GPLMS

GAUTENG PROVINCE
Department: Education
REPUBLIC OF SOUTH AFRICA

GRADE 3

Mathematics

Term 4

MATHEMATICS FOUNDATION PHASE
GRADE 3 TERM 4 LESSON PLANS

CONTENTS

MANAGEMENT NOTES

1. CORE METHODOLOGY

We have included a section called CORE METHODOLOGY which is given at the front of the lesson plans for the term. This tells you how to use each of the components of the lesson plans and how they fit together to create a well scaffolded maths lesson each day.

2. 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 for particular lessons when these apply.

2. **Resources for this term:** A stock list of the mathematical resources required in the lesson plan set for the duration of the term. Refer to this list to make sure you have the necessary resources for the term.

3. **Term plan:** This provides an overview of key teaching and assessment activities for the term.

4. **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. It also provides guidelines for the timing and use of the lesson plans. *You need to read this as you prepare until you are fully familiar with the general lesson plan structure, pace and content.*

5. **Assessment schedules and mark record sheets:** These provide the content, planning and recording sheets for the continuous assessment activities that should be done in the course of the term.

6. **Lesson plans:** The term pack contains forty mathematics lesson plans (and accompanying assessments) that have been developed for each Foundation Phase grade.

   Note: There are also plans for general revision in the first week of school that you should work through with your learners before starting with the lesson plans. This provides an opportunity for you to reflect on the previous term's work. We suggest that you write observation notes based on your observations of the learners while you work through the revision activities.

7. **Learner's material packs:** The learner's materials comprise six activity components**:** Mental mathematics, classwork, homework, assessments, enrichment activity cards and lesson vocabulary lists. The contents of these components have been extracted from the lesson plans and presented at the end of each pack for easy reference and photocopying purposes.

3. CURRICULUM ALIGNMENT

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

4. 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, you should continue the next day from where you last left

MANAGEMENT NOTES

off. Do not miss a lesson. You may need to speed up the pace of delivery to catch up the lesson schedule – by covering the lesson concept content of two consecutive days in one day. To do this you could cut out or cut back on some of routine activities like mental maths or homework reflection to save time until you are back on track with the dated delivery of the plans.

5. 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 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 your mathematics lessons 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 you have all your resources ready for use every day. (E.g. counters, number boards, paper cut-outs, examples of shapes, etc.)
   - **Your lessons will not succeed if you have not prepared properly for them.**
   - 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/number boards 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".
   - Use newspapers and magazines to cut out pictures that could be used in your teaching. If you have access to the internet, use Google to search for and print out pictures that you may need to use as illustrations in your lessons.

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. 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. Also make sure that you mark the homework activities – use peer and individual marking and check homework yourself as often as you can.

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 it in simple terms to your learners.

5. **Lesson vocabulary lists:** You will notice that the lesson vocabulary words have been listed in the teacher's notes for each lesson plan. They are also provided in a glossary of lesson vocabulary (with full explanations and diagrams) at the end of the lesson plan set. ***Go through the lesson vocabulary each day as you prepare for the lesson***. 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 them with your learners during the lesson. Lesson vocabulary words will be translated into the LoLT of your school and made available to you.

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6. **Mental maths:** This start-up activity should not take more than 10-5 min. Counting should take about 5 min and the mental maths questions about 10 min. The purpose of this activity is to focus the learners on numeracy and to drill basic numeric concepts so that they can be easily recalled in other higher level work. ***Each day you need to prepare the full set of questions before the lesson starts.*** (Orally, write them on the board, make flashcards, make a chart or photocopy.) This is a mental activity for the learners. Once a week learners should do it in written form so that there is some record of your daily mental maths activities. Learners should also not use concrete material to work out the answers. If learners need to, let them use their fingers as a concrete aid during mental maths, but make a note of who they are and then spend time with them during remediation to help them with the basic skills. Mental maths skills improve hugely from Grade 1 to Grade 3. In Grade 1 learners might only manage 5 questions, especially when they have to write the answers, but by Grade 3 learners should manage 10 questions with written answers easily.

7. **Concept development:** This is the heart of the lesson – you will use this time to explain new mathematics content and skills to your learners. ***Make sure you have prepared for the teaching of the concepts before you teach.*** Also make sure that you have prepared all of the resources needed for the lesson so that you have them and you know how to use them effectively. This preparation needs to be done in advance so that you do not waste time during the lesson. Follow the activities in the lesson plan. ***Prepare yourself*** to assist learners with any questions they might have during the lesson.

8. **Lesson pace:** Once you have introduced the new concept, work through ***Activity 1*** of the lesson. Allow sufficient time for the learners to complete the activity - it is important that each learner works through the first activity. Then immediately move on to the next activity, provide a reasonable time for the learners to complete Activity 2, but do not wait for the last learner to finish before moving on. It is important to manage the pace of the lesson carefully, otherwise you will not manage to cover all the lesson content.

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 maths and problem solving skills. It is important that you ***prepare yourself for the classwork activity*** – you need to assist learners as they do the classwork. Plan the timing of the lesson so that learners can go over the classwork together and do corrections in the lesson.

10. **Remediation activities:** Each day you should ***be prepared to identify learners*** that need some additional practice to consolidate their learning. Remediation activities have been built into each lesson to be used as needed. While the rest of the class are busy working through the classwork activities, you should spend some time with those that need extra support and help them to work through the remediation activities.

11. **Enrichment activities:** If learners successfully complete the daily classwork activities ahead of the rest of the class ***be prepared*** to give them the enrichment activities.

12. **Homework:** ***Prepare*** to allocate a few minutes at the end of each lesson to discuss the homework for the day – make sure that learners understand what it is that they have to do. Read over the word problems with the class if there is time to help them to cope with the problems when they go home to do the work.

13. **Lesson reflection**: Briefly jot down "*what worked well*" and "*what did not work so well*" in your lesson observation books so that you have a record for the next time you implement the same lesson/content again. The reflection can be ***used as a guide your preparation*** for general teaching, remediation and enrichment activities***.***

CORE METHODOLOGY

*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 about the **core methodology** of the lesson plans and how they all work together to set the pace, sequence and content and resource requirements of the lessons.*

Topic	Each lesson has a topic with specific detail about the day's lesson.
Curriculum knowledge	The CAPS topics list gives all of the content related to the day's lesson. The curriculum references can be located in the Term 4 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 lesson vocabulary list for the fourth 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 you will record a mark for a few learners for a certain criterion from the curriculum each day. • Decide how many learners to assess each day so that you assess your whole class in the time allocated to each assessment activity. • Rubrics to be used to guide you in giving ratings for formal assessments are given in the assessment schedule. Each day you need to use the appropriate rubric for the assessment activity of that day. • A mark record sheet that you can use to record your term marks is given in the assessment schedule. Each of the assessment tasks for the term has been broken up into several smaller assessment activities.

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Mental Maths – 15 minutes	This is the first activity of the lesson. We recommend that you take at most 15 minutes to do the mental maths activity. There are two parts to the mental maths activity, a counting activity and some mental maths questions. Mental maths is not a concrete activity (as the title suggests). If there are learners who need concrete aids to complete the mental maths activities we suggest that you allow them to use their fingers to count on. • Observe which learners struggle with mental activities and make sure you spend time with them to assist them to reach the required level of competence by offering remediation activities using concrete aids. • The memo for the ten mental maths questions are given in the answer column in the lesson plans. 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. We recommend that learners only do written mental maths once a week and orally on all other days. (It would be far better to do all ten questions per day but if you find that your children struggle to finish these in 10 minutes, do a minimum of 5 questions.)
Homework / Corrections – 15 minutes	This is the second activity of 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 reflect on the previous day's work. Allow learners the opportunity to write corrections as needed.
Lesson Content – Concept Development – 30 minutes	This is the third activity of the lesson. We recommend that you should actively teach your class for 30 minutes – going through examples interactively with your learners. • Resources needed for the lesson are listed so that you know what resources to prepare. • Concepts covered in the lesson are given in a list that links to the CAPS topics. • Activities on the content that you will teach with worked examples and suggested explanations are given that you should go through with your class. • 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.
Remediation	Optional as required. 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. It will be done with a smaller group of learners/individual learners while the rest of the class is working through the classwork activity.

CORE METHODOLOGY

Enrichment	Optional as required: Activities that you can use for enrichment opportunities for learners who have completed the lesson activities are provided in a set of enrichment activity cards at the end of the lesson plan set. Learners should work on these cards independently or with their peers who have also completed the classwork. Ideally you should photocopy the enrichment cards and laminate them so that they can be used as a resource, not only this year but in the future as well. You may need to explain some of the activities to the learners who use them. You should tell them to ask you questions it they have any.
Classwork Activity **– 25 minutes**	This is the fourth activity of the lesson. We recommend that you allocate 25 minutes to the classwork activity. Here you find a set of activities that you will allow your learners to work through to consolidate what they have learned in the body of the lesson. You could to go over one or two of the classwork activities orally with the whole class before allowing the class 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). Some activities are done in the DBE workbook. • You should allow the learners opportunities to do these activities alone, in pairs and in groups so that they experience working alone as well as with their peers. • Wrap up the lesson each day by giving the learners the answers to the classwork and allow time for corrections to be written if and when necessary. 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 homework 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**	This is the fifth and final activity of the lesson. We have allocated 5 minutes to give you time to tell the learners about the homework each day. Here you find 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. Homework also promotes learner writing and development of their mathematical knowledge. There is a homework pack at the end of the lesson plans set, similar to the classwork pack.
Reflection	Each day there is a reminder to you that you should note your thoughts about the day's lesson. You will use these notes as you plan and prepare for your teaching.

OVERVIEW

Pg	Lesson	Date	Lesson name	DBE	Resources required	Date completed
WEEK 1						
26	**Lesson 1**	1 - 0ct	Revision	-	Base ten blocks, flard cards	
27	**Lesson 2**	2 – Oct	Revision	-	Analogue Clock	
28	**Lesson 3**	3 - 0ct	Revision	-	Counters	
29	**Lesson 4**	4 - 0ct	Revision	-	2-D and 3-D shapes	
WEEK 2						
30	**Lesson 5**	7 - 0ct	Numbers up to 999 – place value	Worksheet 98 (p 70 & 71), 99 (p 72 & 73)	701 – 800 number boards (see printable resources – Term 3), counters, slates/white boards.	
32	**Lesson 6**	8 - 0ct	Numbers up to 999 - place value	Worksheet 103 (p 82 &83), 104 (p 84 & 85)	Slates/white boards, base ten blocks (see printable resources Term 3).	
34	**Lesson 7**	9 - 0ct	Numbers up to 999 - decomposition	Worksheet 100 (p 74 & 75), 101 (p 76 & 77)	Slates/white boards, flard cards, base ten blocks.	
36	**Lesson 8**	10 - 0ct	Numbers up to 999 – Rounding off to tens	Worksheet 111 (p 98 & 99)	Slates/white boards	
38	**Lesson 9**	11 - 0ct	Addition & subtraction – building up & breaking down	-	Base ten blocks (remediation)	
WEEK 3						
40	**Lesson 10**	14 - 0ct	Addition & subtraction – building up & breaking down	Worksheet 108 (p 92 & 93)	Base ten blocks, flard cards (remediation)	
42	**Lesson 11**	15 - 0ct	Addition & subtraction – near doubles	Worksheet 105 (p 86 & 87)	Base ten blocks, flard cards (remediation)	
44	**Lesson 12**	16 - 0ct	Addition and subtraction - money	-	Cut out coins and notes (see printable resources Term 3)	
46	**Lesson 13**	17 - 0ct	Addition and subtraction - money	Worksheet 107 (p 90 & 91)	Cut out coins and notes (see printable resources Term 3)	
48	**Lesson 14**	18 - 0ct	Symmetry	-	Scrap paper cut into squares and rectangles – 1 per learner; shape cut-outs (see printable resources).	

