbers.



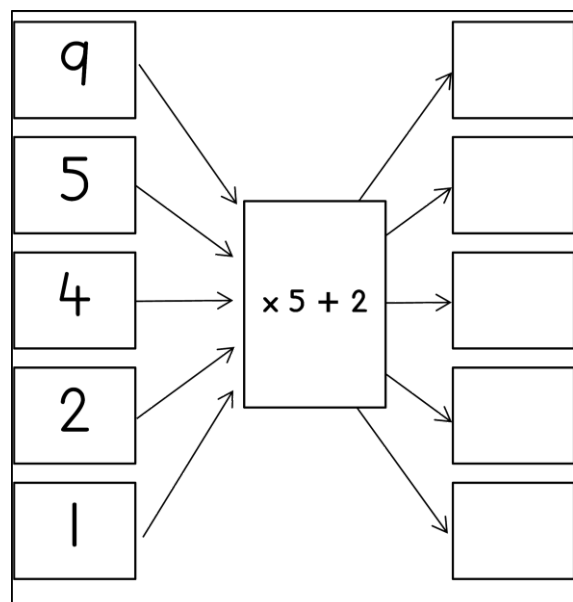
Enrichment Activity 1.3

Fill in the output numbers.



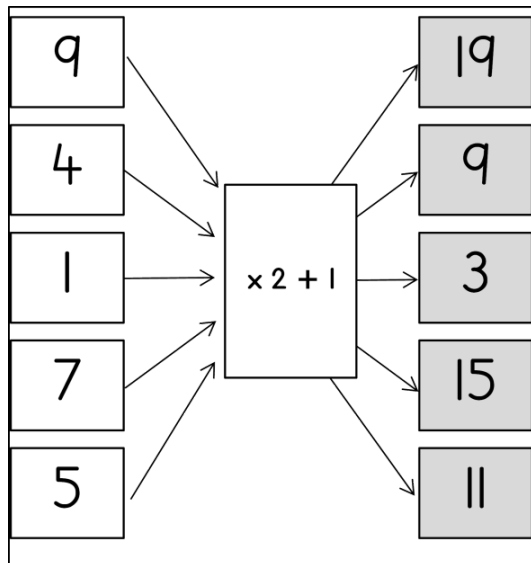
Enrichment Activity 1.4

Fill in the output numbers.



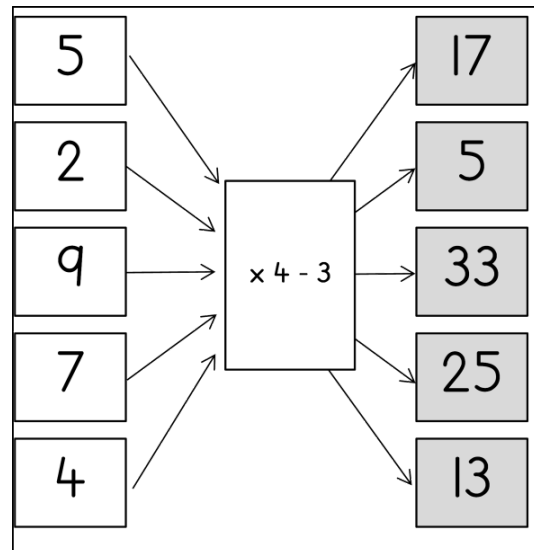
Enrichment Activity I.1

Answers



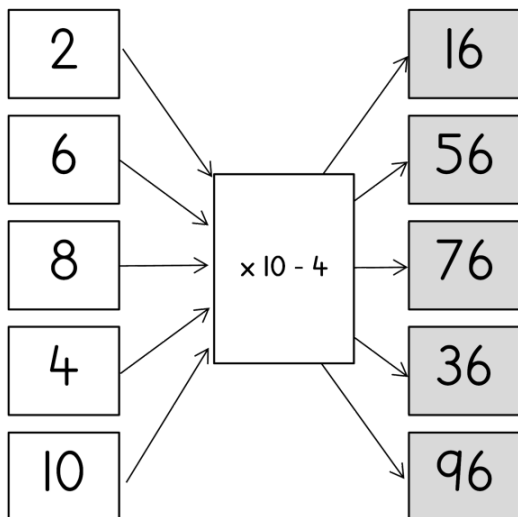
Enrichment Activity I.2

Answers



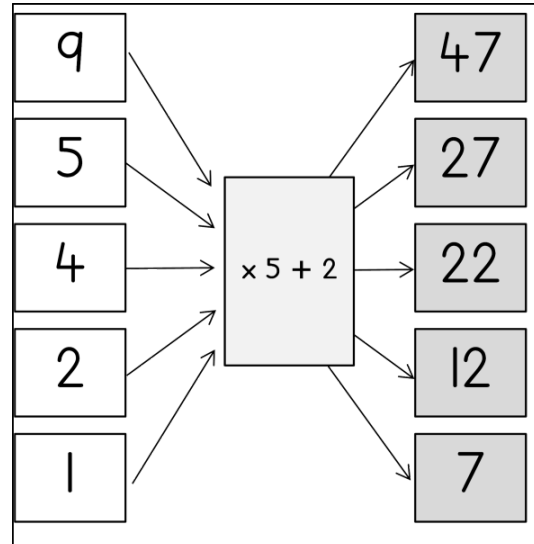
Enrichment Activity I.3

Answers



Enrichment Activity I.4

Answers



Enrichment Activity 2.1

What should I do to change the following?

- 124 to 104
- 176 to 170
- 135 to 100
- 192 to 92
- 141 to 1

Enrichment Activity 2.2

Find the path from the start to the end by placing a small stone on the blocks where the value of the hundreds is 2.

Start	two hundred and four	208	400	321
103	one hundred and thirty	214	223	406
four hundred	327	104	two hundred and forty	151
412	48	thirty seven	253	End

Enrichment Activity 2.3

Find the path from the start to the end by placing a small stone on the blocks where the value of the tens is 2.

Start	two hundred and four	319	470	392
129	one hundred and thirty	214	253	336
two hundred and twenty	307	104	two hundred and forty	257
325	328	421	429	End

Enrichment Activity 2.4

Find the path from the start to the end by placing a small stone on the blocks where the value of the hundreds is 3.

Start	three hundred and four	319	351	282
129	one hundred and thirty	214	353	148
two hundred and twenty	273	134	three hundred and sixty	370
401	148	431	439	End

Enrichment Activity 2.1

Answers

- $124 - 20 = 104$
I must subtract 20
- $176 - 6 = 170$
I must subtract 6
- $135 - 35 = 100$
I must subtract 35
- $192 - 100 = 92$
I must subtract 100
- $141 - 140 = 1$
I must subtract 140

Enrichment Activity 2.2

Answers

Start	two hundred and four	208	400	321
103	one hundred and thirty	214	223	406
four hundred	327	104	two hundred and forty	151
412	48	thirty seven	253	End

Enrichment Activity 2.3

Answers

Start	two hundred and four	319	470	392
129	one hundred and thirty	214	253	336
two hundred and twenty	307	104	two hundred and forty	257
325	328	421	429	End

Enrichment Activity 2.4

Answers

Start	three hundred and four	319	351	282
129	one hundred and thirty	214	353	148
two hundred and twenty	273	134	three hundred and sixty	370
401	148	431	439	End

Enrichment Activity 3.1

Find the path from the start to the end by placing a small stone on the blocks where the value of the tens is 3.

three hundred and twenty	three hundred and four	319	232	Start
113	two hundred and fifteen	214	237	339
Three hundred and twenty	273	134	four hundred and thirty	433
321	148	three hundred and four	439	End

Enrichment Activity 3.2

Find the path from the start to the end by placing a small stone on the blocks where the value of the hundreds is 4.

Start	Four hundred and four	412	434	451
140	two hundred and four	214	374	477
two hundred and seven	298	134	one hundred and seven	490
145	259	351	439	End

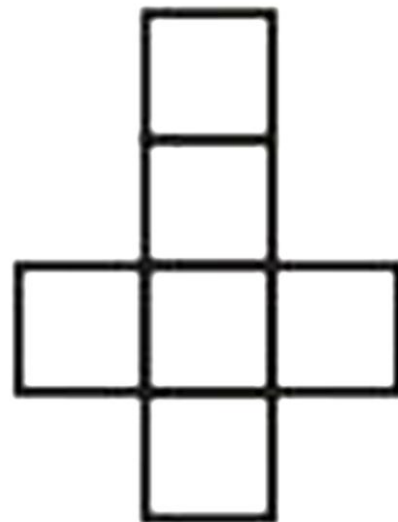
Enrichment Activity 3.3

Find the path from the start to the end by placing a small stone on the blocks where the value of the tens is 4.

Start	146	312	424	401
135	244	221	157	289
287	248	134	207	490
124	341	345	449	End

Enrichment Activity 3.4

Copy this template and make your own small box.



What shape does this template make?

Enrichment Activity 3.1

Answers

three hundred and twenty	three hundred and four	319	232	Start
113	two hundred and fifteen	214	237	339
Three hundred and twenty	273	134	four hundred and thirty	433
321	148	three hundred and four	439	End

Enrichment Activity 3.2

Answers

Start	Four hundred and four	412	434	451
140	two hundred and four	214	374	477
two hundred and seven	298	134	one hundred and seven	490
145	259	351	439	End

Enrichment Activity 3.3

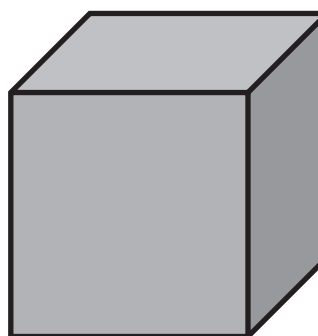
Answers

Start	146	312	424	401
135	244	221	157	289
287	248	134	207	490
124	341	345	449	End

Enrichment Activity 3.4

Answers

It makes a cube.



Enrichment Activity 4.1

Fill in the missing Sudoku numbers.

	4				3
			5		2
	1		2		
		2		3	
4		6			
1				5	

Enrichment Activity 4.2

Fill in the missing Sudoku numbers.

1		3	4		
4		6			3
2		1		6	
5		4	2		
3		2		4	
6		5			2

Enrichment Activity 4.3

Fill in the missing Sudoku numbers.

3					4
	2	6	5	1	
2	6	4	3	5	1
1					2
	4	1	2	3	6
6					5

Enrichment Activity 4.4

Fill in the missing Sudoku numbers..

	4				3
			5		2
	1		2		
		2		3	
4		6			
1				5	

Enrichment Activity 4.1

Answers

2	4	5	6	1	3
6	3	1	5	4	2
3	1	4	2	6	5
5	6	2	1	3	4
4	5	6	3	2	1
1	2	3	4	5	6

Enrichment Activity 4.2

Answers

1	2	3	4	5	6
4	5	6	1	2	3
2	3	1	5	6	4
5	6	4	2	3	1
3	1	2	6	4	5
6	4	5	3	1	2

Enrichment Activity 4.3

Answers

3	1	5	6	2	4
4	2	6	5	1	3
2	6	4	3	5	1
1	5	3	4	6	2
5	4	1	2	3	6
6	3	2	1	4	5

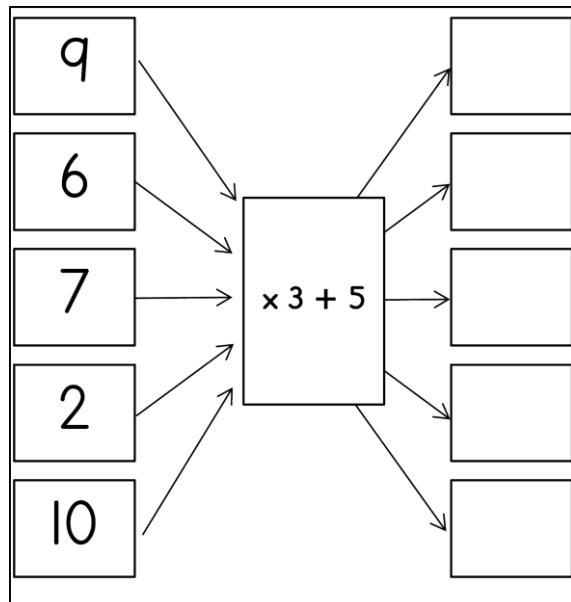
Enrichment Activity 4.4

Answers

2	4	5	6	1	3
6	3	1	5	4	2
3	1	4	2	6	5
5	6	2	1	3	4
4	5	6	3	2	1
1	2	3	4	5	6

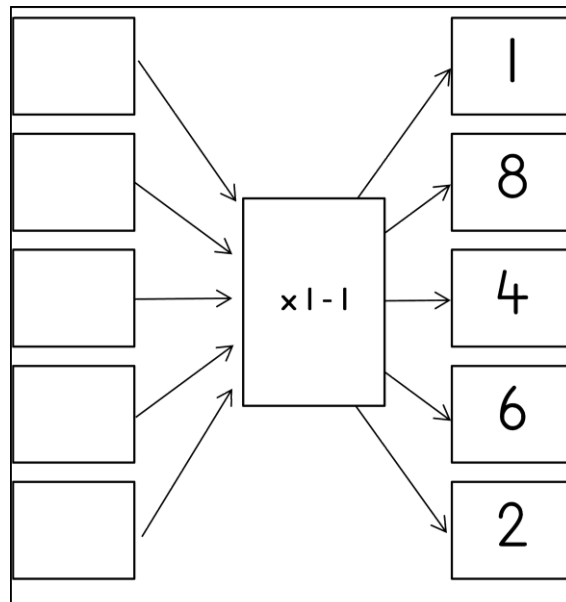
Enrichment Activity 5.1

Fill in the output numbers.



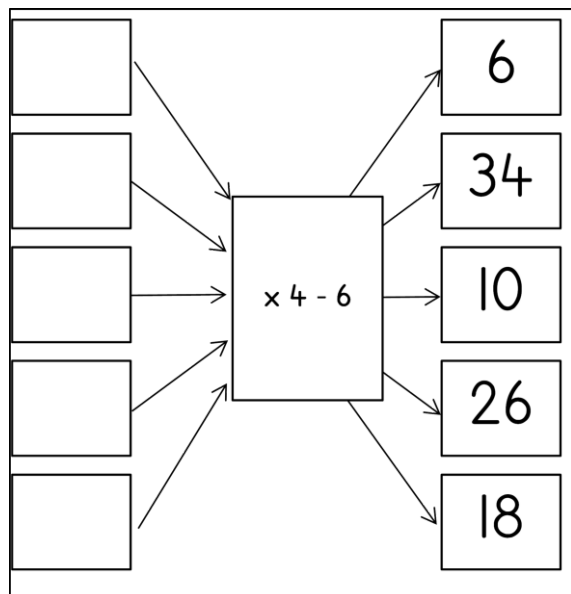
Enrichment Activity 5.2

Fill in the output numbers.



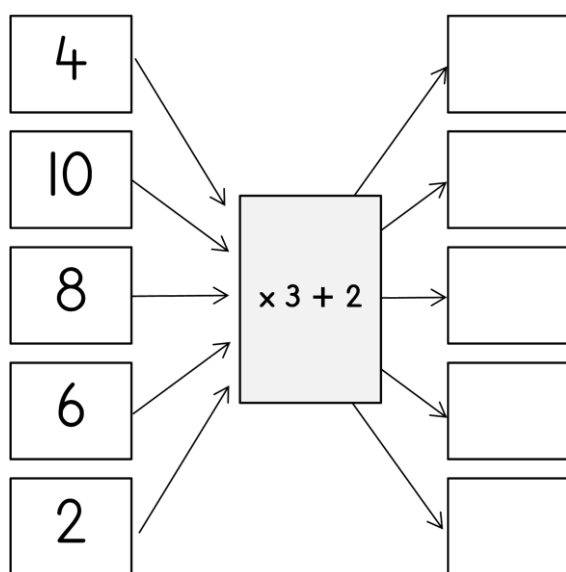
Enrichment Activity 5.3

Fill in the output numbers.



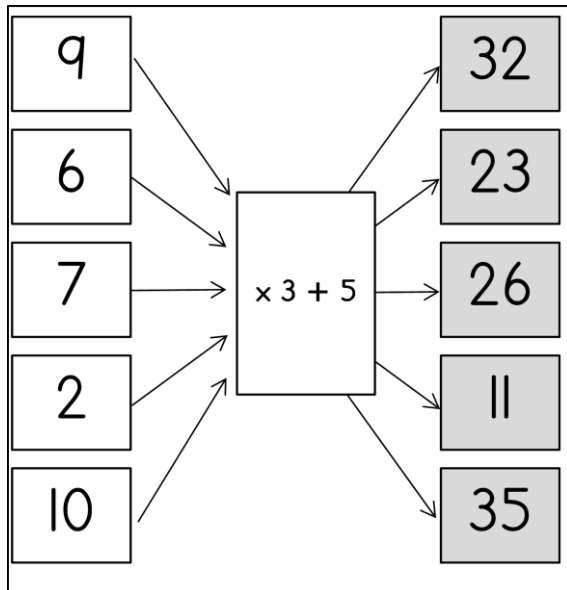
Enrichment Activity 5.4

Fill in the output numbers.