OVERVIEW						
Pg	**Lesson**	**Date**	**Lesson name**	**DBE**	**Resources required**	**Date completed**
WEEK 4						
50	**Lesson 15**	21 - 0ct	Symmetry	Worksheet 97 (p 68 & 69)	One large paper cut out circle, square, rectangle and triangle (for demonstration)	
52	**Lesson 16**	22 - 0ct	Division: Grouping and sharing leading to division	Worksheet 85 (p 43) Worksheet 115 (p 106)	Base ten blocks	
54	**Lesson 17**	23- 0ct	Division	-	Slates/white boards, base ten blocks	
56	**Lesson 18**	24 - 0ct	Division	-	Slates/white boards, unifix blocks (remediation)	
58	**Lesson 19**	25 - 0ct	**Assessment**			
WEEK 5						
64	**Lesson 20**	28 - 0ct	Division	Worksheet 116 (p 108 &109), Worksheet 117 (p 110 – 111)	Slates/white boards	
66	**Lesson 21**	29 - 0ct	Multiplication and division – inverse operations	Worksheet 112 (p 100 & 101) Worksheet 115, pg. 107	Slates/white boards	
68	**Lesson 22**	30 - 0ct	Multiplication and division – inverse operations **Practical assessment today**	Worksheet 118, pgs. 112 & 113	Slates/white boards	
70	**Lesson 23**	31 - 0ct	Division: Consolidation		Slates/white boards	
72	**Lesson 24**	1 - Nov	Division: Consolidation	-	Slates/white board, counters	

OVERVIEW						
Pg	**Lesson**	**Date**	**Lesson name**	**DBE**	**Resources required**	**Date completed**
WEEK 6						
74	**Lesson 25**	4 - Nov	Sharing leading to fractions	-	Fraction squares, fraction circles (see printable resources) – one copy per pair	
76	**Lesson 26**	5 - Nov	Sharing leading to fractions	Worksheet 121 (p 118 & 119) Worksheet 126 (p 128 &)	Counters	
78	**Lesson 27**	6 - Nov	Fraction - Solutions which include unitary fractions.	Worksheet 124 (p 124 & 125), 125 (p 126 & 127)	Fraction strips and circles (see Term 3 printable resources), unifix blocks.	
80	**Lesson 28**	7 - Nov	Putting fractions together	Worksheet 122 (p 120 & 121)	Fraction circles, fraction squares (see printable resources)	
82	**Lesson 29**	8 - Nov	3-D objects	Worksheet 123, (p 122 & 123)	Boxes/box shape and ball/ball shape objects, toothpicks, straws, magazines	
WEEK 7						
84	**Lesson 30**	11 - Nov	3-D objects	-	3-D geometric solids (collect old containers), pictures of the 3-D objects (see Term 3 printable resources), sticky tape	
87	**Lesson 31**	12 - Nov	Perimeter	-	Plastic or paper cut-out shapes (squares, rectangles, triangles) in different sizes – to be prepared before the lesson	
90	**Lesson 32**	13 - Nov	Area	Worksheet 109 (p 94 & 95)	Squares template and shapes (see printable resources) **Keep cut out to use again in lesson 34**	
92	**Lesson 33**	14 - Nov	**Assessment** -			
98	**Lesson 34**	15 - Nov	Perimeter and area	-	Square and rectangular shaped objects from the classroom, slates/white boards, square cut outs from lesson 32	

OVERVIEW						
Pg	**Lesson**	**Date**	**Lesson name**	**DBE**	**Resources required**	**Date completed**
WEEK 8						
100	**Lesson 35**	18 - Nov	2-D shapes	Worksheet 123 (p 122 & 123)	Plastic/paper shapes – circles, squares, rectangles and triangles, 3 square pieces of paper per learner for Homework	
102	**Lesson 36**	19 - Nov	Time: **Practical assessment today**	-	Draw the analogue clocks on the board before he lesson commences	
104	**Lesson 37**	20 - Nov	Time	Worksheet 109 (p 88)	Slates/white boards, analogue and digital clocks	
106	**Lesson 38**	21 - Nov	Mass	Worksheet 102a and b (p 78 & 79)	Pictures of a range of products with a mass of 1 kg, 2 kg, 3 kg, products with masses in grams, bathroom scale	
108	**Lesson 39**	22 - Nov	Capacity	Worksheet 127 (p 130 & 131)	Pictures of products on which you can see the capacity, 250 ml cup, teaspoon, an empty 1litre bottle	
WEEK 9						
110	**Lesson 40**	25 - Nov	Revision: Mass and Capacity	Worksheet 102b (p 80 – 81), 106 (p 89)	Plastic cup (250 ml), empty plastic 2 litre bottle, extra container – per group, bathroom scale.	
112	**Lesson 41**	26 - Nov	Length - Revision	Worksheet 114 (p 104&105)	Measuring tapes, rulers	
114	**Lesson 42**	27 - Nov	Data	-	**S**lates/white boards	
118	**Lesson 43**	28 - Nov	Data	-	**S**lates/white boards	
120	**Lesson 44**	29 - Nov	Number patterns	Worksheet 113 (p 102 &103), 118 (p 112 & 113), 120 (p 116 & 117)	900 – 1 000 number board (see printable resources), counters	
WEEK 10						
	Revision	2 – Dec	Revision			
	Revision	3 – Dec	Revision			
	Revision	4 - Dec	Revision			

RESOURCE LIST TERM 4

This is a list of the mathematical resources that you will need in this term. You need to make sure that you have them for the lessons for which they are recommended. If you do not have them speak to your coach about it so that GPLMS can do an audit of the resources not present in your school.

1. 901-1 000 Number square
2. Fraction circles and rectangles
3. Squares template
4. Symmetry cut-out shapes (Lesson 14)
5. Poster – Addition and Subtraction
6. Poster – Multiplication and Division
7. Poster – Inverse Operations and the Commutative Property
8. Poster – Equal sign and Place Holders
9. Poster – Doubling and Halving
10. Poster – Sharing and grouping

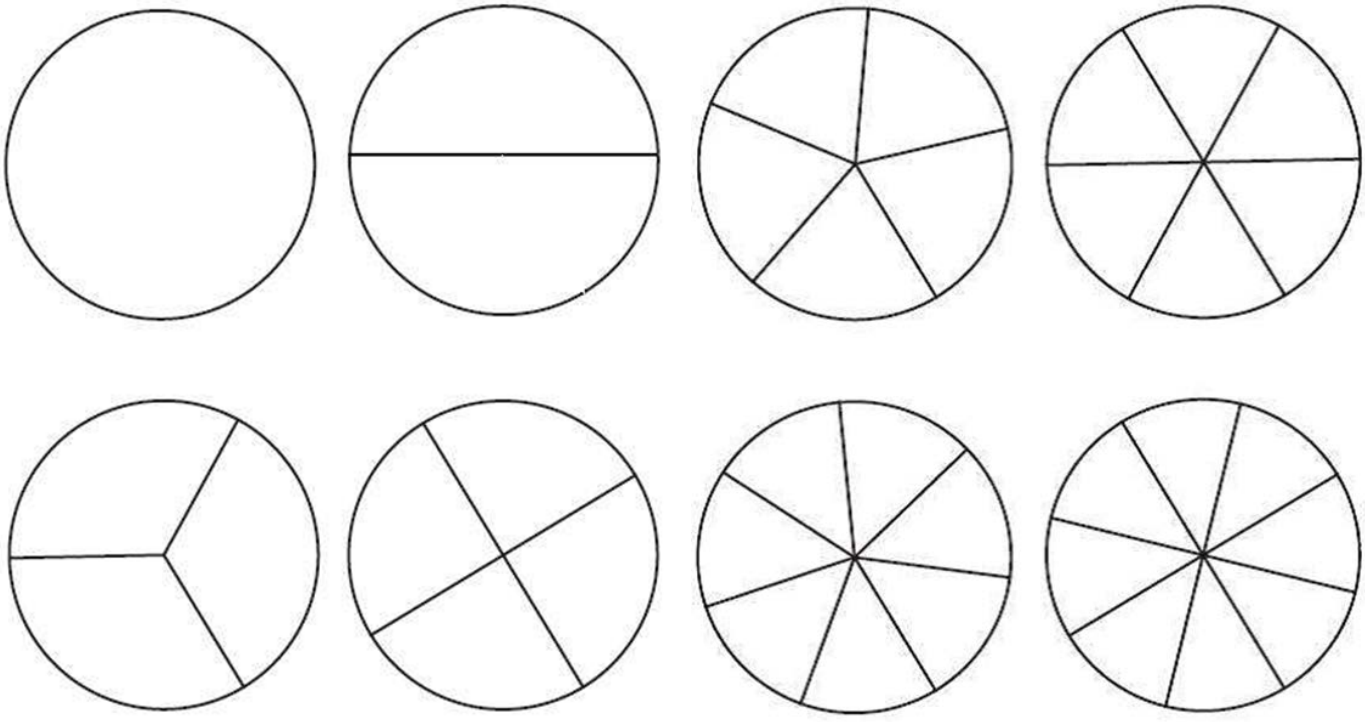
Resources for each day of teaching

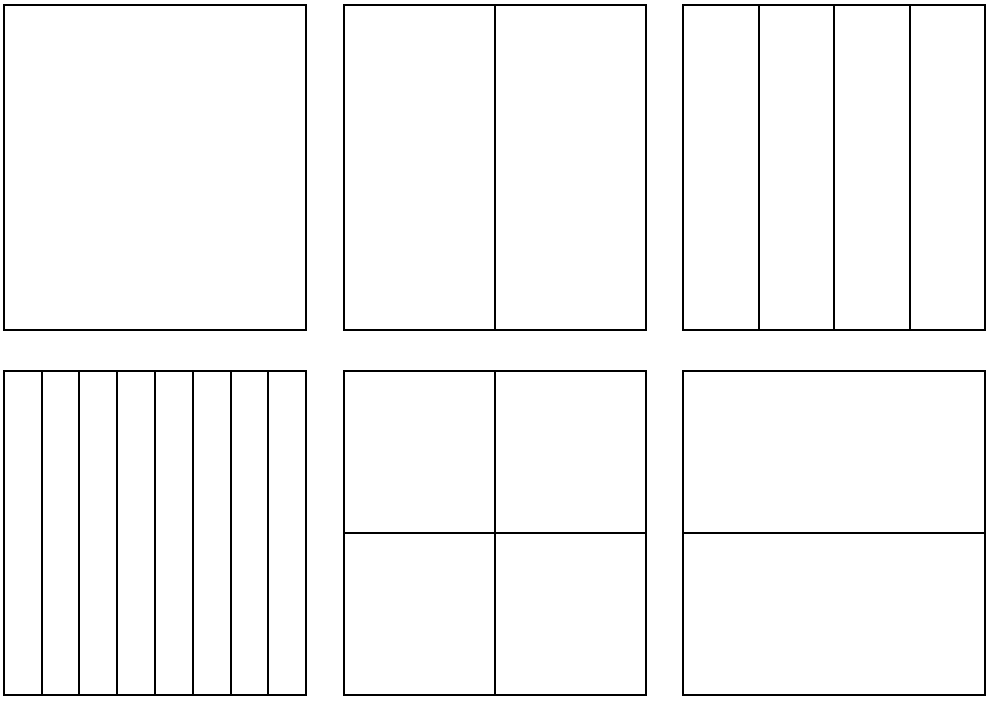
There are also other resources such as informal resources (such as old magazines, pieces of string, scrap paper, etc.) that you may need in certain lessons. You should have a careful look at the list of resources needed for each lesson which is given in the lesson plans each day to see which resources are needed for that day. Prepare yourself so that you have the necessary resources for the lessons on a daily basis.

Number board 901-1 000

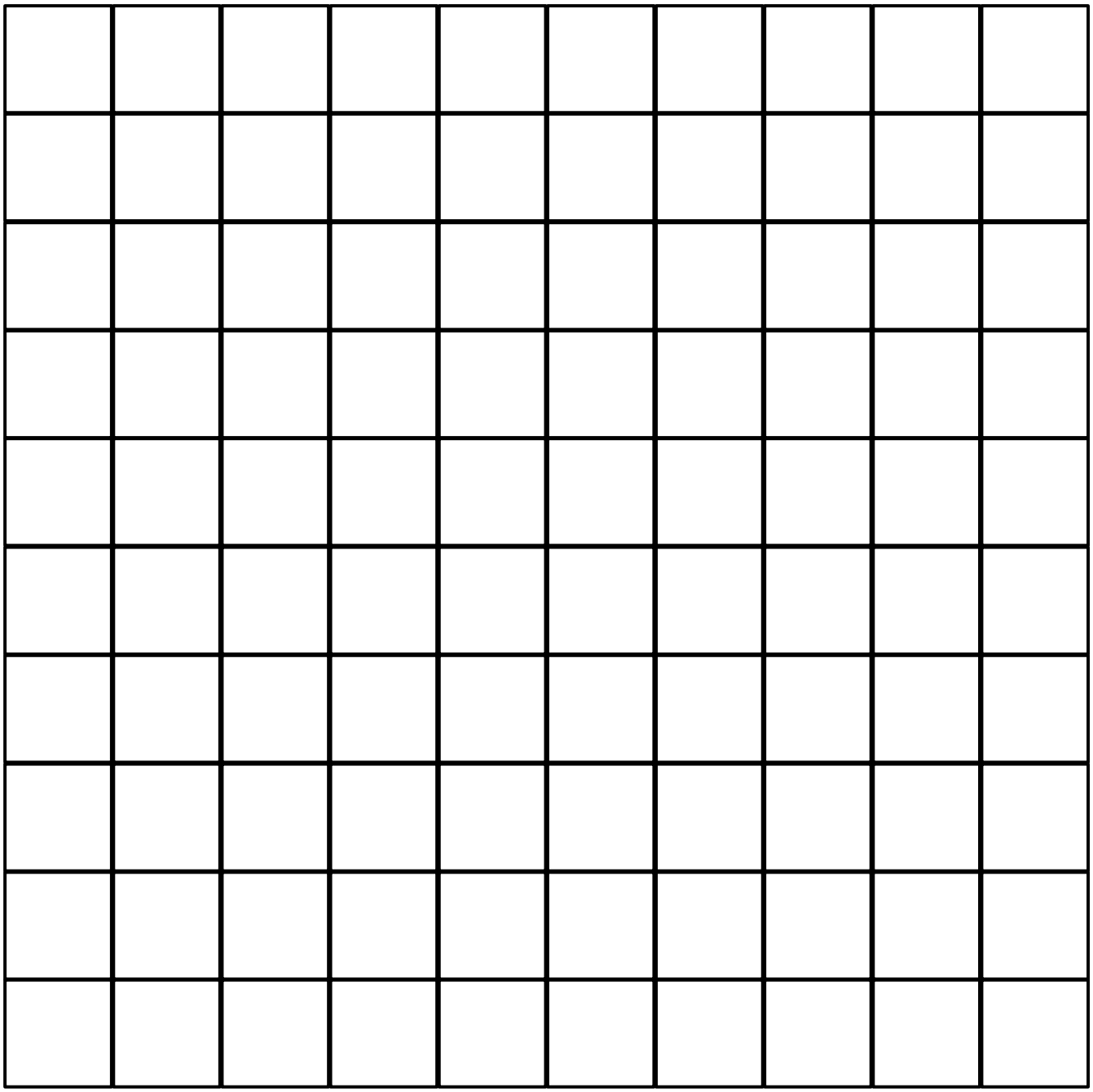
901	902	903	904	905	906	907	908	909	910
911	912	913	914	915	916	917	918	919	920
921	922	923	924	925	926	927	928	929	930
931	932	933	934	935	936	937	938	939	940
941	942	943	944	945	946	947	948	949	950
951	952	953	954	955	956	957	958	959	960
961	962	963	964	965	966	967	968	969	970
971	972	973	974	975	976	977	978	979	980
981	982	983	984	985	986	987	988	989	990
991	992	993	994	995	996	997	998	999	1000

Fraction rectangles and circles

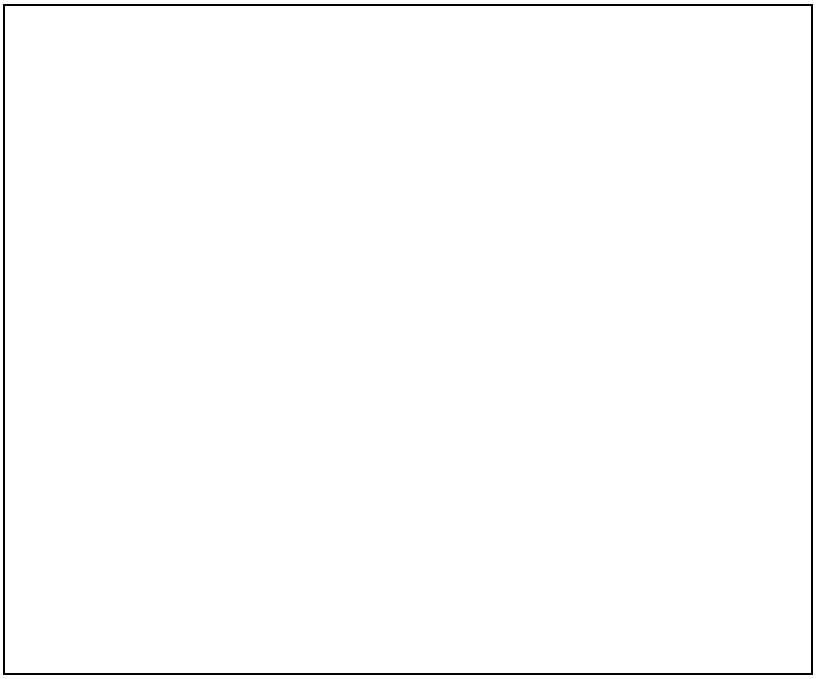




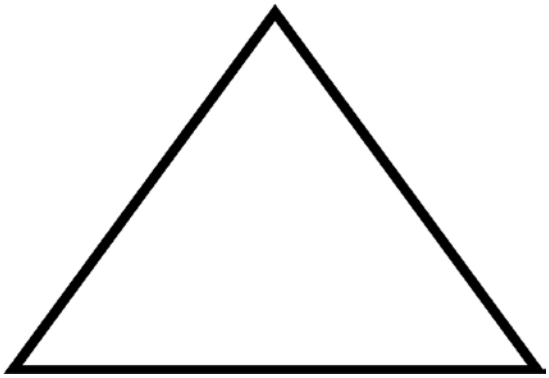
Squares template (Lesson 32 and 34)

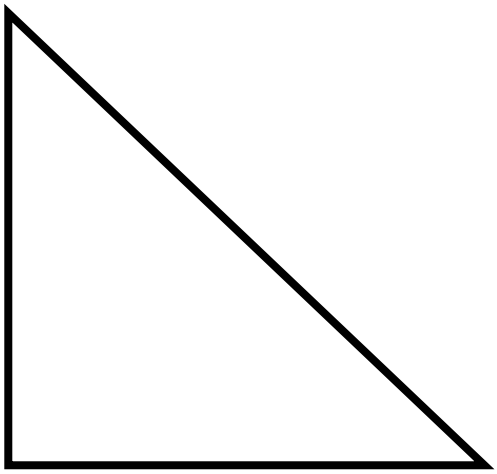


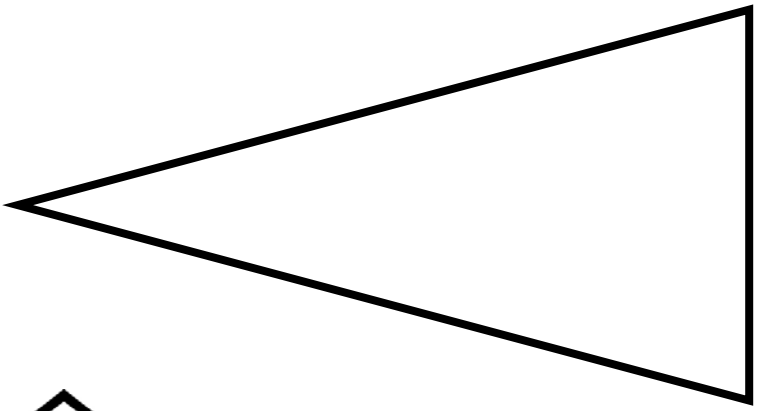
Rectangular shapes (Lesson 32)

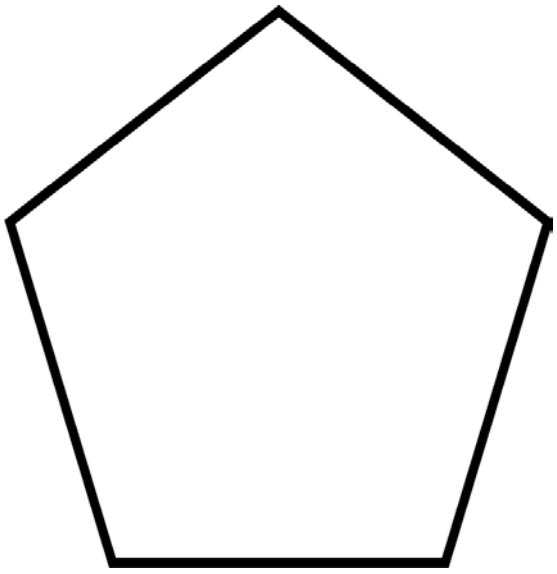


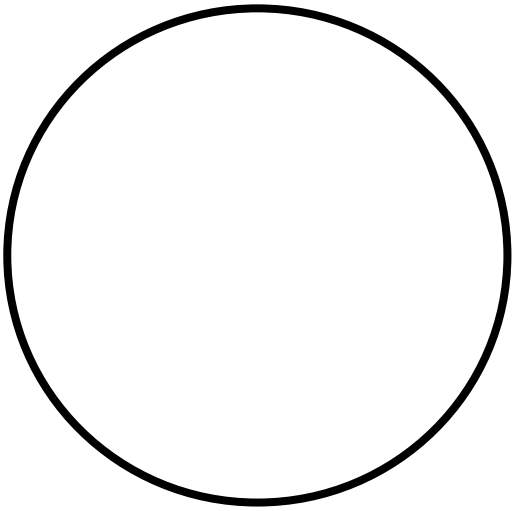
Symmetry cut-out shapes (Lesson 14)











Addition +

Sum Add Increase both

More than Total Additional

Plus Extra Altogether

In addition to And Combine In all

Subtraction -

Minus Deduct Less Difference

Remains Deduct Left over

Fewer How much more Subtract

Take away Change

Multiplication x

Times How many times **Product**

Groups of Product of Three times as much

Doubled Tripled **By** Rate

Of **Twice as much** Multiply

Division ÷

Divide **Evenly** Split up between

Percent How many times

Equally divided **Each** **Grouping**

Share **Goes into** Shared between

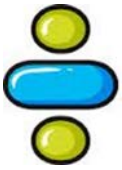
Divided among **Average**

Inverse operations

Opposite Reverse operations

Addition and subtraction are inverse operations.


Multiplication and division are inverse operations.

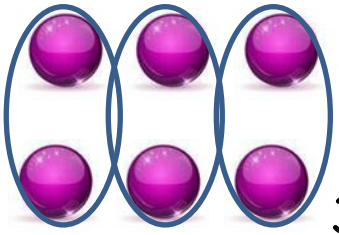
Commutative property

In addition and multiplication, numbers may be added or multiplied together in any order.


3 + 2 = 5


2 + 3 = 5


2 x 3 = 6



3 x 2 = 6

Equal =

Total Equal

Same as **Result**

Are Equivalent to Is

Place holders, _ □♡△

1 + 1 = □

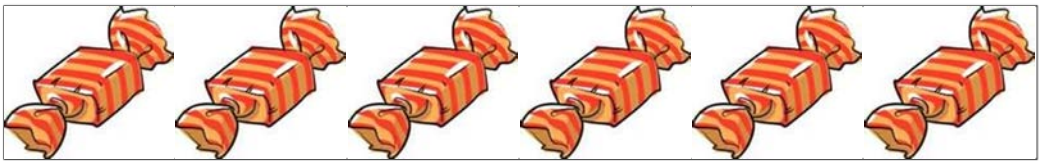
1 + 1 = ♡

_ + 2 = 5

2 + △ = 5

Double/Doubling

Double these sweets



6

6

6

6 + 6 = 12 OR Double 6 is 12

Half/ Halving

Halve these cupcakes

There are two groups of 3 in 6 and so half of 6 is 3

Sharing

Share 6 sweets between 2 boys.