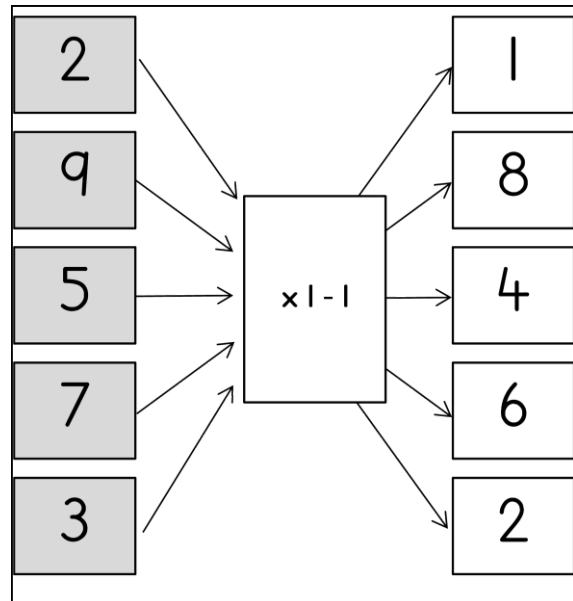
Enrichment Activity 5.1

Answers



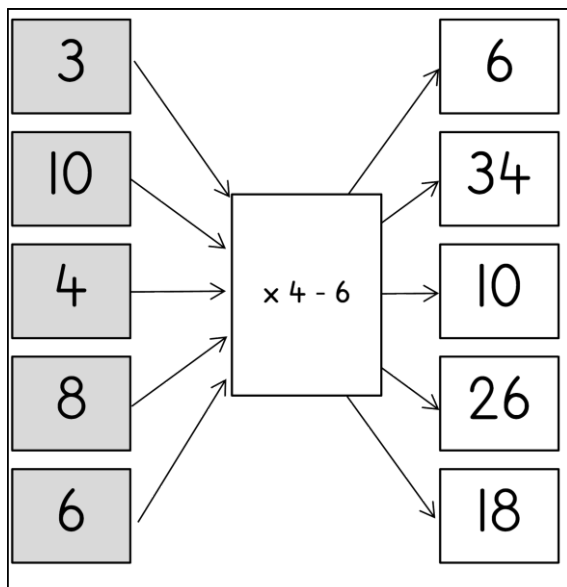
Enrichment Activity 5.2

Answers



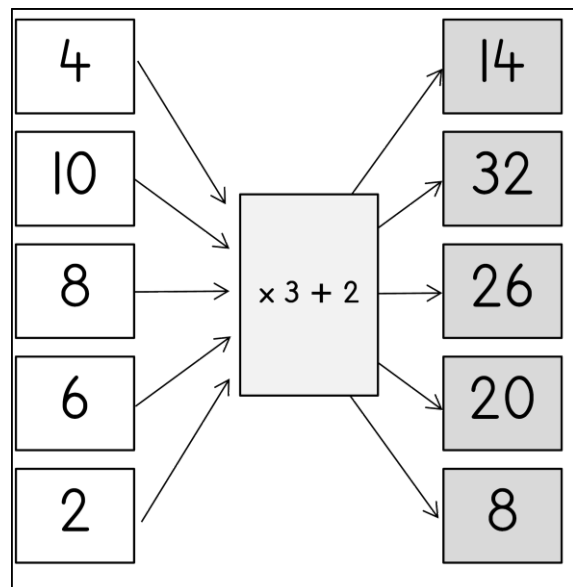
Enrichment Activity 5.3

Answers



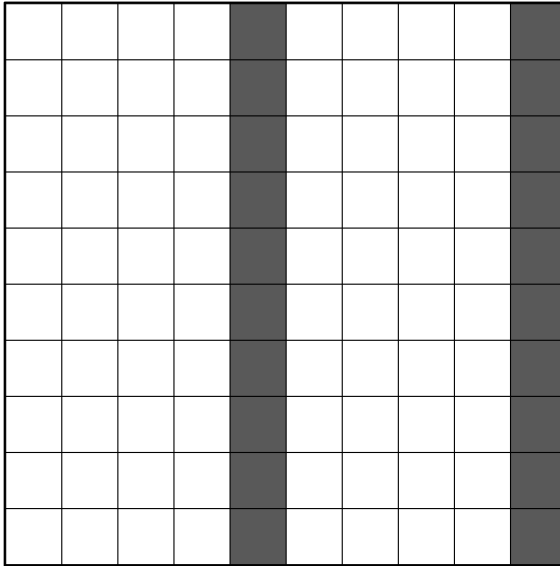
Enrichment Activity 5.4

Answers

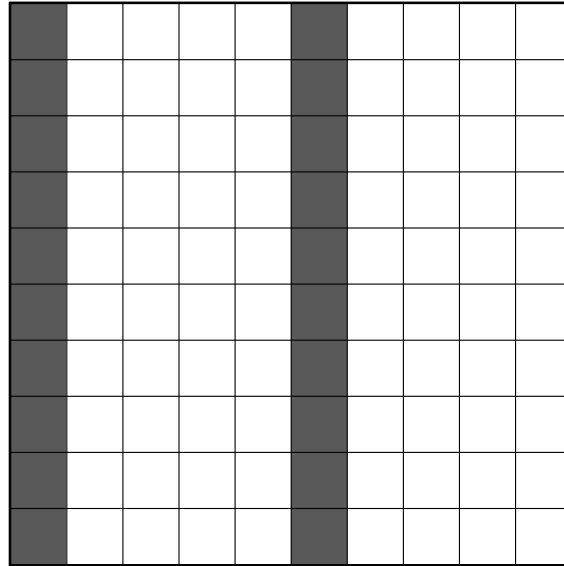


Enrichment Activity 6.1

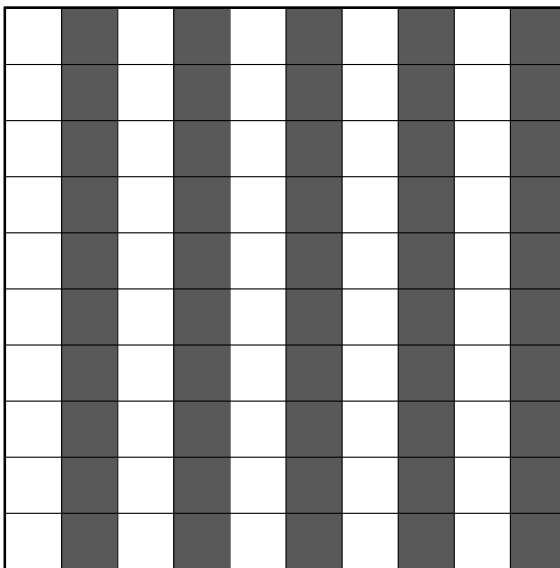
Write the numbers from 1-100
into the number board.
What pattern has been shaded?

**Enrichment Activity 6.2**

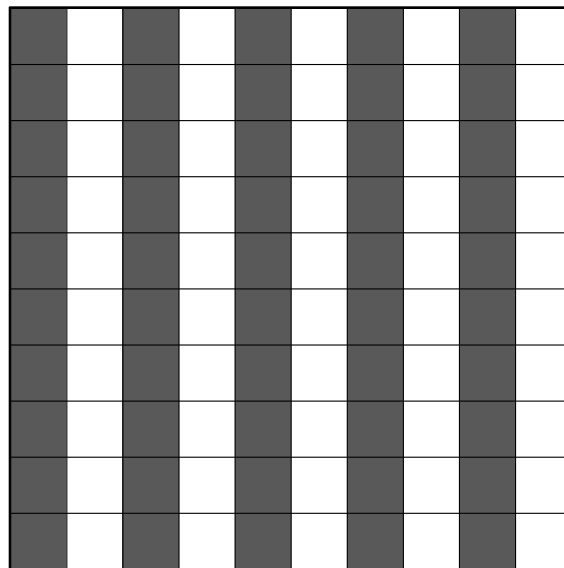
Write the numbers from 1-100
into the number board.
What pattern has been shaded?

**Enrichment Activity 6.3**

Write the numbers from 1-100
into the number board.
What pattern has been shaded?

**Enrichment Activity 6.4**

Write the numbers from 1-100
into the number board.
What pattern has been shaded?



Enrichment Activity 6.1

Answers

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

The pattern shows the multiples of 5 starting with 5.

Enrichment Activity 6.2

Answers

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

The pattern shows the multiples of 5 starting with 1.

Enrichment Activity 6.3

Answers

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

The pattern shows the multiples of 2 starting with 2.

Enrichment Activity 6.4

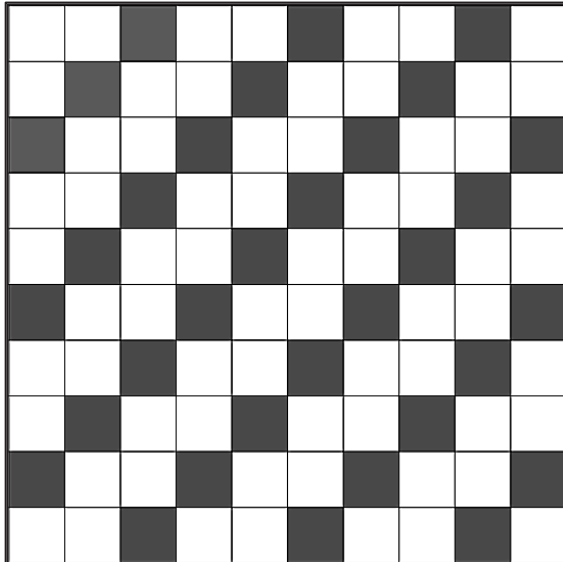
Answers

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

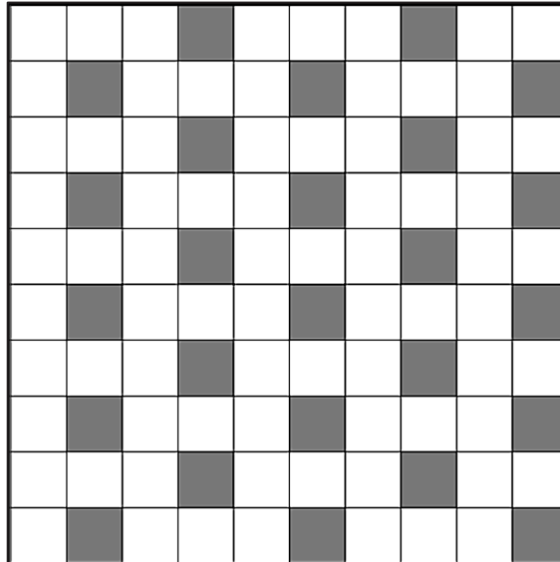
The pattern shows the multiples of 2 starting with 1.

Enrichment Activity 7.1

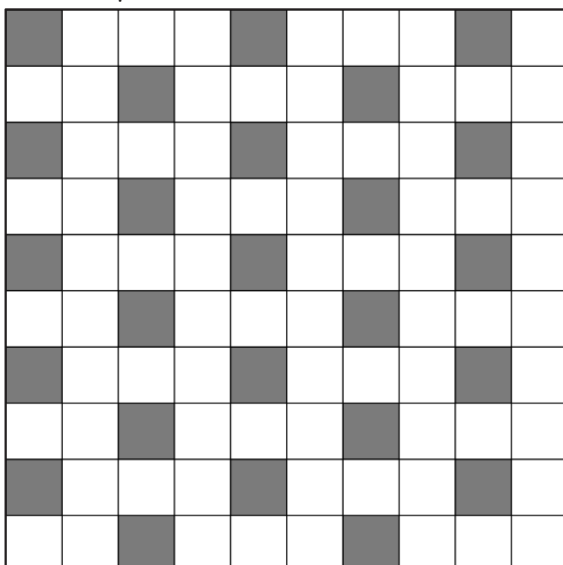
Write the numbers from 1-100
into the number board.
What pattern has been shaded?

**Enrichment Activity 7.2**

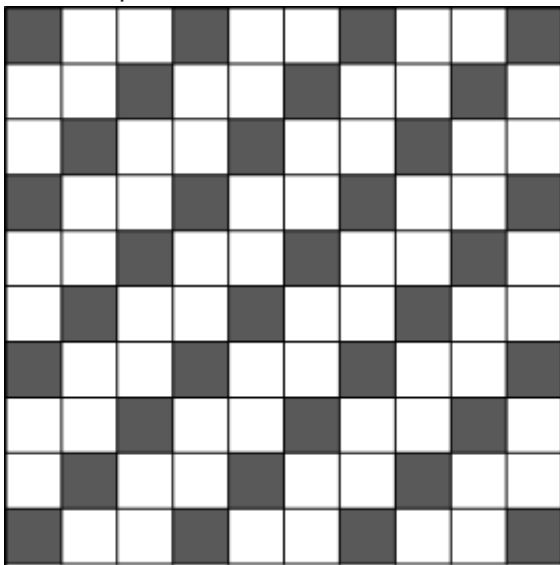
Write the numbers from 1-100
into the number board.
What pattern has been shaded?

**Enrichment Activity 7.3**

Write the numbers from 1-100
into the number board.
What pattern has been shaded?

**Enrichment Activity 7.4**

Write the numbers from 1-100
into the number board.
What pattern has been shaded?



Enrichment Activity 7.1

Answers

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

The pattern shows the multiples of 3 starting with 3.

Enrichment Activity 7.2

Answers

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

The pattern shows the multiples of 4 starting with 4.

Enrichment Activity 7.3

Answers

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

The pattern shows the multiples of 4 starting with 1.

Enrichment Activity 7.4

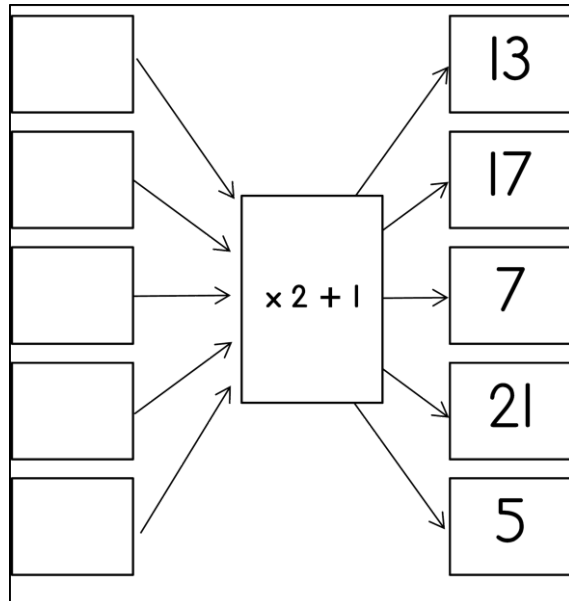
Answers

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

The pattern shows the multiples of 3 starting with 1.