Each boy will get 3 sweets.

Grouping

Put these cakes into groups of two each.

I can make 3 groups which have 2 cupcakes in each group.

ASSESSMENT

1. TERM PLAN

The term plan gives an overview of how the assessment programme fits into the weekly lesson plans

Week	Activities	Assessment	Comment
1 Oct – 4 Oct	Revision Lesson plans week 1	Revision week no formal assessment	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.
7 Oct – 11 Oct	Lesson plans week 2	7 -18 Oct Oral Counting	• 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.
14 Oct – 18 Oct	Lesson plans week 3	7 -18 Oct Oral Counting	
21 Oct – 25 Oct	Lesson plans week 4	21 Oct – 1 Nov Oral Counting 25 October: Written Number, operations and relationships	
28 Oct – 1 Nov	Lesson plans week 5	21 Oct – 1 Nov Oral: Counting 30 October: Practical Inverse Operations **Assessment Task 1 completed this week**	
4 Nov – 8 Nov	Lesson plans week 6	4-15 Nov Oral Counting	
11 Nov – 15 Nov	Lesson plans week 7	4-15 Nov Oral Counting 14 November: Written Number and operations, patterns and measurement	
18 Nov – 22 Nov	Lesson plans week 8	18-28 Nov Oral Counting 19 November: Practical Time	
25 Nov – 29 Nov	Lesson plans week 9	18-28 Nov Oral Counting **Assessment Task 2 completed this week.**	
2 Dec – 4 Dec	Lesson plans week 10 Revision	End of Term – Wednesday 4 December	Use the 3 days to recap key maths ideas that your learners need to consolidate.

2. ASSESSMENT TASK 1

Activity 1 and 2: Oral and practical

- Number, operations and relationships
- Observation
- Assess a group of learners every day.

Activity 1: 7 Oct – 18 Oct

Count between 800 and 1 000 (select within this range for your assessment)

Level	Criterion
1	Cannot count verbally
2	Counts verbally with constant assistance
3	Counts verbally with some assistance
4	Counts verbally but makes 2 errors
5	Counts verbally but makes 1 error
6	Counts verbally independently
7	Independently and consistently counts verbally between **0 and 1 000** and beyond

Activity 2: 21 Oct -1 November

Count forwards and backwards in 2s and 3s between 800 and 1 000. (select within this range)

Level	Criterion
1	Cannot count verbally forwards and backwards in 2s
2	Cannot count verbally forwards and backwards in 3s
3	Needs constant assistance to count verbally forwards and backwards 2s
4	Needs constant assistance to count verbally forwards and backwards 3s
5	Counts verbally forwards and backwards in 2s and 3s between 800 and 1 000 but needs assistance
6	Counts verbally forwards and backwards independently in 2s and 3s between 800 1000
7	Independently and consistently counts verbally forwards and backwards independently in 2s and 3s up to 1000 and beyond

Activity 3: Practical

- Numbers and Operations
- Observation checklist
- **Multiplication and Division – Inverse Operations (Lesson 22 – 30 Oct)**

Observation checklist	✔ or x	
Identify multiplication and division as inverse relationships		**To assign levels, count the number of positive observations** 1 ✔ level 1 2 ✔ level 2 3 ✔ level 3 4 ✔ level 4 5 ✔ level 5 6 ✔ level 6 7 ✔ level 7
Able to write number sentences that show the inverse relationship between multiplication and division. E.g. 4 x 5 = 20 and 20 ÷ 5 = 4		
Able to identify multiplication in a word problem		
Able to identify division in a word problem		
Able to use multiplication to solve a word problem		
Able to use division to solve a word problem		
Solves all four word problems correctly		

Activity 4: Written Assessment 1

- Number, operations and relationships
- The copy of the learners' assessment (and memo) is given in Lesson 19.
- **Lesson 19 – 25 Oct**

Question 1: 4 marks
Question 2: 1 mark
Question 3: 2 marks
Question 4: 2 marks
Question 5: 2 marks
Question 6: 3 mark
Question 7: 2 mark
Question 8: 1 marks
Question 9: 2 marks
Question 10: 4 marks
Question 11: 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

3. ASSESSMENT TASK 2

Activity 1 and 2: Oral and practical

- Number, operations and relationships
- Observation
- Assess a group of learners every day.

Activity 1: 4 Nov -15 Nov

Count forwards and backwards in 4s and 5s between 800 and 1 000. (select within range)

Level	Criterion
1	Cannot count verbally forwards and backwards in 5s
2	Cannot count verbally forwards and backwards in 4s
3	Needs constant assistance to count verbally forwards and backwards 5s
4	Needs constant assistance to count verbally forwards and backwards 4s
5	Counts verbally forwards and backwards in 5s and 4s between 800 and 1 000 but needs assistance
6	Counts verbally forwards and backwards independently in 5s and 4s between 800 1000
7	Independently and consistently counts verbally forwards and backwards independently in 5s and 4s up to 1000 and beyond

Activity 2: 18 Nov -28 Nov

Count forwards in 20s and 25s between 800 and 1 000. (select within range)

Level	Criterion
1	Cannot count verbally forwards and backwards in 20s
2	Cannot count verbally forwards and backwards in 25s
3	Needs constant assistance to count verbally forwards and backwards 20s
4	Needs constant assistance to count verbally forwards and backwards 25s
5	Counts verbally forwards and backwards in 20s and 25s between 800 and 1 000 but needs assistance
6	Counts verbally forwards and backwards independently in 20s and 25s between 800 1000
7	Independently and consistently counts verbally forwards and backwards independently in 20s and 25s up to 1000 and beyond

Activity 3: Practical

- Measurement
- Observation checklist
- **Time (Lesson 36 – 19 Nov)**

Observation checklist	✔ or x	
Able to identify an analogue clock		**To assign levels, count the number of positive observations** 1 ✔ level 1 2 ✔ level 2 3 ✔ level 3 4 ✔ level 4 5 ✔ level 5 6 ✔ level 6 7 ✔ level 7
Able to identify a digital clock		
Able to draw the long and short hands on an analogue clock to show a given time		
Able to write the time in a digital clock/format		
Able to read the time from an analogue clock		
Able to read the time from a digital clock		
Able to calculate time passed (in hours/half hours)		

Activity 4: Written Assessment 2

- Patterns, Number, operations and relationships, Fractions, Space and Shape, Measurement
- The copy of the learners' assessment (and memo) is given in Lesson 33.
- **Lesson 33 – 14 Nov**

Question 1: 2 marks
Question 2: 2 mark
Question 3: 3 mark
Question 4: 4 mark
Question 5: 2 mark
Question 6: 2 marks
Question 7: 4 marks
Question 8: 3 marks
Question 9: 2 marks
Question 10: 1 mark

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

Term 4: Grade 3 Suggested Mark Record Sheet

Learner Name	Surname	Assessment Task 1				Task Level	Assessment task 2				Task Level
		Activities									
		1	2	3	4		1	2	3	4	
		Oral (7 – 18 Oct)	Oral (21 Oct – 1 Nov)	Practical (Lesson 22 30 Oct)	Written (Lesson 19 25 Oct)		Oral (4 Nov – 15 Nov)	Oral (18 – 28 Nov)	Practical (Lesson 36: 19 Nov)	Written (Lesson 33 14 Nov)	

Date:

Lesson 1: Revision: 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 700 objects reliably, saying the names in sequence.
- Recognise, identify and read number symbols to 1 000 and names 0 to 500.
- Compare and order whole numbers up to 700.
- Decompose three-digit numbers into multiples of hundreds, tens and units/ones up to 700.

Lesson vocabulary: Number symbols 1 to 1 000, number names one to five hundred, greatest, smallest, smaller, bigger

Prior knowledge

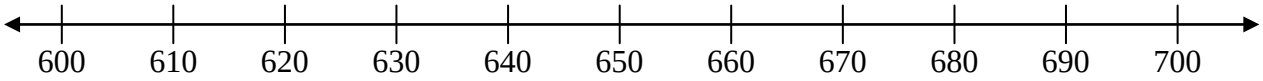
- In Grade 3Term 3 learners should have learnt to work with numbers up to 1 000 as above.

Mental maths – 10 minutes

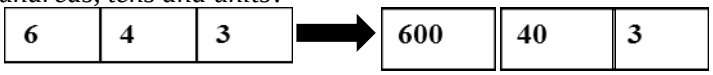
Go over the number bonds up to 30 with your learners.

Warm up activity – 20 minutes

Draw a 600 to 700 number line on the board. Ask your learners where to place these numbers on the number line: 611, 625, 646, 699, 685, etc.



Lesson content – concept development – 30 minutes

Activity: Resources - Base ten blocks, flard cards	**Observation**	**Comments**
• Give learners base ten blocks to count. How many blocks do you count?  Note if they count 100, 200, 300, 400, 410, 420, 430, 440, 441, 442, 443, ,444, 445, 446	Can learners: • Count objects to 700 in groups	*Make notes in your observation book*
Give learners some flard cards. Ask them to show you 643. *How would you break the six hundred and forty three into hundreds, tens and units?*  *We can say 643 is the same as 600 and 40 and3.* Do the same with 527, 632, 563, 469 and 594.	• Decompose three-digit numbers up to 700	
Write 651 on the board. Ask the learners to give you a number smaller than and then greater than the number. • Do the same with 548, 452,654 and 679.	• Order and compare whole numbers up to 700	

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

Classwork activity (Group/independent work) – 30 minutes

Do the following activity in your maths book.

1. Give two numbers smaller than 681 but bigger than 650. (Any two numbers between 651 and 680)
2. Break 658 into hundreds, tens and units. (600 + 50 + 8)
3. Write these numbers from the smallest to the biggest: 640, 522, 531, 632, 541 (522, 531, 541, 632, 640)
4. Complete:600 + 90 + 8 = ☐ (698)

Date:

Lesson 2: Revision: Addition and Subtraction and Time

Teacher's notes

CAPS Topics:1.7 and 1.13 Addition and subtraction, 4.1 Time, 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 800.
- Add and subtract up to 800.
- Tell 12-hour time in hours, half hours, quarter hours and minutes.

Lesson vocabulary: Addition, subtraction, problem solving, add to, subtract, time, half hour, quarter hour, minutes

Prior knowledge

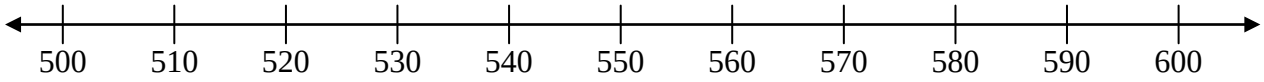
- In Grade 3Term 3 learners should have learnt to add up to 800 and subtract from 800.

Mental maths – 10 minutes

Practise number bonds up to 30.

Warm up activity – 20 minutes

Draw a 500 to 600 number line on the board. Ask your learners where to place these numbers on the number line: 509, 555, 534, 580, 675, etc.



Lesson content – concept development – 30 minutes

Activity: Resource – Analogue Clock	**Observation**	**Comments**
Give learners word problems to answer orally. Ask them to make a drawing to help them solve the problem. 1. There are four hundred and nineteen children in the hall. Another fifty-eight arrive. *How many children are in the hall?*(477) 2. Three hundred and thirty-seven children leave to play cricket. *How many children are in the hall now?* (140) 3. We are 564 children on the train. One hundred and thirty-nine get off at the first stop. *How many children are left in the train?* (425)	Can learners: • Solve addition and subtraction problems up to 800	*Make notes in your observation book*
Revise telling 12- hour time in hours, half hours, quarter hours and minutes. • Show/draw clocks and let them write the times on their slates. • Show the time on an analogue clock. Ask: *What is the time?* They say/show: It is quarter past two.	• Tell 12-hour time	

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

Classwork activity (Group/independent work) – 30 minutes

Calculate the following:

1. 354 + 302 = ☐ (656)
2. 665 – 223 = ☐ (442)
3. 570 + ☐ = 698 (128)
4. ☐ - 35 = 484 (519)

Draw clocks and show the following times:

5. quarter to 2
6. half past 8,
7. quarter past 11.

Date:

Lesson 3: Revision: 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 numbers problems in context and explain own solutions to problems that involve equal sharing and grouping up to 75 with answers that may include remainders.

Lesson vocabulary: Group, grouping, left over, sharing, remainders, number problems.

Prior knowledge

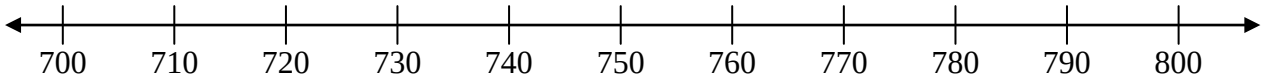
- In Grade 3 Term 3 learners should have learnt to work with grouping and sharing up to 75.

Mental maths – 10 minutes

Practise number bonds up to 30.

Warm up activity – 20 minutes

Draw a 700 to 800 number line on the board. Ask your learners where to place these numbers on the number line: 719, 725, 744, 780, 789, etc.



Lesson content – concept development – 30 minutes

Activity: Resources - Counters	**Observation**	**Comments**
Give learners 70 counters and ask them to make groups as follows. Ask • *How many groups of **10** counters can you make?*(7) • *How many groups of **5** counters can you make?*(14) • *How many groups of **6** counters will you have*? (11 and 4 left over) • *How many groups of **3** counters they can make?* (23 and 1 left over)	Can learners: • Group with whole numbers up to 75	*Make notes in your observation book*
Give each pair of learners 73 counters. Tell them to share the counters between them in their pairs. Ask learners: • *How many counters do you each have*? (36 and there is one left) • *Why didn't one of you take the one that was left over?* (Answer: That would not be sharing equally/ Sharing equally means we all have to have the same amount) Note that some learners might answer each will get 36 and a half counters each. Although it is difficult to share a counter this answer should not be rejected.	Can learners: • Share with whole numbers up to 75	

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

Classwork activity (Group/independent work) – 30 minutes

Make drawings to help you to find the answers.

1. 75 marbles shared between two children. What do you get*?* (37 each and 1 marble left over.)
2. Put seventy one balloons in three packets. What do you get*?* (23 in each packet and 2 balloons left over.)

Date:

Lesson 4: Revision – Measurement and Data handling

Teacher's notes

CAPS Topics: 1.2 Counting forwards and backwards, 4.2 Length, 4.5 Perimeter, 5.5 Represent data, 1.16 Mental mathematics

Concepts and skills for today

- Estimate, measure, compare, order and compare length using non-standard and standard measures.
- Investigate the distance around 2-D shapes and 3-D objects using direct comparison or informal units.
- Represent data in tables.

Lesson vocabulary: Numbers 0-1 000, hand spans, balancing scale, data, tally table, perimeter

Prior knowledge

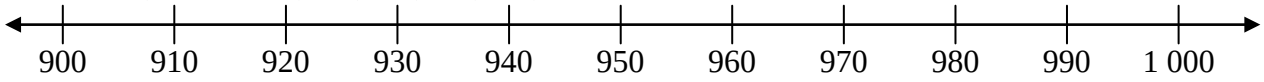
- In Grade 3 Term 3 learners should have learnt about measurement and representing data in tables.

Mental maths – 10 minutes

Practise number bonds up to 30.

Warm up activity – 20 minutes

Draw a 900 to 1 000 number line on the board. Ask your learners where to place these numbers on the number line, such as 905, 938, 997, 922, 988, …



Lesson content – concept development – 30 minutes

Activity: Resources – 2-D and 3-D shapes	**Observation**	**Comments**
Revise comparing and ordering using standard units. See Term 3, Lessons 39 & 40. • Revise investigating the distance around 2-D shapes and 3-D objects using direct comparison or informal units. See Term 3, lesson 45.	Can learners: • Compare and order length? • Measure the perimeter?	*Make notes in your observation book*
Ask learners to represent the data provided in the Classwork activity below. (*You may wish to collect data from your own class for this activity, in which case the answers will be different.*) After learners have represented the data ask questions where learners interpret the data by asking the following questions • *What is the most popular colour?* (blue) • *What is the least popular colour?* (green) • *How many children are there in the class?* (35) • *Tell me anything else that is interesting about the graph*. (various answers e.g. more than half the class likes red and blue / one fifth of the class likes orange/ nobody likes black/purple/…)	Represent data on a bar graph and answer questions about the data on the graph	

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

Classwork activity (Group/independent work) – 30 minutes

Complete a tally table in your classwork book.

I collected this data. These are the favourite colours in our class.

b is for blue r is for red
g is for green o is for orange

Draw a bar graph to show the data. (red=8, blue= 10, yellow= 6, orange= 7, green=4)

Date:

Lesson Topic: Numbers up to 999 – Place Value

Teacher's notes

CAPS Topics:1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 1.3 Number symbols and number names 1.4 Describe, order and compare numbers 1.5 Place value 1.6 Problem solving techniques

Lesson vocabulary: Number names, biggest, smallest, place value, hundreds, tens, units

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Identify, recognise, read and write number symbols 0 to 200.
- Identify, recognise, read and write number names 0 to 100.
- Describe, compare and order numbers to 80.
- Recognise place value of numbers 11 to 80.
- Use apparatus like counters, number lines and techniques like breaking down of numbers when solving problems.

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 10s from any number between 0 and 800, e.g. 710, 720, 730 …

Mental maths activity - 10 minutes

	Answer the following:	**Answer**		Answer the following:	**Answer**
1.	What is 1 more than 736?	737	6.	What is 3 less than 702?	699
2.	What is 1 less than 702?	701	7.	What is 4 more than 636?	640
3.	What is 2 more than 636?	638	8.	What is 4 less than 782?	778
4.	What is 2 less than 502?	500	9.	What is 10 more than 696?	706
5.	What is 3 more than 736?	739	10.	What is 10 less than 799?	789

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: 701 – 800 number boards (see printable resources – Term 3), counters, slates/white boards.

Concepts

- Identify, recognise, read and write number symbols 0 to 1 000.
- Identify, recognise, read and write number names 0 to 1 000.
- Describe, compare and order numbers to 999.
- Recognise place value of numbers to 999.
- Use apparatus like counters and techniques like breaking down of numbers when solving problems.

Activity 1: Work in groups of four.

- Give each group a 701 – 800 number board and each learner a counter and slate/white board.
- Call out the following numbers: 777, 776, 773, 778

- Each learner gets a chance to put their counter on one of the numbers that are called out.
- As soon as all the numbers have counters, ask the learners to write the number names for all the numbers on their slates/white boards. (seven hundred and seventy-seven, seven hundred and seventy-six, seven hundred and seventy-three, seven hundred and seventy-eight)

Activity 2: Give each group base ten blocks.

- Ask the learners to write the numbers from activity 1, from the smallest to the greatest number, on their slates/white boards. (773, 776, 777, 778)
- Ask them to build each number using their base ten blocks, starting from the biggest to the smallest number. (778)
- After they have built each number, ask the following questions:
- *How many hundreds are there in this number (778)?* (7)
- *How many tens are there in this number (778)?* (7)
- *How many units are there in this number (778)?* (8)
- Ask similar questions for each other number (777, 776, 773). While the learners answer observe if they are able to speak about place value in 3-digit numbers.

Remediation: Ask the learners to place a counter on the 789 on the number board. Ask the learners to show you a number that is bigger than 789 and one that is smaller than 789. Ask them to show you 789 using the base ten blocks.

Enrichment: See Enrichment Activity Cards

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

Do the following questions in your DBE Workbook.

1. Complete DBE Worksheet 98, pgs. 70 and 71.

5. Homework activity – 5 minutes

Do the following questions in your DBE Workbook.

1. Complete DBE Worksheet 99, pgs. 72 and 73.

Reflection on lesson:

Date:

Lesson Topic: Numbers up to 999 – Place Value

Teacher's notes

CAPS Topics:1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 1.3 Number symbols and number names 1.4 Describe, order and compare numbers 1.5 Place value 1.6 Problem solving techniques

Lesson vocabulary: Hundreds, tens, units, number lines, intervals

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Identify, recognise, read and write number symbols 0 to 200.
- Identify, recognise, read and write number names 0 to 100.
- Describe, compare and order numbers to 80.
- Recognise place value of numbers 11 to 80.
- Use apparatus like counters, number lines and techniques like breaking down of numbers when solving problems.

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 1s from any number between 0 and 800, e.g. 703, 702, 701

Mental maths activity - 10 minutes

	Give the number between:	**Answer**		Give the number between:	**Answer**
1.	753 and 755	754	6.	730 and 732	731
2.	120 and 122	121	7.	456 and 458	457
3.	445 and 447	446	8.	114 and 116	115
4.	154 and 156	155	9.	102 and 104	103
5.	170 and 172	171	10.	510 and 512	511

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Slates/white boards, base ten blocks (see printable resources Term 3).

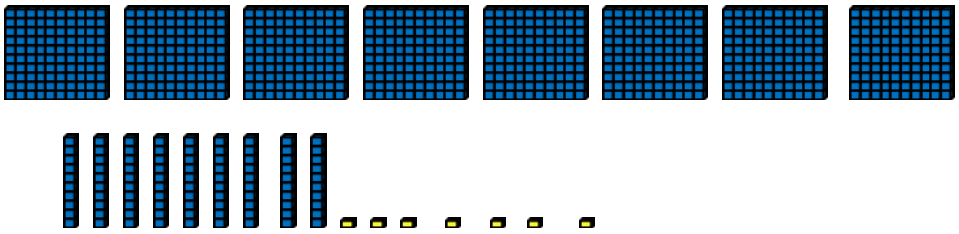
Concepts

- Identify, recognise, read and write number symbols 0 to 1 000.
- Identify, recognise, read and write number names 0 to 1 000.
- Describe, compare and order numbers to 999.
- Recognise place value of numbers to 999.
- Use apparatus like number lines and techniques like breaking down of numbers when solving problems.

Activity 1: Work in groups of four.

- Give each learner a slate/white board and each group base ten blocks.
- Write the following on the board: 8 hundreds + 9 tens + 7 units
- Ask them to build it using their base ten blocks.

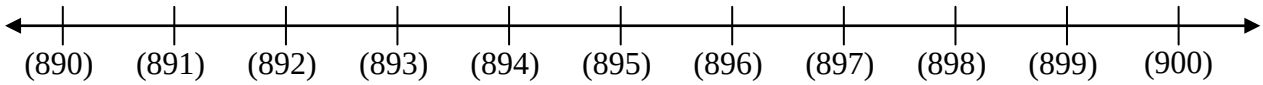
Date:



- Tell them to write the number on their slates/white boards. (897)
- Repeat with: 9 hundreds + 8 units + 5 tens (958) and 7 units + 9 hundreds + 3 tens (937)

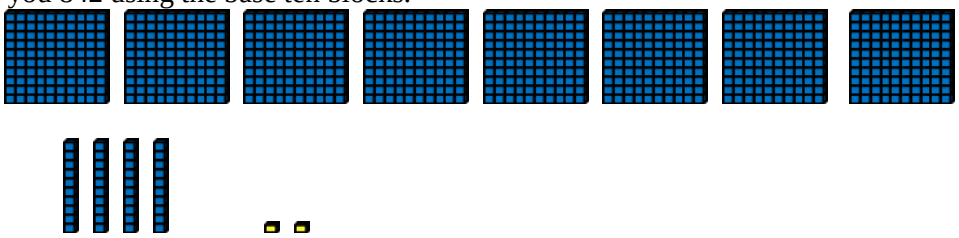
Activity 2: Draw a number line on the board with ten intervals from 890 to 900.