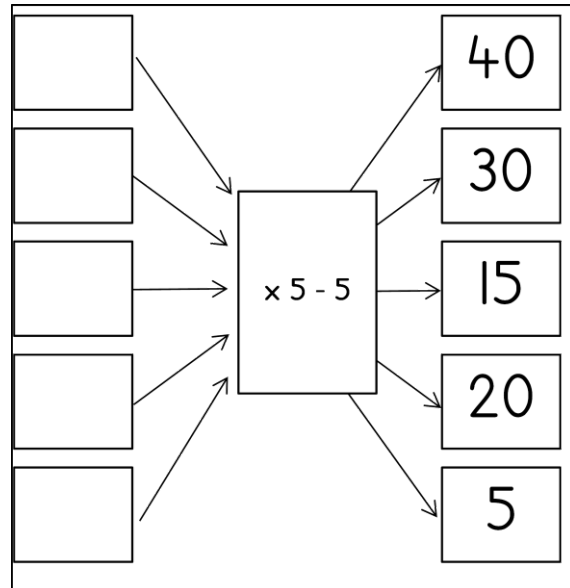
Enrichment Activity 8.1

Fill in the input numbers.



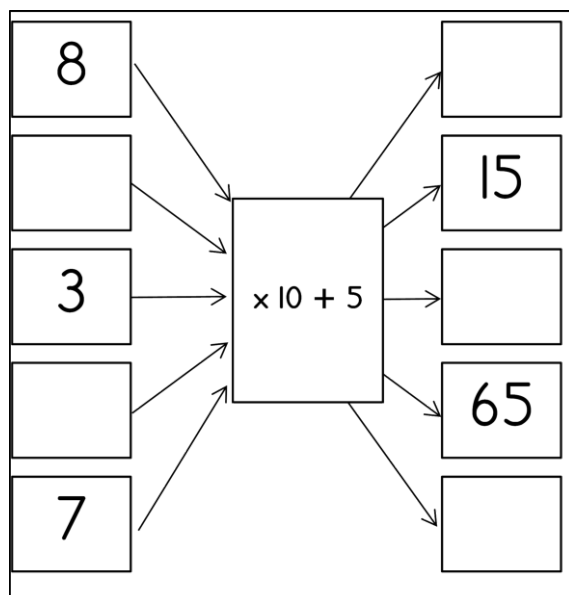
Enrichment Activity 8.2

Fill in the input numbers.



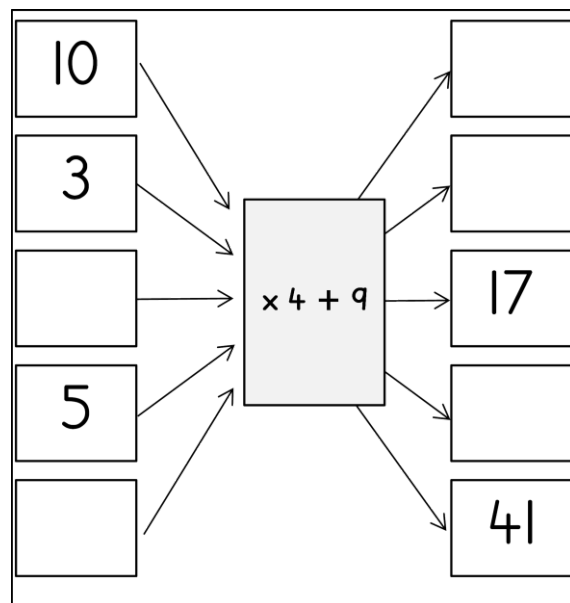
Enrichment Activity 8.3

Fill in the missing numbers.



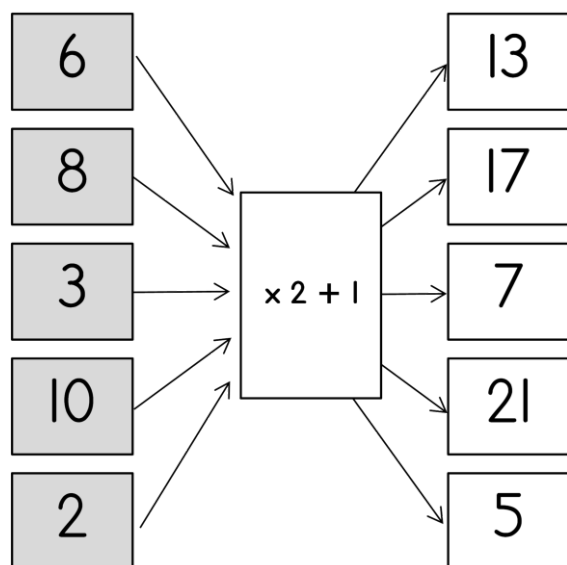
Enrichment Activity 8.4

Fill in the missing numbers.



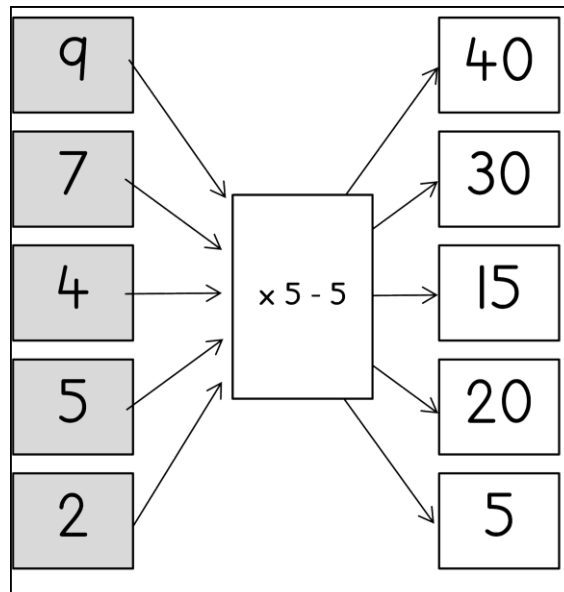
Enrichment Activity 8.1

Answers



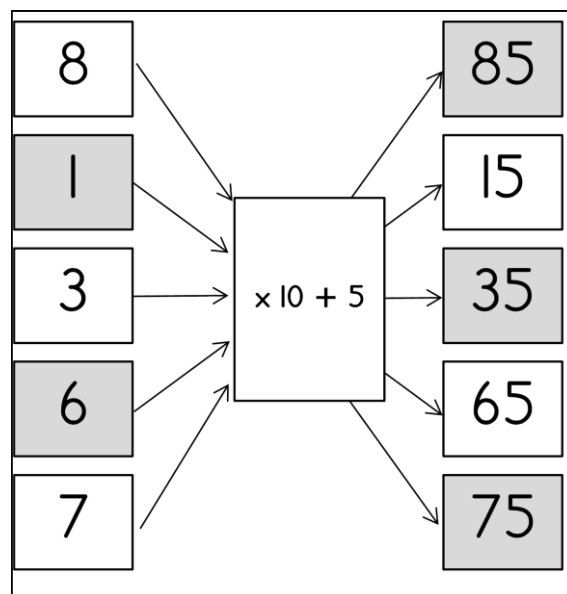
Enrichment Activity 8.2

Answers



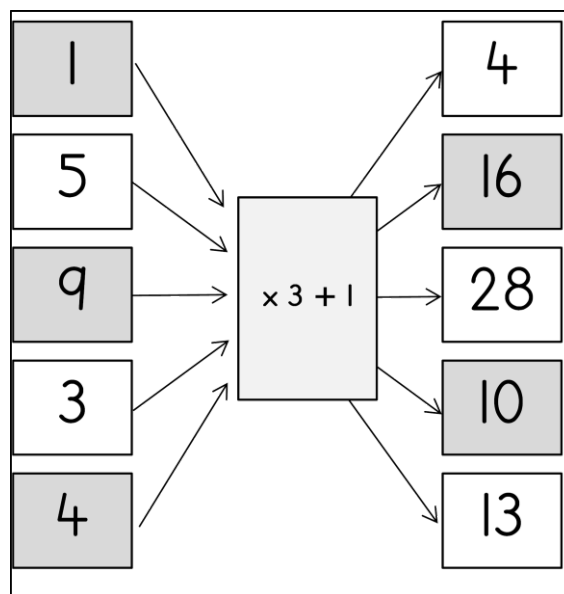
Enrichment Activity 8.3

Answers



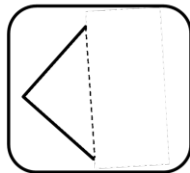
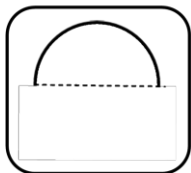
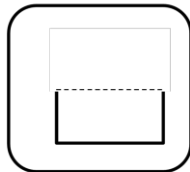
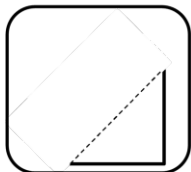
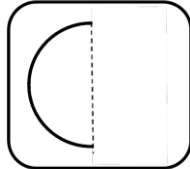
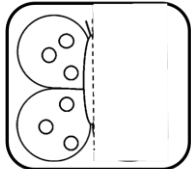
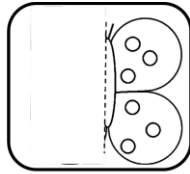
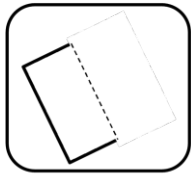
Enrichment Activity 8.4

Answers

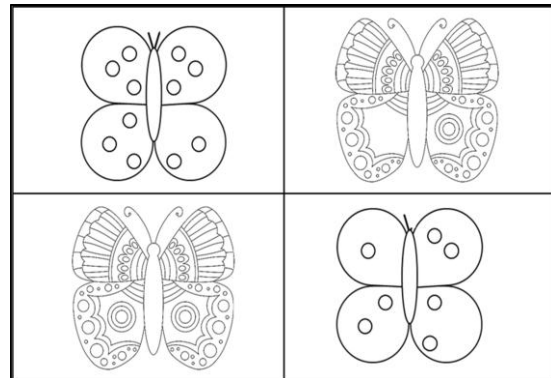


Enrichment Activity 9.1

Find the other part.

**Enrichment Activity 9.2**

Which picture is symmetrical?

**Enrichment Activity 9.3**

Find the path by counting in fifties.