- Ask the learners to copy it onto their slates/white boards and fill in the following numbers on the number line:



- Discuss the following with your learners, with reference to the number line as you answer each question:
- *What is the biggest number represented on this number line?* (900)
- *What is the smallest number represented on this number line?* (890)
- *What is the number that is three more than 891?* (894)
- *What is the number that is 5 less than 900?* (895)
- *What is the number after 895?* (896)
- *What is the number before 900?* (899)
- *What is the number before 894?* (893)
- *What is the number between 891 and 893?* (892)
- *What two numbers have we not yet mentioned that are also labelled on the number line?* (897, 898)

Remediation: Ask the learners to place a counter on the 842 on the number board. Ask the learners to show you the number that is 1 more than 842 (843) and one that is 3 less than 842 (839). Ask them to show you 842 using the base ten blocks.



Enrichment: See Enrichment Activity Cards

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

Do the following questions in your DBE Workbook.

1. Complete DBE Worksheet 103, pgs. 82&83.

5. Homework activity – 5 minutes

Do the following questions in your DBE Workbook.

1. Complete DBE Worksheet 104, pgs. 84 and 85.

Reflection on lesson:

Date:

Lesson Topic: Numbers up to 999 – Decomposition

Teacher's notes

CAPS Topics:1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 1.3 Number symbols and number names 1.4 Describe, order and compare numbers 1.5 Place value 1.6 Problem solving techniques

Lesson vocabulary: Describe, order, compare, decompose, multiples

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Identify, recognise, read and write number symbols 0 to 200.
- Identify, recognise, read and write number names 0 to 100.
- Describe, compare and order numbers to 80.
- Recognise place value of numbers 11 to 80.
- Use techniques like counters, number lines and breaking down of numbers when solving problems.

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 10s from any number between 0 and 800, e.g. 710, 720, 730 …

Mental maths activity - 10 minutes

	Answer the following:	**Answer**		Answer the following:	**Answer**
1.	What is 10 more than 521?	531	6.	What is 10 less than 521?	511
2.	What is 20 more than 521?	541	7.	What is 20 less than 521?	501
3.	What is 30 more than 521?	551	8.	What is 30 less than 521?	491
4.	What is 40 more than 521?	561	9.	What is 40 less than 521?	481
5.	What is 50 more than 521?	571	10.	What is 50 less than 521?	471

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Slates/white boards, flard cards, base ten blocks.

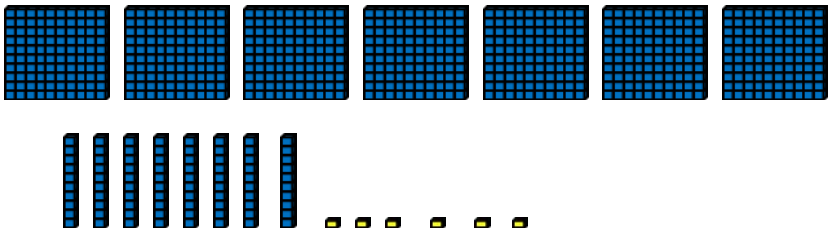
Concepts

- Identify, recognise, read and write number symbols 0 to 1 000.
- Identify, recognise, read and write number names 0 to 1 000.
- Decompose three-digit numbers up to 999 into multiples of hundreds, tens and ones/units.
- Identify and state the value of each digit.
- Use techniques like breaking down of numbers when solving problems.

Activity 1: Work in groups of four.

- Give each group base ten blocks, flard cards and slates/white boards.
- Write the number name seven hundred and eighty-six on the board.
- Ask the learners to write the number on their slates. (786)
- The group then shows the number using their base ten blocks and flard cards.

Date:

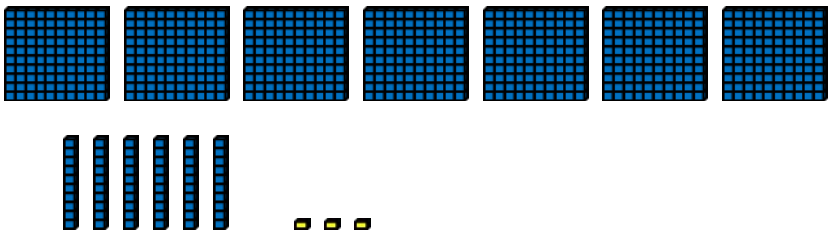


- Repeat using these numbers: 812, 799, 856

Activity 2: Learners work individually for this activity.

- Write the following numbers on the board: 823, 789, 968
- Tell the learners that we are going to break down the numbers into hundreds, tens and units. Do this example: 823 = 800 + 20 + 3 or we can write it as: 823 = 8 hundreds + 2 tens + 3 units.
- Allow the learners to do the other two numbers on their own using both methods. (789 = 700 + 80 + 9 and 789 = 7 hundreds + 8 tens + 9 units, 968 = 900 + 60 + 8 and 968 = 9 hundreds + 6 tens + 8 units)

Remediation: Give the learners base ten blocks to count up to 90 in tens: 10, 20, 30, 40, 50, 60, 70, 80, 90.Count up to 800 using base ten blocks.100, 200, 300, 400, 500, 600, 700, 800. Learners use base ten blocks to show you 763.



Enrichment: See Enrichment Activity Cards

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

Do the following questions in your DBE Workbook.

1. Complete DBE Worksheet 100, pgs. 74 and 75.

5. Homework activity – 5 minutes

Do the following questions in your DBE Workbook.

1. Complete DBE Worksheet 101, pgs. 76 and 77.

Reflection on lesson:

Date:

Lesson Topic: Numbers up to 999 – Rounding off to tens

Teacher's notes

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

Lesson vocabulary: Rounding off, problem solving, techniques, nearest ten

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Use apparatus and appropriate techniques when solving problems and explain solutions to problems: Drawings or concrete apparatus and using techniques like building up and breaking down of numbers, doubling and halving, number lines

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 1s from any number between 0 and 800, e.g. 699, 700, 701

Mental maths activity - 10 minutes

	Calculate	**Answer**		Calculate	**Answer**
1.	What is 2 more than 700?	702	6.	What is 5 less than 700?	695
2.	What is 2 less than 700?	698	7.	What is 10 more than 700?	710
3.	What is 4 more than 700?	704	8.	What is 10 less than 700?	690
4.	What is 4 less than 700?	696	9.	What is 20 more than 700?	720
5.	What is 5 more than 700?	705	10.	What is 20 less than 700?	680

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Slates/white boards

Concepts

- Use techniques when solving problems and explain solutions to problems: Rounding off in tens and number lines.

Activity 1: Revise the rule for rounding off numbers

- When we round off numbers ending on a 1, 2, 3 or 4 we round down to the previous ten. So 81, 82, 83 and 84 will become 80.
- When we round off numbers ending on a 5, 6, 7, 8 and 9 we round up so 85, 86, 87, 88 and 89 will become 90.

Write the following numbers on the board.

80	81	82	83	84	85	86	87	88	89	90

- Ask the learners which numbers will round down to 80 when we round off.

81	82	83	84

- Ask the learners which number will round up to 90 when we round off.

85	86	87	88	89

Activity 2: Ask the learners to draw a 90 to 100 number line on their slates.

- Ask them to circle the numbers that will round down to 90 when we round off. (91, 92, 93, 94)
- Ask the learners to cross out the numbers that will round up to hundred when we round off. (95, 96, 97, 98, 99)

Activity 3: Write this problem on the board. Solve it together with the class.

- Mandla has R20,00. The pack of cards he collects costs R4,95. *How many packs of cards can he buy?* (4 packs)
- We can round off R4, 95 to the nearest ten, which is R5,00. We know that 4 x 5 = 20 so this means that Mandla has enough money to buy 4 packs (4 x R5 = R20).

Activity 4: Write this problem on the board. Pair work activity on whiteboards

- Ask learners to work this problem out in pairs.
- Mandla has R20,00. The pack of cards he collects costs R3,95. *How many packs of cards can he buy?* (5 packs)

Remediation: Ask the learners to draw a 80 to 90 number line on their slates. Point to 82. When we round it off it will become 80. *Why?* (Because it ends on a 2.) Draw an arrow to show this.Point to 86. When we round it off it will become 90. *Why?* (Because it ends on a 6.) Draw an arrow to show this. Round off 83, 84, 85, 88 and 89 using the number line.

Enrichment: See Enrichment Activity Cards

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

Do the following questions in your DBE Workbook.

1. Complete DBE Worksheet 111, pgs. 98 and 99.

5. Homework activity – 5 minutes

Do the following questions in your homework book.

Draw number lines to help you round off the following numbers to the nearest ten:

1. 84 ____ (80)
2. 96 ____ (100)
3. 23 ____ (20)
4. 55 ____ (60)

Put the smallest number first:

5. 145, 457, 45 (45, 145, 457)
6. 133, 132, 130 (130, 132, 133)

Put the biggest number first:

7. 130, 310, 301 (310, 301, 130)
8. 445, 554, 454 (554, 454, 445)

Reflection on lesson:

Date:

Lesson Topic: Addition and subtraction up to 999 – Building up and Breaking down Numbers

Teacher's notes

CAPS Topics:1.2 Count forwards and backwards 1.16 Mental Mathematics1.6 Problem solving techniques 1.13 Addition and subtraction

Lesson vocabulary: Addition, breaking down, building up, calculate

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Use techniques when solving problems and explain solutions to problems: building up and breaking down of numbers.
- Add to 99, subtract from 99.
- Use appropriate symbols: +, -, =, ☐

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 1s from any number between 0 and 800, e.g. 389, 388, 387

Mental maths activity - 10 minutes

		Answer			Answer
1.	What is 10 more than 750?	760	6.	What is 20 more than 750?	770
2.	What is 11 more than 750?	761	7.	What is 100 more than 750?	850
3.	What is 10 less than 750?	740	8.	What is 110 more than 750?	860
4.	What is 11 less than 750?	739	9.	What is 120 more than 750?	870
5.	What is 12 more than 750?	762	10.	What is 130 more than 750?	880

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Base ten blocks (remediation)

Concepts

- Use techniques when solving problems and explain solutions to problems: building up and breaking down of numbers.
- Add to 999, subtract from 999.
- Use appropriate symbols: +, -, =, ☐

Activity 1: Addition (**Adding three-digit and two-digit numbers)**

Do the following example on the board. While you do the working explain to the leaners how you add the hundred to the hundreds, the tens to the tens and the units to the units.

- 524 + 82 = ☐
  = (500 + 20 + 4) + (80 + 2)
  = 500 + (20 + 80) + (4 + 2)
  = (500 + 100) + 6
  = 600 + 6
  = 606

Date:

- Another example – learners do it on their slates using the same method: 626 + 32= ☐ (658)

Activity 2: Addition - (Adding three-digit and three-digit numbers)
Do the following example on the board. While you do the working explain to the leaners how you add the hundred to the hundreds, the tens to the tens and the units to the units.

- 323 + 436 = ☐
  = (300 + 20 + 3) + (400 + 30 + 6)
  = (300 + 400) + (20 + 30) + (3 + 6)
  = 700 + 50 + 9
  = 759
- Another example – learners do it on their slates using the same method: 626 + 142= ☐ (768)

Activity 3: Subtraction - (Three-digit numbers subtract three-digit numbers)
Do the following example on the board. Remind the learners to take the hundreds away from the hundreds, the tens away from the tens and the units away from the units.

- 889 – 137 = ☐
  = (800 + 80 + 9) – (100 + 30 + 7)
  = (800 – 100) + (80 – 30) + (9 – 7)
  = 700 + 50 + 2
  = 752
- Another example – learners do it on their slates using the same method: 786 – 142 = ☐ (644)

Remediation: Give the learners base ten blocks to do the same examples that were done during the class activity. The base ten blocks will help them to follow the breaking down of the numbers in a concrete way.
Enrichment: See Enrichment Activity Cards

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

Do the following questions in your maths book. Write and number sentence and then calculate the answer by breaking down the numbers.