Start	50	100	150	157
510	150	200	250	170
185	359	350	300	210
405	219	400	252	5
305	354	450	500	End

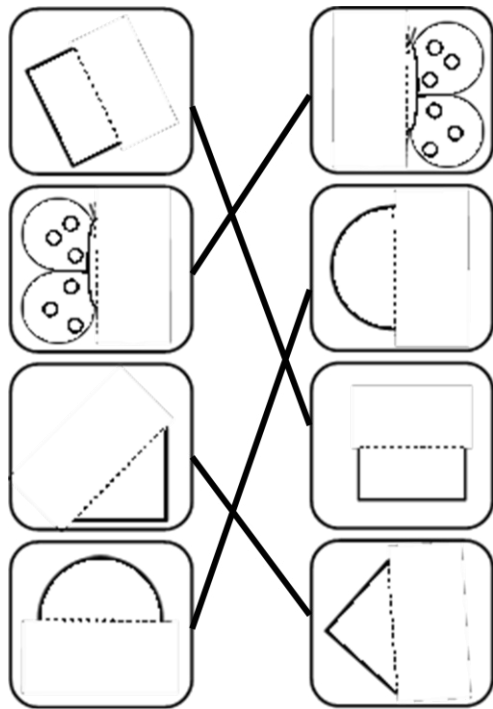
Enrichment Activity 9.4

Find the path by counting in 100s.

50	120	60	20	Start
70	600	500	90	100
30	700	400	300	200
40	800	140	10	110
50	900	150	80	40
End	1 000	130	170	160

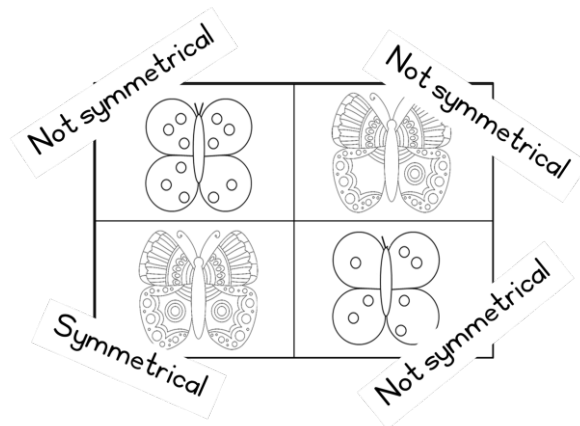
Enrichment Activity 9.1

Answers



Enrichment Activity 9.2

Answers



Enrichment Activity 9.3

Answers

Start	50	100	150	157
510	150	200	250	170
185	359	350	300	210
405	219	400	252	5
305	354	450	500	End

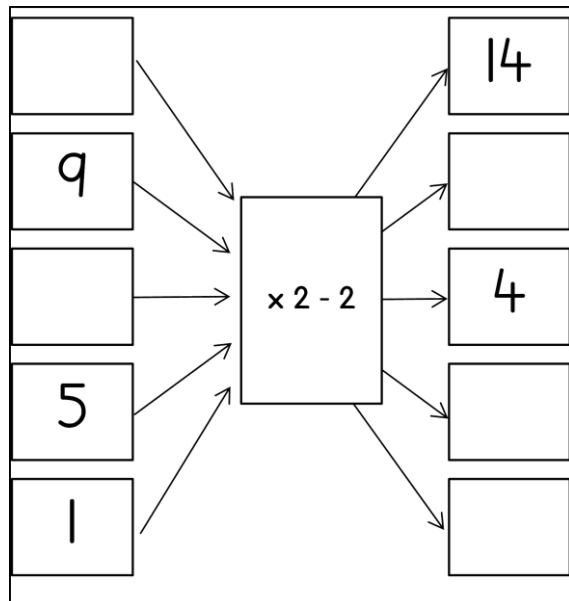
Enrichment Activity 9.4

Answers

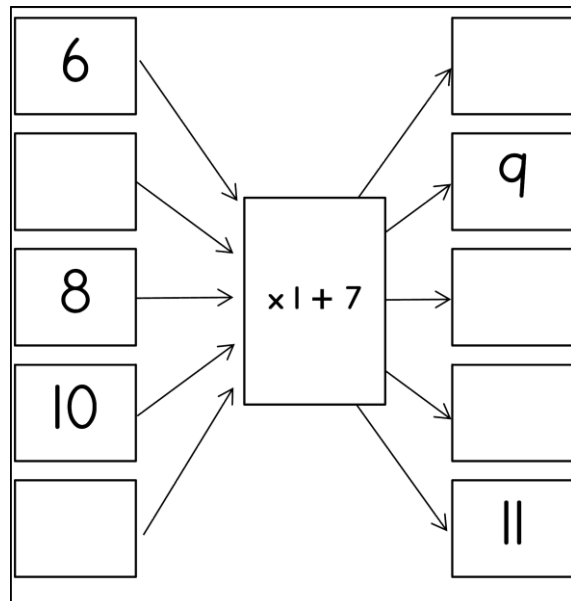
50	120	60	20	Start
70	600	500	90	100
30	700	400	300	200
40	800	140	10	110
50	900	150	80	40
End	1 000	130	170	160

Enrichment Activity 10.1

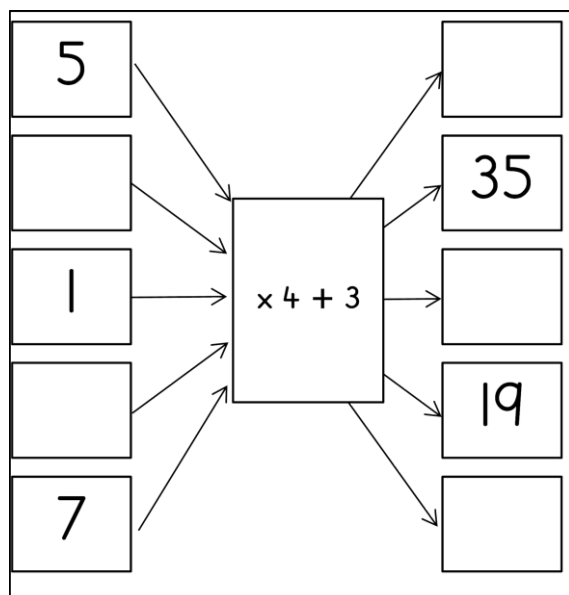
Fill in the missing numbers.

**Enrichment Activity 10.2**

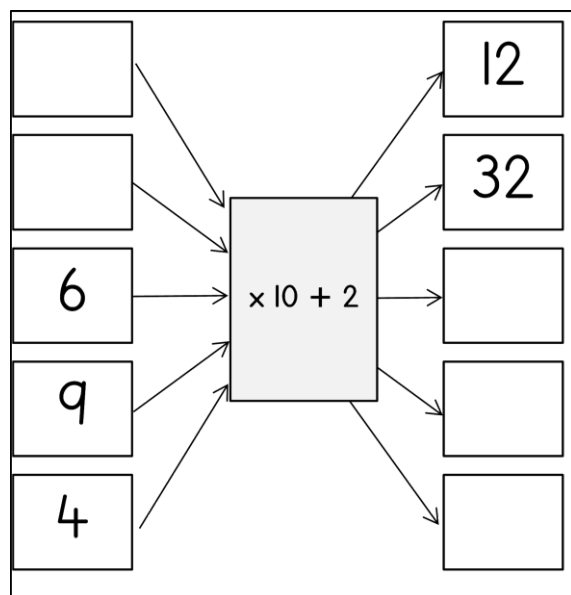
Fill in the missing numbers.

**Enrichment Activity 10.3**

Fill in the missing numbers.

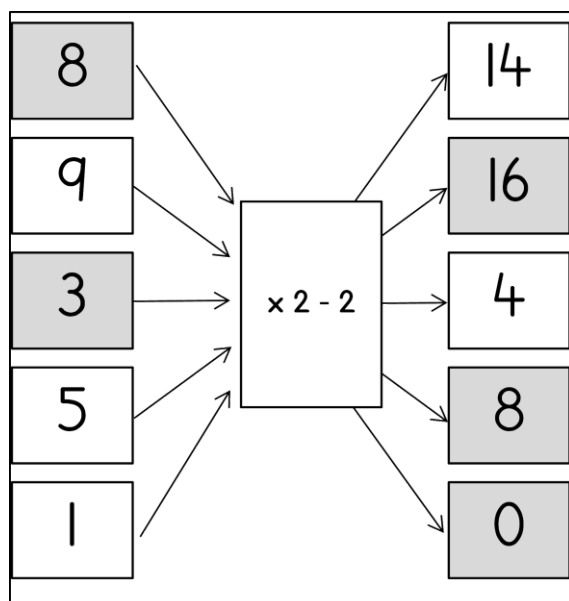
**Enrichment Activity 10.4**

Fill in the missing numbers.