1. Add 437 and 82 (Answer: 437 + 82 = ☐
   = (400 + 30 + 7) + (80 + 2)
   = 400 + (30 + 80) + (7 + 2)
   = (400 + 110) + 9
   = 510 + 9
   = 519)

2. Add 106 and 628 (Answer: 106 + 628 = ☐
   = (100 + 0 + 6) + (600 + 20 + 8)
   = (100 + 600) + (0 + 20) + (6 + 8)
   = (100 + 600) + (0 + 20) + 14
   = 700 + 20 + 10 + 4
   = 7 + 30 + 4
   = 734)

3. 467 take away 132 (Answer: 467 – 132 = ☐
   = (400 + 60 + 7) – (100 + 30 +2)
   = (400 – 100) + (60 – 30) + (7 – 2)
   = 300 + 30 + 5
   = 335)

Homework activity – 5 minutes

No homework

Reflection on lesson:

Date:

Lesson Topic: Addition and subtraction –building up and breaking down of numbers

Teacher's notes

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

Lesson vocabulary: Add, subtract, plus, take away, building up, breaking down

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Solve word problems in context and explain own solutions to problems involving addition and subtraction with answers up to 99.
- Add to 99, subtract from 99.
- Use appropriate symbols: +, -, =, ☐

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 10s from any given multiple between 0 and 800, e.g. 611, 621, 631 …

Mental maths activity - 10 minutes

	Which number is the biggest?	**Answer**		Which number is the smallest?	**Answer**
1.	145, 154, 150	154	6.	154, 120, 145	120
2.	120, 122, 102	122	7.	130, 152, 153	130
3.	800, 700, 600	800	8.	48, 47, 46	46
4.	321, 312, 333	333	9.	98, 87, 89	87
5.	102, 103, 101	103	10.	100, 102, 105	100

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Base ten blocks, flard cards (remediation)

Concepts

- Use techniques when solving problems and explain solutions to problems: building up and breaking down of numbers.
- Add to 999, subtract from 999.
- Use appropriate symbols: +, -, =, ☐

Activity 1: Adding three-digit and two-digit numbers- keeping the first number intact

Do the following examples on the board. While you do the working explain that you are counting on 80 from 524 done by counting in 10s and then adding the units

- 524 + 82 = ☐
  = 524 + (80 + 2)
  = 524 + 80 + 2
  = 604 + 2

= 606

- Another example: Ask learners to do the following sum on their whiteboards 743 + 91 = ☐

Activity 2: Adding three-digit and three-digit numbers - keeping the first number intact
Do the following example on the board. Explain that this time you count on the hundreds, then the tens and then the units.

- 323 + 436 = ☐
  = 323 + (400 + 30 + 6)
  = (323 + 400) + 30 + 6
  = (723) + 30 + 6
  = 753 + 6
  = 759

- Another example: Ask learners to do the following sum on their whiteboards. 493 + 402 = ☐

Activity 3: Subtracting by breaking down the second number.
Do the following example on the board. In this example you first take away the hundreds, then the tens and then the units.

- 889 – 137 = ☐
  = 889 – (100 + 30 + 7)
  = (889 – 100) – (30 + 7)
  = 789 – 30 – (7)
  = 759 – 7
  = 752

- Another example: Ask learners to do the following sum on their whiteboards 789 – 246 = ☐

Remediation: Use base ten blocks and flard cards to explain the same examples as were done in the class activity.

Enrichment: See Enrichment Activity Cards

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

Do the following questions in your maths book.

1. 524 + 90 = ☐ (614)
2. 475 + 312 = ☐ (787)
3. 679 – 247 = ☐ (432)

5. Homework activity – 5 minutes

Do the following questions in your DBE Workbook.

1. DBE Worksheet 108, pgs. 92 and 93.

Reflection on lesson:

Date:

Lesson Topic: Addition and subtraction – near doubles

Teacher's notes

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

Lesson vocabulary: Double, near doubles, forwards, backwards

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Solve word problems in context and explain own solutions to problems involving addition and subtraction with answers up to 99.
- Add to 99, subtract from 99.
- Use appropriate symbols: +, -, =, ☐

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 100s from any given multiple between 0 and 800, e.g. 400, 500, 600 …

Mental maths activity - 10 minutes

	Give the number between:	**Answer**		Give the number between:	**Answer**
1.	145 and 147	146	6.	130 and 132	131
2.	350 and 352	351	7.	102 and 104	103
3.	123 and 125	124	8.	98 and 100	99
4.	788 and 790	789	9.	555 and 557	556
5.	654 and 656	655	10.	111 and 113	112

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Base ten blocks, flard cards (remediation)

Concepts

- Using doubles and near doubles to solve problems involving addition and subtraction with answers up to 999.
- Use appropriate symbols: +, -, =, ☐

Activity 1: Addition using doubles.

Do the following examples on the board.

- 432 + 432=
  = (400 + 30 +2) +(400 + 30 +2)
  =Double 400 + double 30 + double 2
  =(400 +400) + (30+30) + (2+2)
  = (800) + (60) + (4)
  =800+60+4
  =864

Another example:

Ask learners to do the following example on their whiteboards.

314 +314 = ☐

Date:

Activity 2: Addition using near doubles (add one)
Revise the following examples on the board

- 4 + 5 → 4 + 4 + 1 → double 4 + 1
  25 + 26 → 25 + 25 + 1 → double 25 + 1
  112 + 113 → 112 + 112 + 1 → double 112 + 1

Another example:
Ask learners to do the following example on their whiteboards.
65 +66 = ☐

Activity 3: Addition using near doubles (minus one)
Do the following example on the board.

244 + 245 =
We can say double 245 -1 (5 is easier than 4 to double)
= (200 + 40 + 5) + (200 + 40 + 5) - 1
= 400 + 80 + 10 - 1
= 400 + (80 + 10) - 1
= 400 + 90 - 1
= 489

Another example:
Ask learners to do the following example on their whiteboards.
90 + 89 = ☐

Remediation: Use base ten blocks to work through and explain the same examples that were done during the class activity. Make up other similar questions to practise the method more with the learners that need more practice with the method.

Enrichment: See Enrichment Activity Cards

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

Do the following questions in your maths book.

1. Complete the following:
   a. Double 123 = _____ (Answer (123 + 123 = 246))
   b. Double 246 = _____ (Answer (246 + 246 = 492))
   c. Double 204 = _____ (Answer (204 + 204 = 408))

2. Use near doubles to add the following.
   a. 25 + 26 = _____ (Answer (25 + 25) + 1 = 50 + 1 = 51)
   b. 200 + 201 = _____ (Answer (200 + 200) +1 =401)
   c. 130 + 129 = _____ (Answer (130 + 130) - 1 = 259)

5. Homework activity – 5 minutes

Do the following questions in your DBE Workbook.

1. Complete DBE Worksheet 105, pgs. 86 and 87.

Reflection on lesson:

Date:

Lesson Topic: Addition and subtraction - money

Teacher's notes

CAPS Topics:1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 1.7, 1.13 Addition and subtraction 1.11 Money

Lesson vocabulary: Money, rands, cents, combinations, change, add, subtract, backwards, forwards

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Solve word problems in context and explain own solutions to problems involving addition and subtraction with answers up to 99.
- Solve money problems involving totals and change in cents up to 90c and rands to R99.
- Use appropriate symbols: +, -, =, ☐

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards in 100s from any given number between 0 and 800, e.g. 558, 658, 758 …

Mental maths activity - 10 minutes

	What is the smallest number?	**Answer**		What is the smallest number	**Answer**
1.	120, 125, 110	110	6.	105, 213, 578	105
2.	130, 135, 145	130	7.	487, 458, 132	132
3.	248, 489, 698	248	8.	252, 245, 265	245
4.	122, 578, 10	10	9.	102, 104, 101	101
5.	689, 102, 487	102	10.	301, 105, 605	105

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Cut out coins and notes (see printable resources Term 3)

Concepts

- Solve word problems in context and explain own solutions to problems involving addition and subtraction with answers up to 999.
- Solve money problems involving totals and change in cents and rands.
- Use appropriate symbols: +, -, =, ☐

Activity 1: Work in groups of four. Give the learners cut-out money - rands and cents.

- Ask the groups to use their coins using rands and cents to make two combinations that total less than R5.
  e.g. R2,70 and R1,40. This will give you R4,10.
  There will be several different combinations.
- Do the same for R10 / R20 / R50

Activity 2: Give the groups the following word problem to solve.

- Damon bought 4 books for R60 each. How much change will he get if he pays with R300?
- Ask the learners: *What is the question?* How much change will he get?

- *What are the numbers?*4 books at R60 each
- *How much is that?* R240
- *What is the key word?* Change
- *What is the basic operation?* Subtract
- *Write a number sentence*. (R300- R240 = ☐)

Remediation: Sipho bought two books for R70 each. He paid with two R100 notes. How much change did he get? *What is the question*? *How much change did he get*? *What are the numbers*? 2 books for R70 each and 2 times R100.What is the key word? Change. *What is the basic operation*? Subtract. Write a number sentence. (R200-R140 = ☐)
Enrichment: See Enrichment Activity Cards

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

Do the following questions in your maths book.

1. Draw two different ways in which you can get 80c. (Several different possibilities e.g. 20c + 20c + 20c + 20c / 50c +10c+10c+5c+5c)

2. Draw two different ways in which you can get R55. (Several different possibilities e.g. (50 + R5/ R20+ R20+ R10 + R2 + R2 + R1)

3. Solve the following problem:
   Pedro's granny gave him R5. Which 3 sweets can he buy?
   The sweets cost:
   Choc chuckle R2,70; Gums R1, 80; Sour worms R1,40; Peach treats R1,60;
   Magic mints R2,20; Toffees R1, 20
   (Answer: several different possibilities which total R5 or less
   e.g. 2 x sour worms + toffees = R1,80 + R1,80 + R1,20 = R4,80)

5. Homework activity – 5 minutes

Do the following questions in your homework book.

1. Peter bought 5 books for R80 each. How much change will he get from R500? (R100)
2. Romy bought 4 ice creams at R1,75 each. How much change will she get from R10? (R3)

Reflection on lesson:

Date:

Lesson Topic: Addition and subtraction - Money

Teacher's notes

CAPS Topics:1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 1.7, 1.13 Addition and subtraction 1.11 Money

Lesson vocabulary: Rands, cents, convert, add, subtract

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Solve word problems in context and explain own solutions to problems involving addition and subtraction with answers up to 99.
- Solve money problems involving totals and change in cents up to 90c and rands to R99.
- Add to 99, subtract from 99.
- Use appropriate symbols: +, -, =, ☐

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 5s from any given multiple between 0 and 800, e.g. 705, 710, 715 …

Mental maths activity - 10 minutes

	What is the biggest number?	**Answer**		What is the biggest number?	**Answer**
1.	120, 125, 110	125	6.	105, 213, 578	578
2.	130, 135, 145	145	7.	487, 458, 132	487
3.	248, 489, 698	698	8.	252, 245, 265	265
4.	122, 578, 10	578	9.	102, 104, 101	104
5.	689, 102, 487	689	10.	301, 105, 605	605

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Cut out coins and notes (see printable resources Term 3)

Concepts

- Solve word problems in context and explain own solutions to problems involving addition and subtraction with answers up to 999.
- Solve money problems involving totals and change in cents and rands.
- Convert between rands and cents.
- Use appropriate symbols: +, -, =, ☐

Activity 1: Draw/show the learners the following:

- Ask the learners to write the total in cents (985c)
- Ask the learners to write the total rands and cents using numbers (R9, 85)

Activity 2: Draw/show the learners the following:

- Ask the learners to write it in cents (1425c)
- Ask them to write the rands and cent using numbers (R14,25)

Activity 3: Ask learners to solve the following problem.

- Travis has a 50c piece and four 20c pieces. Toffees cost R1,20. *How much change will he get if he pays with all his money?* (10c)
- Packets with 5 mints in each cost 44c each. Mr King wants 85 mints. *How many packets should he buy?* What will he need to pay? (85÷ 5 = 17 17 x 44 = R7, 48)

Remediation: Caryn has a 50c piece and five 20c pieces. She buys a lollipop for R1,30. How much money will she have left?