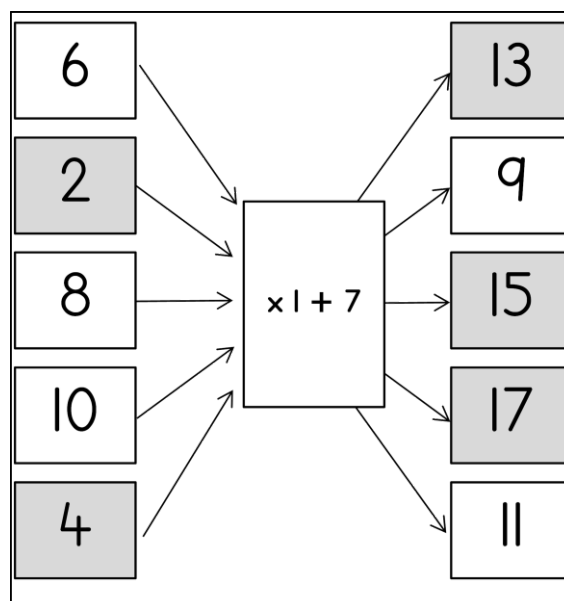
Enrichment Activity 10.1

Answers



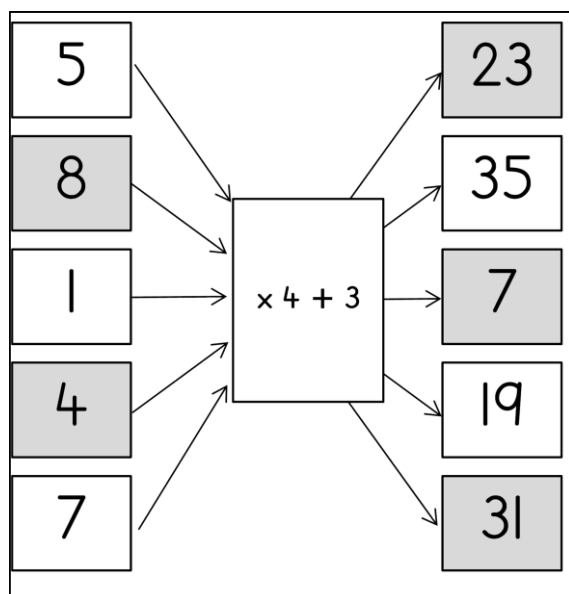
Enrichment Activity 10.2

Answers



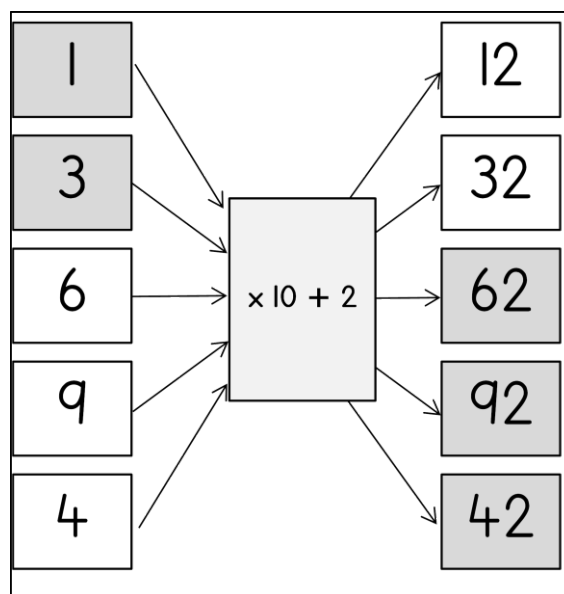
Enrichment Activity 10.3

Answers



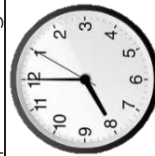
Enrichment Activity 10.4

Answers

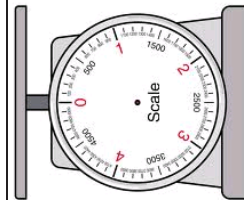


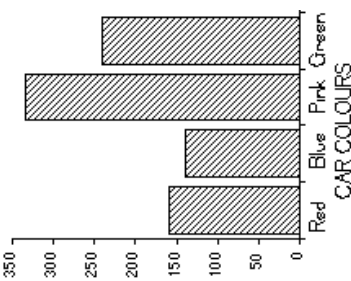
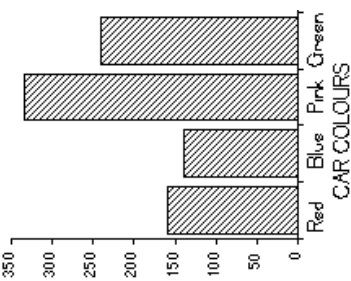
Lesson Vocabulary Grade 3 Term 1 and 2

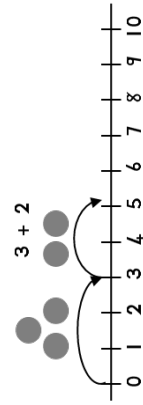
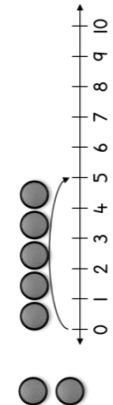
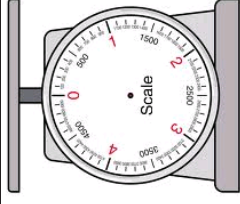
Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)
add	To join two or more numbers together. E.g. $3 + 2 + 1 = 6$		
add hundreds	To add groups of 100 starting from any given number.		
add tens	To add groups of 10 starting from any given number.		
addition	The operation that involves calculating the sum of two or more numbers. E.g. $4 + 3 + 2 + 5 = 14$		
altogether	Take everything together. e.g. If you have 3 flowers in one hand and 2 flowers in the other hand you have 5 flowers altogether.		
am / pm	am – times in the morning from midnight until noon; pm – times in the afternoon after 12 o'clock (noon) and up to midnight.		
analogue clock / analogue time	A clock with the numbers 1 to 12 around the face and a rotating short hand to show the hours, and long hands to show the minutes and seconds.		
analogue scale	A measuring scale that has a face which is marked so that you can read a measurement. e.g. This is a scale used to measure mass in kilograms.		

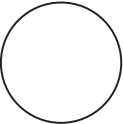


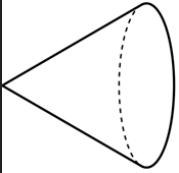
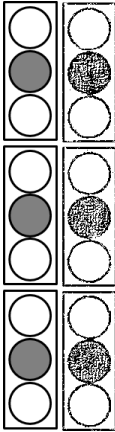
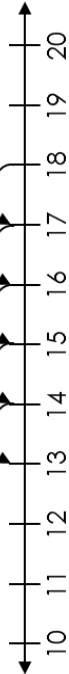
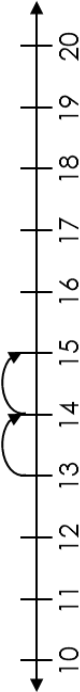
The analogue time above is 8 o'clock.



Maths word	Diagram/explanation		LoLT translation	Diagram/explanation (LoLT)													
appropriate symbols	The symbols which are the right ones for the given question. E.g. if the question says "add 23 to 45" the appropriate symbol is an addition symbol "+" .																
array	A set of objects or numbers are arranged in an order, often in rows and columns in a grid.	E.g. <table><tr><td>1</td><td>2</td><td>3</td><td>4</td></tr><tr><td>2</td><td>4</td><td>6</td><td>8</td></tr><tr><td>3</td><td>6</td><td>9</td><td>12</td></tr></table>	1	2	3	4	2	4	6	8	3	6	9	12			
1	2	3	4														
2	4	6	8														
3	6	9	12														
axes /axis	The axes (axis – singular) of a graph are the vertical and horizontal lines which create a point of reference for the graph. e.g. the horizontal axis of this graph shows the colours of cars and the vertical axis shows how many of each type was counted in a survey.																
backwards	In the reverse of the usual way. E.g. when you count backwards the numbers get smaller: 10, 9, 8, 7, ...																
bar graph	A graph which shows the number of things using bars. e.g. this bar graph shows car colours from a survey.																

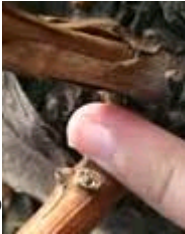
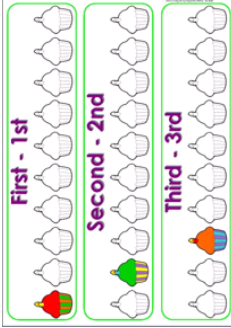
Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)
birthday	The day you were born. E.g. 15 February 2006		
break down / breaking down	Breaking down numbers is done when a number is broken down to two smaller numbers. E.g. $5 = 4 + 1$ or $5 = 3 + 2$ 		
build up / building up	Building up numbers is when numbers are put together to make other bigger numbers. e.g. 		
calculate	Find the answer. Work out the solution.		
calendar	A table showing the year broken up into months, weeks and days.		
calibrated	Marked so that correct values can be determined. E.g. the measuring scale is calibrated in kilograms and grams.		
capacity	The amount a container can hold in order to fill it up. E.g. This container is filled to its capacity.		

Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)												
change (money)	When you pay for something and you give more money than is needed, you get some money back. This money you get back is called change. e.g. You give a shop keeper R10,00 to pay for a pen that costs R2,50. The shop keeper will give you R7.50 change.														
check (calculation)	When you re-do a calculation using the same or a different method, you check it to see if it is correct.														
circle	A 2-dimensional (2D) shape that is perfectly round. E.g. 														
coins and notes	The money that we use to pay for goods or services comes in coins and notes. E.g. Coins  Notes 														
column (and row)	A set of objects or numbers can be arranged in order, often in rows and columns in a grid/array. The rows go across from left to right in the grid. The columns go from top to bottom in the grid. e.g. The first row has the numbers 1,2,3,4 in it. The second column has the numbers 2,4,6 in it. <table border="1" data-bbox="1145 1216 1305 1413"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td></tr> <tr> <td>2</td><td>4</td><td>6</td><td>8</td></tr> <tr> <td>3</td><td>6</td><td>9</td><td>12</td></tr> </table>	1	2	3	4	2	4	6	8	3	6	9	12		
1	2	3	4												
2	4	6	8												
3	6	9	12												

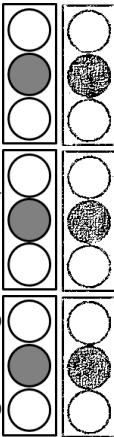
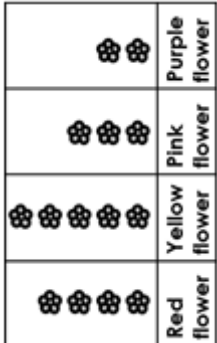
Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)
compare / comparing / comparison	To look for similarities or differences. E.g. 4 is smaller than 5. 96 is bigger than 92. 85 is equal to 85. 9 is greater than 4. 4 is less than 9. 10 is the same as 2×5 .		
cone	A geometric shape with a round base and a curved surface that tapers to a point.  e.g.		
copy (a pattern)	Something that looks exactly like another thing is a copy of that other thing. E.g. This pattern is made by drawing 6 repeated copies of three circles – white, black, white. 		
count back / counting back	Counting back means counting down (backwards) from a given number. To subtract you can count back from the bigger number to the smaller number. E.g. $18 - 5 = 13$. Count back: 18 ... 17, 16, 15, 14, 13 		
count on / counting on	Counting on means counting forwards from a given number. To add you can count on. Usually you count on from the bigger number. E.g. $13 + 2 = 15$. Count on: 13 ... 14, 15 		

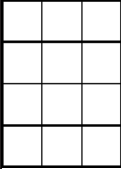
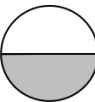
Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)
counting in 10s, 50s, 100s	When you count in groups from a given number. e.g. count in 10s from 15: 15, 25, 35, 45, 55, 65 Count in 50s to 200: 50, 100, 150, 200.		
data	A collection of facts, such as values or measurements. E.g. Information about the heights of the learners in your class, the numbers of different coloured cars in the school yard, and so on.		
decompose	A technique that allows numbers to be split and recombined (put together) to make calculations easier. E.g. $49 + 18$ $= 49 + 1 + 17$ (decompose 18 into $17 + 1$) $= 50 + 17$ $= 67$		
decrease	Make smaller or less.		
describe (a pattern)	To tell or write about a pattern to explain how the pattern is made up. E.g. 3, 5, 7, 9, ... This pattern is made by starting at 3 and then adding 2 every time to get to the next term in the pattern.		
digit	A digit is a symbol that is used to represent the numbers 1-9 and 0. E.g. 49 is made up of 2 digits, namely, 4 and 9 205 is made up of 3 digits, namely, 2, 0 and 5.		
digital clock	A clock using numbers, not hands to tell the time,  e.g.		
direction	The line along which anything moves, points or lies. E.g. when you write in your book the direction in which you write is from left to right.		
divide / dividing	The operation that involves sharing or grouping numbers. E.g. $8 \div 2 = 4$		

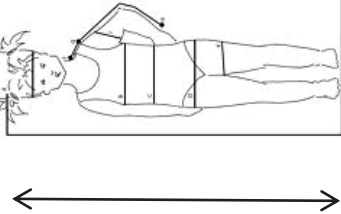
Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)
double / doubles	When a number is twice as much as another number it is called the double of the other number. E.g. 14 is double 7.		
eighth / eighths	A fraction that is made by finding eight equal sized parts of the whole. e.g.  or  or 		
equal / equal to	Having the same amount or value. E.g. $10 = 10$ $3 \text{ kg} = 3 \text{ kg}$		
equivalent	Equivalent fractions are fractions which have the same value. E.g. One half is equivalent to two quarters.		
estimate	An "educated guess" not just a wild guess. E.g. Rounded numbers are sometimes used as estimates in order to do an approximate or rough calculation. $39 + 39 \approx 40 + 40 = 80$		
extend (a pattern)	To add terms to a given pattern. To do this you need to find the rule for the pattern. E.g. Extend the pattern by giving the next 3 terms in the pattern: 4, 9, 14, ... Rule: add 5 each time to get the next term. Extended pattern: 4, 9, 14, 19, 24, 19...		
fewer than	Less than.		

Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)
fifth / fifths	A fraction that is made by finding five equal sized parts of the whole. e.g.  or 		
finger width	The width of your finger, used to measure length/thickness of something else. e.g. this stem is about one finger width in thickness. 		
first, second, third, firth, hundredth	Positions (ordinal numbers) according to the number in a display. e.g. 		
fives	When things or objects come in groups of five. Example:  We can count: 5, 10, 15 We can say: 3 groups of 5 or $5 + 5 + 5$ or 3×5		

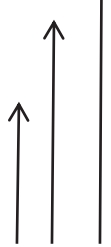
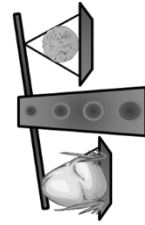
Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)
foot lengths	The length of your foot, used to measure length of something else. E.g. Mark the number of foot lengths, from heel to toe. 		
forwards	Going towards the front. E.g. when you count forwards the numbers get bigger.		
fours	When things or objects come in groups of four. Example:  We can count: 4, 8, 12, 16, 20 We can say: 5 groups of 4 or $4 + 4 + 4 + 4 + 4$ or 5×4		
fractions	Parts of a whole. e.g. half, third, quarter		
frequency	The number of times a data item occurs.		

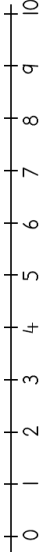
Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)																		
frequency table	A table used to record frequencies. A tally is often used to count up the frequencies. e.g. <table><tr><th colspan="3">Favourite colours</th></tr><tr><th>Colour</th><th>Tally</th><th>Total (Frequency)</th></tr><tr><td>Red</td><td>###</td><td>5</td></tr><tr><td>Blue</td><td>### /</td><td>6</td></tr><tr><td>Yellow</td><td> </td><td>4</td></tr><tr><td>Green</td><td>### ##</td><td>10</td></tr></table>	Favourite colours			Colour	Tally	Total (Frequency)	Red	###	5	Blue	### /	6	Yellow		4	Green	### ##	10		
Favourite colours																					
Colour	Tally	Total (Frequency)																			
Red	###	5																			
Blue	### /	6																			
Yellow		4																			
Green	### ##	10																			
geometric pattern	A pattern made using shapes. E.g. This geometric pattern is made by repeating circles. 																				
gram	A gram is a smaller unit used to measure mass. There are 1 000 grams in 1 kilogram.																				
graph title	The heading of a graph that tells you what the graph is about. E.g. this graph is about the colours of flowers that were collected. Flower Colours 																				

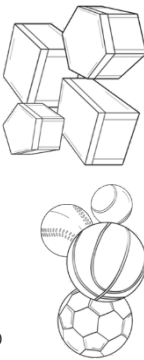
Maths word	Diagram/explanation		LoLT translation	Diagram/explanation (LoLT)	
greater than	Bigger. The symbol $>$ means greater than. E.g. $5 > 3$ means 5 is greater than 3.				
greatest	The biggest number.				
grid	A rectangle that has been divided up into smaller squares that appear in rows and columns. E.g.				
group / groups	A group is a set of objects that have been put together according to a given instruction. E.g. The flowers are in groups of 5. 				
grouping	When you put objects into groups you are "grouping" the objects. You can divide numbers by grouping them. E.g. If you have 15 flowers, how many bunches of 5 flowers each can you make? ($15 \div 5 =$)  $15 \div 5 = 3$				
half / halves	One of two equal parts. E.g. 	There are 2 halves in a whole.			
halving, halve, finding halves	To divide/ cut something into two parts of equal size or number.				

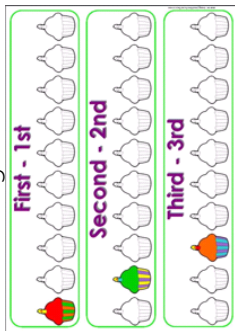
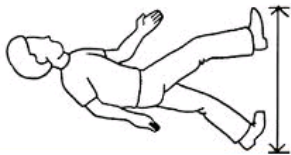
Maths word	Diagram/explanation		LoLT translation	Diagram/explanation (LoLT)	
hand span	The length between your fingers when they have been stretched out a little. e.g.				
heavy, heavier, heaviest	Objects which have a great mass are heavy. The heaviest object (of a group of objects) is the one with the greatest mass. E.g.				
height	The car is heavy, the taxi is heavier the truck is the heaviest The measurement from top to bottom. e.g.				
historical events /historical days	Events we celebrate that happened in the past. E.g. 27 April is Freedom Day. It is celebrated to remember the first free elections in South Africa.				
horizontal	_____ _____ _____ _____ _____ E.g.				

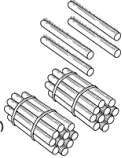
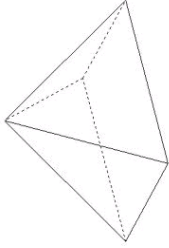
Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)
12-hour time	A day has 24 hours. In 12-hour time the time is measured as am and pm – before noon (midday) and afternoon. This are two 12 hour periods in one day.		
hours / half hours / quarter hours	A unit of time equal to 60 minutes (hour). Half an hour has 30 minutes. Quarter of an hour has 15 minutes.		
increase.	Make bigger or larger.		
kilogram	A standard metric unit used to measure mass. The abbreviation for kilogram is kg. The mass of 1 kg is the same everywhere in the world.		
label	A label tells you what something is.		
larger	Bigger.		
less (than)	Smaller. The symbol < means less than. E.g. We read $4 < 9$ as "4 is less than 9". This is true because 4 is a smaller number than 9.		
light, lighter, lightest	Objects which have a small mass are light. The lightest object (of a group of objects) is the one with the smallest mass. E.g. The pen is light, the button is lighter the feather is the lightest 		
line	A straight path from one point to another point. e.g. _____		

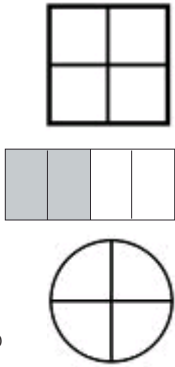
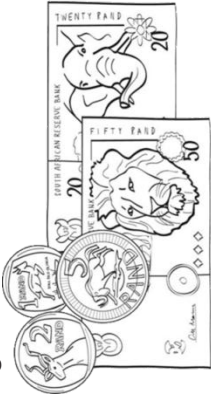
Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)
long, longer, longest	You can compare the lengths of different objects using the words long, longer and longest. E.g. This first arrow is long, the second arrow is longer, the third arrow is the longest.  The third arrow is longer than the second arrow. It is also longer than the first arrow.		
mass	The amount of matter that an object is made up of. E.g. a rock has a greater mass than a cookie. 		
measure	To find the size or amount of something. This can only be done for things that can be measured. For example you can measure the length, mass, capacity and volume of objects.		
metre / metres	The standard unit used to measure length in metric system.		
minute	A unit of time – there are 60 minutes in an hour. There are 60 seconds in a minute.		
money	We use money to pay for goods or services. It comes in coins and notes. E.g. Coins  Notes 		

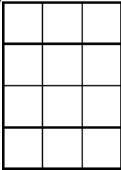
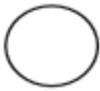
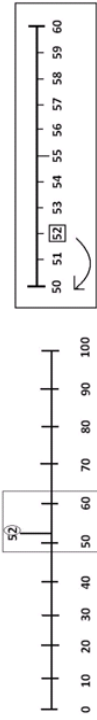
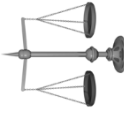
Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)
month	A calendar year is broken up into 12 months, each of which is about 30 days long. Not all months have the same number of days.		
more than	Greater than. The symbol $>$ means more/greater than. E.g. We read $23 > 19$ as "23 is greater than 19". This is true because 23 is a bigger number than 19.		
multiple	The product when you multiply one whole number by another whole number. e.g. 6 is a multiple of 2; 25 is a multiple of 5.		
multiples of 3	The products when you multiply whole numbers by 3. E.g. 3, 6, 9, 12, 15, 18, 21 are the first seven multiples of 3.		
multiples of 4	The products when you multiply whole numbers by 4. E.g. 4, 8, 12, 16, 20, 24, 28 are the first seven multiples of 4.		
multiples of 5	The products when you multiply whole numbers by 5. E.g. 5, 10, 15, 20, 25, 30, 35 are the first seven multiples of 5.		
multiplication	The operation that involves calculating repeated addition of a given number.		
multiply	When you multiply you carry out the operation of multiplication. The answer that you get is called the product. E.g. $7 \times 2 = 14$ so we say that 14 is the product of 7 and 2.		
number	How many things or objects there are. You count to find the number of items.		
number line	A number line is a line on which numbers can be placed, according to their value. The gaps on the number line must be drawn accurately. E.g. 		
number name / number word	When you write out a number using words you give the number name. E.g. The number name of the 47 is forty seven.		

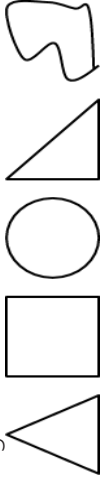
Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)
number pattern/ numeric pattern	A number / numeric pattern is another name for a number sequence or pattern.		
number sentence	When you write a mathematical expression of a problem, you write it using a number sentence. E.g. If I have 5 sweets and you have 7 sweets how many sweets do we have altogether? The number sentence expressing this is: $5 + 7 = \underline{\quad}$ or $5 + 7 = 12$.		
number sequences	Number sequences are patterns of numbers that follow a rule. E.g. 2, 4, 6, 8, 10, 12, ... are the even numbers, they are a sequence of numbers		
number symbol	When you write out a number using symbols (numerals/digits) you give the number symbol. E.g. The number symbol for the number seventy two is 72.		
3D objects (3-dimensional objects)	Objects such as balls (spheres) and boxes (prisms). E.g.: 		
object	A thing. You can see it. If there are lots you can count them.		
order / ordering	To order means to sort. You can sort numbers or shapes according to size.		

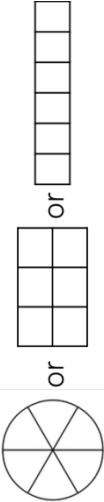
Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)
ordinal numbers	Positions are given by ordinal numbers. E.g. first, second, third, fourth, etc. according to the number in a display. 		
organise (data)	When you collect data you get all sorts of answers and they are not sorted out into categories. When you sort out the data you organise it.		
pace(s)	A pace is a step that you take. The length of a pace is used to measure the lengths of other things, such as the length of your classroom. E.g. 		
physical objects	Real things. E.g. Things which you work with when you count, such as stones, counters or blocks.		

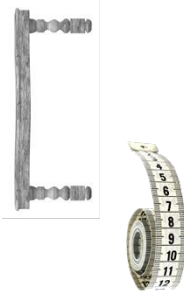
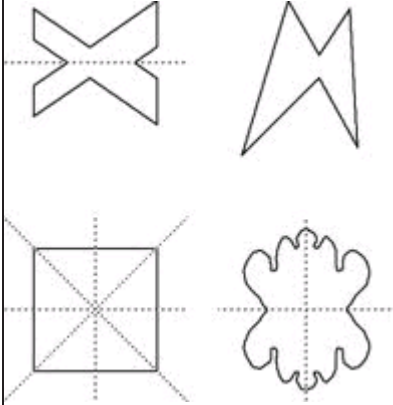
Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)										
pictograph (data)	A pictograph is a data graph which uses pictures to represent the data. E.g. <table><tr><th></th><th>Red flower</th><th>Yellow flower</th><th>Pink flower</th><th>Purple flower</th></tr><tr><td></td><td>   </td><td>    </td><td>   </td><td> </td></tr></table> Key = 		Red flower	Yellow flower	Pink flower	Purple flower		   	    	   	 		
	Red flower	Yellow flower	Pink flower	Purple flower									
	   	    	   	 									
place value	In our number system, the decimal number system, the value of a digit depends on its place, or position, in the number. Each place has a value of 10 times the place to its right. The place values used in Grade 2 are tens and units. E.g. This drawing shows the number 24 sticks.  The place value of the 2 is tens. (We can also say the 2 is in the tens place.)												
predictable	In an expected way. E.g. patterns behave in a way that is predictable. You can use the rule of the pattern to predict (work out) what another term in the pattern will be.												
public holidays	Days which are given as holidays by the government. E.g. In South Africa June 16 is a public holiday.												
pyramid	A geometric shape that has a base that can vary but all of the other faces are triangles. E.g. 												

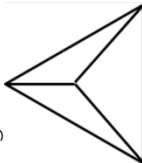
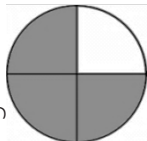
Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)
quarter	A fraction that is made by finding four equal sized parts of the whole. e.g. 		
rands and cents	Money values used in South Africa. E.g. 		
record	Write something down. E.g. Record your answer means "write down your answer". Record the data items means write down the data facts that you find.		
rectangle	A shape with 4 straight sides and 4 square corners. E.g. 		
religious festivals	Days on which people of a given religion celebrate something special. E.g. Easter, Diwali, Ramadan, Passover.		
remainder	Something that is left over. E.g. If I share 7 sweets between 2 children each child gets 3 sweets and there is one sweet left over.		
repeated	Adding the same number many times.		

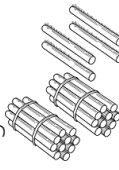
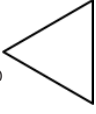
Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)
addition	e.g. $4 + 4 + 4 + 4 = 20$ (In this way we have found by repeated addition that five 4's is equal to 20.)		
rows (and column)	A set of objects or numbers can be arranged in order, often in rows and columns in a grid/array. E.g. The rows go across from left to right in the grid. The columns go from top to bottom in the grid. 		
round / curved sides	An edge of a shape that is curved. e.g. a circle has a round (curved) edge. 		
rounding off	When you want to simplify a situation you can round off a number – this means you make it a number that ends in zero. e.g. 52 rounded off to the nearest ten is 50. 		
scale/balance scale	An instrument used to measure or compare the mass of different objects. 		
sequence / sequencing events	Things that happen (events) can be put in date/time order, when you are given their dates/times. This is called sequencing the events. E.g. The sequence of events in your day could be: Eat breakfast, go to school, do your homework, eat supper, go to bed. (this does not include all the events of a full day)		
2D shapes (2-dimensional)	Shapes such as triangles, squares, rectangles, circles, etc. E.g.:		

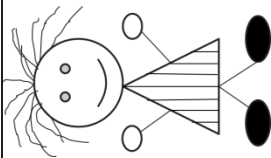
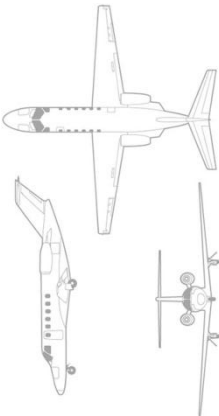
Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)
shapes)			
shape	Form or outline. e.g. 		
sharing / share (divide)	When you share objects among a certain number of people you are "sharing" the objects. You can divide numbers by finding out how you share them. E.g. If you have 12 flowers, and you share them equally among 4 children, how many flowers will each child get? $(12 \div 4 =)$  $12 \div 4 = 3$ Each child will get 3 flowers.		
shared amongst / between	We say "shared amongst" when we share out to more than two people and "shared between" when we share between 2 people. E.g. 24 sweets are shared amongst 6 boys. How many sweets will each boy get? 4 biscuits are shared between 2 girls. How many biscuits will each girl get?		
sharing equally	When you share by giving the same amount to each person.		

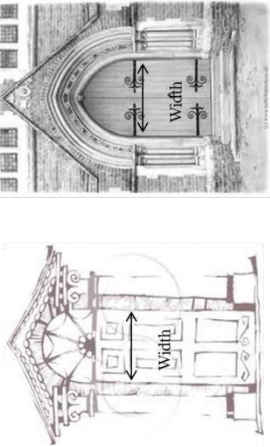
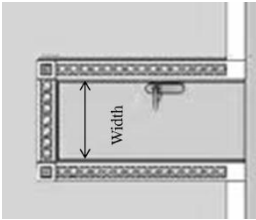
Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)
short, shorter, shortest	You can compare the lengths of different objects using the words short, shorter, shortest. E.g. This pencil short, this pencil is shorter, this pencil is the shortest. 		
sixth / sixths	A fraction that is made by finding six equal sized parts of the whole. e.g. 		
small, smaller, smallest (shape)	Shapes come in different sizes and can be ordered according to their size. E.g. The first circle is small, the second circle is smaller, the third circle is the smallest. 		
smaller than	The symbol < means smaller/less than. E.g. We read $4 < 9$ as "4 is less than 9". This is true because 4 is a smaller number than 9.		
smallest (number)	When we write number in order we will write them from the smallest to the biggest or from the biggest to the smallest. E.g. 32, 33, 34, 35, is written from the smallest to the biggest.		
square	A shape with 4 straight sides which are equal in length and 4 square corners. E.g. 		

Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)
standard unit	When you measure formally, you use standard units of length. E.g. If you measure the width of your school desk using a tape measure, you are using centimetres as a formal unit. 		
straight sides	An edge of a shape that is not curved. e.g. a square has straight edges.		
strategy	A method for working something out.		
subtract	Take away.		
subtraction	The operation that involves taking one number away from another number.		
symmetry / line of symmetry	We see symmetry in a shape when one half of it is a mirror image of the other half. The line of symmetry is the line we draw between the two symmetrical halves of the shape. e.g. Some shapes have one line of symmetry, others have more than one. Some shapes are not symmetrical. 		
table	Mathematical information organised in columns and rows.		

Maths word	Diagram/explanation		LoLT translation	Diagram/explanation (LoLT)												
taller	More tall. E.g.	 This giraffe is taller than the buck.														
tally	Using marks to keep a record of counting.															
tally table	A table in which you record tally marks while you count up items. e.g. <table><thead><tr><th colspan="2">Favourite colours</th></tr><tr><th>Colour</th><th>Tally</th></tr></thead><tbody><tr><td>Red</td><td>###</td></tr><tr><td>Blue</td><td>### /</td></tr><tr><td>Yellow</td><td> </td></tr><tr><td>Green</td><td>### ##</td></tr></tbody></table>		Favourite colours		Colour	Tally	Red	###	Blue	### /	Yellow		Green	### ##		
Favourite colours																
Colour	Tally															
Red	###															
Blue	### /															
Yellow																
Green	### ##															
thirds	A fraction that is made by finding three equal sized parts of the whole. e.g.  or 															
three quarters	A fraction that is made by taking three of four equal sized parts of the whole, i.e. three quarters. e.g.  or  or 															

Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)
threes	When things or objects come in groups of three. Example:      We can count: 3, 6, 9, 12 We can say: 4 groups of 3 or $3 + 3 + 3 + 3$ or 4×3 The full amount due. E.g. if you spend R5, R3 and R21, the total you have spent is $R5 + R3 + R21 = R29$ In our number system, the decimal number system, the value of a digit depends on its place, or position, in the number. Each place has a value of 10 times the place to its right. The place values used in Grade 2 are tens and units. E.g. This drawing shows 24 sticks.  The total value of 2 in the tens place is 20.		
triangle	A shape with three straight sides. E.g. 		
twos	When things or objects come in groups of two. E.g.     We can count: 2, 4, 6 We can say: 3 groups of 2 or $2 + 2 + 2$ or 3×2 Another name for one. A single item. e.g. In place value the ones place can also be called the units place.		
unit			

Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)
value	The value of something is how much that thing is worth. Numbers represent values.		
vertical	Going up and down. e.g. The lines on the girl's dress are vertical. They go from top to bottom. 		
views (top view, side view, front view)	What you see when you look at a shape from different positions. E.g. this is the top, front and side view of an aeroplane. 		
volume	The amount of space occupied by an object.		
whole	All, everything, total amount. All of the parts together.		
whole number	E.g. 0, 1, 2, 3, 4, 5, 6, ... Whole numbers are counting numbers starting from 0.		

Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)
wider	More wide. E.g. This house door is wide but the church door is wider 		
width	The distance across from side to side of an object. E.g. The width of this door is 80 cm. 		



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