- *What is the question*? How much money will she have left?
- *What are the numbers?* 50c, 20c, 20c, 20c, 20c, 20c and R1,30.
- *What is the key word?* Left.
- *What operation will I use?* Subtract.
- *Write a number sentence.*50c + 20c + 20c + 20c + 20c + 20c = R1,50. R1,50 – R1,30 = R0,20.
- Draw a picture to check your answer.

Enrichment: See Enrichment Activity cards

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

Do the following questions in your maths book.

1. Write the following numbers from biggest to smallest
a. 120, 125, 110 (125, 120, 110)
b. 130, 135, 145 (145, 135, 130)
c. 248, 489, 698 (698, 489, 248)

2. Do the following questions in your DBE Workbook.
DBE Worksheet 107, pg. 90.

5. Homework activity – 5 minutes

Do the following questions in your DBE Workbook.

1. DBE Worksheet 107, pg. 91.

Reflection on lesson:

Date:

Lesson Topic: Symmetry

Teacher's notes

CAPS Topics:1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 3.4 Symmetry
Lesson vocabulary: Symmetry, 2-D, geometrical, non-geometrical, vertical line, horizontal line

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Recognise and draw line of symmetry in 2-D geometrical and non-geometrical shapes.

Assessment

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

1. Mental maths

Counting – 5 min

- Count backwards in 100s from any given multiple between 0 and 1000, e.g. 916, 816, 716 …

Mental maths activity - 10 minutes

	What is the smallest number?	**Answer**		What is the biggest number?	**Answer**
1.	784, 874, 478	478	6.	478, 784, 874	874
2.	511, 115, 151	115	7.	511, 115, 151	511
3.	123, 312, 213	123	8.	123, 312, 213	312
4.	702, 207, 720	207	9.	207, 702, 720	720
5.	987, 978, 789	789	10.	987, 789, 978	987

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Scrap paper cut into squares and rectangles – 1 per learner; shape cut-outs (see printable resources).

Concepts

- Recognise and draw line of symmetry in 2-D geometrical and non-geometrical shapes.
- Written exercises should include examples where: the line of symmetry is not always a vertical line and there are more than one line of symmetry in the shape or object.

Activity 1: Work in groups of four.

1. Give each group a paper square cut out of scrap paper.
   - Ask the learners to fold the paper square to show the line of symmetry, using a vertical line.
   - Unfold and trace over the fold with a red pencil.
   - Use the same square, but use a horizontal line to show the line of symmetry. Trace the fold with a blue pencil.
   - Ask the learners if there is another line of symmetry that you can fold. (diagonal)
   - Draw the line using a green pencil.
   - Ask the learners if there is another line of symmetry that you can fold. (diagonal)
   - Draw the line using a purple pencil.
   - Ask the learners if there is another line of symmetry that you can fold. (No)
   - How many lines of symmetry altogether? (four)

2. Repeat the steps above with a rectangle cut out of scrap paper. (two lines of symmetry)

Date:

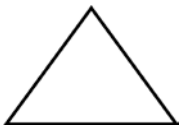
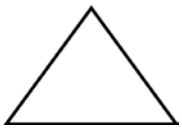
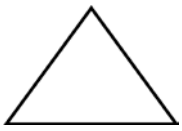
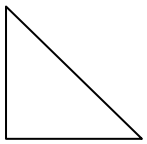
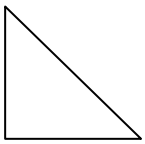
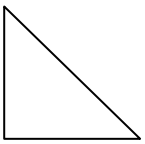
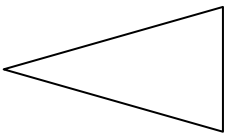
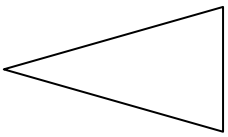
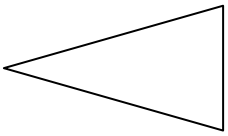
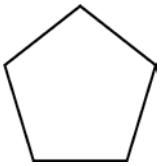
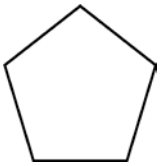
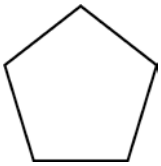
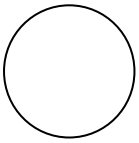
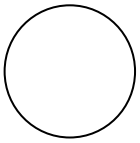
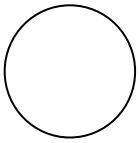
Remediation: Let learners work with paper folding and a mirror to test for symmetry. The mirror is placed exactly on the fold line. If the reflection in the mirror is **exactly the same** as the image that is covered, then that is a line of symmetry.

Enrichment: See Enrichment Activity cards

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

Give learners copies of shapes from the printable resources (one set per pair) to cut out.

1. For each shape
    a. Predict and draw the number of number of lines of symmetry and write your answer down in the 'We predict' column.
    b. Cut out the shape and fold to find all the lines of symmetry. Draw and write down your answers in the "We found" column.
    c. When you have completed the worksheet discuss with another pair what you predicted and what you found.

Shape	Lines of symmetry	
	We predict	**We found**
		
		
		
		
		

5. Homework activity – 5 minutes

No homework

Reflection on lesson:

Date:

Lesson Topic: Symmetry

Teacher's notes

CAPS Topics:1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics3.4 Symmetry

Lesson vocabulary: Line of symmetry, horizontal, vertical, geometric shapes, non-geometric shapes

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Recognise and draw line of symmetry in2-D geometrical and non-geometrical shapes.

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 10s from any given multiple between 0 and 800, e.g. 601, 611, 621 …

Mental maths activity - 10 minutes

	Answer the following:	**Answer**		Answer the following	**Answer**
1.	What is 1 more than 799?	800	6.	What is 3 less than 785?	782
2.	What is 1 less than 642?	641	7.	What is 4 more than 487?	491
3.	What is 2 more than 658?	660	8.	What is 4 less than 800?	796
4.	What is 2 less than 789?	787	9.	What is 10 more than 755?	765
5.	What is 3 more than 456?	459	10.	What is 10 less than 723?	713

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: One large paper cut out circle, square, rectangle and triangle (for demonstration)

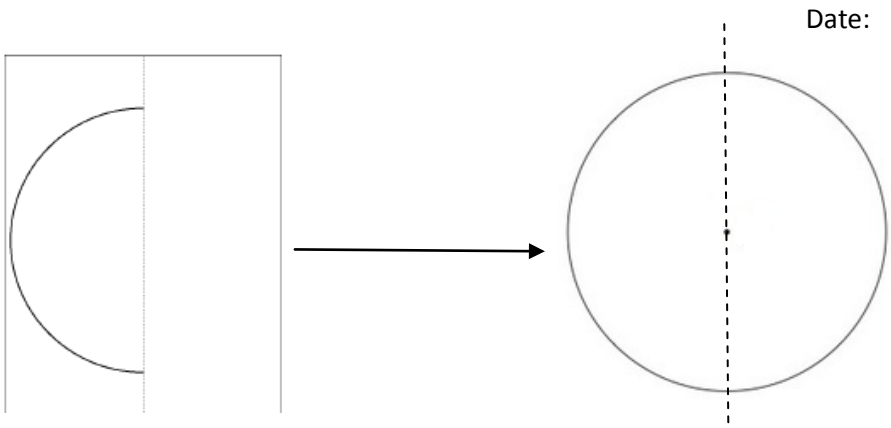
Concepts

- Recognise and draw line of symmetry in 2-D geometrical and non-geometrical shapes.
- Written exercises should include examples where: the line of symmetry is not always a vertical line and there are more than one line of symmetry in the shape or object.

Activity 1: You need a large cut out circle for this activity.

- Show learners a large circle and explain that you are going to fold it to find the line of symmetry.
- Fold the circle perfectly in half, so that the fold will be in the place of a line of symmetry for the circle.
- Ask the learners to predict what it will look like when you open the shape up (i.e. *How would you do a drawing of the shape with its line of symmetry?*)
- Unfold the circle and examine the fold line that represents a line of symmetry.
- Once you have worked with the concrete shape, do the drawings.
- On the drawings mark the lines of symmetry.

Date:



On the board draw a picture of the folded shape, the unfolded shape and the line of symmetry in its place.

Activity 2: Repeat the activity using other shapes.

- Ask them to predict what it will look like when you open the shape up (i.e. *How would you do a drawing of the shape with its line of symmetry?)*
- Each time, show the original shape first, then show it folded, then unfold it again and examine the fold line that represents a line of symmetry.
- Once you have worked with the concrete shape, do the drawings.
- On the drawings mark the lines of symmetry.
- Do all of these step with the following shapes (interact with the learners while you do this, allowing them to predict the fold lines/lines of symmetry. Allow some learners to come and do the drawings on the board if time allows):
  - Square (4 lines of symmetry)
  - Rectangle (2 lines of symmetry)
  - Triangle (various lines of symmetry, depending on the triangle)
  - Circle (MANY lines of symmetry – an infinite number)

Remediation:
Draw half shapes on block paper. Let learners use a mirror to determine the reflection and draw the whole shape on the block paper. Let learners draw symmetrical shapes of their own and investigate the symmetry of the shapes using mirrors.

Enrichment: See Enrichment Activity Cards

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

Do the following questions in your DBE Workbook.

1. Play the game: DBE Worksheet 97, pg. 68.

5. Homework activity – 5 minutes

Do the following questions in your DBE Workbook.

1. Complete DBE Worksheet 97, pg. 69.

Reflection on lesson:

Date:

Lesson Topic: Division

Teacher's notes

CAPS Topics:1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 1.15 Division

Lesson vocabulary: Divide, expanded notation

Prior knowledge

In Grade 2 the learners should have learnt how to:

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

Assessment

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

1. Mental maths

Counting – 5 min

- Count in 10s from any given multiple between 0 and 900, e.g. 704, 714, 724 …
- Count 5/8/10 steps in 5s from 60. Where are you now? (85, 100, 139)

Mental maths activity - 10 minutes

	What is 100 more than...?	**Answer**		What is 100 more than...?	**Answer**
1.	814	914	6.	876	976
2.	206	306	7.	867	967
3.	54	154	8.	786	886
4.	154	254	9.	768	868
5.	754	854	10.	687	787

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Base ten blocks

Concepts

- Divide numbers to 99 by 1, 2, 3, 4, 5, 10
- Use appropriate symbols ÷, +, =, ☐

Activity 1: Revise breaking down numbers with the learners:

- 13 = 10 + 3
  24 = 20 + 4
  35 = 30 + 5
  46 = 40 + 6
  57 = 50 + 7
  68 = 60 + 8
  72 = 70 + 2
  84 = 80 + 4
  93 = 90 + 3
  14 = 10 + 4

Activity 2: Do the following examples on the board:

- 24 ÷ 2
  = (20 + 4) ÷ 2
  = (20 ÷ 2) + (4 ÷ 2)

  Share 24 between 2 – use base ten blocks to demonstrate the sharing

= 10 + 2
= 12

- 36 ÷ 3 Share 36 amongst 3 – use base ten blocks

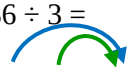
= (30 + 6) ÷ 3
= (30 ÷ 3) + (6 ÷ 3)
= 10 + 2
= 12

Activity 3: Ask learners to do the following examples on their whiteboards. Use the method used above.

- Share 48 amongst 4
- Share 28 between 2

Remediation: Give the learners use base ten blocks. Find 36 and share it amongst 3 children. Show them the calculation: Use the blocks to show how the sharing works. Make up other similar questions to give learners enough opportunities to understand the method.

36 ÷ 3 =



(30 + 6) ÷ 3
= (30 ÷ 3) + (6 ÷ 3)
= 10 + 2
= 12

Enrichment: See Enrichment Activity Cards

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

Do the following questions in your maths book.

1. Write in expanded notation.
   a. 19 = ___ + ___ (10 + 9)
   b. 41 = ___ + ___ (40 + 1)
   c. 24 = ___ + ___ (20 + 4)
   d. 58 = ___ + ___ (50 + 8)
   e. 63 = ___ + ___ (60 + 3)
   f. 82 = ___ + ___ (80 + 2)
   g. 76 = ___ + ___ (70 + 6)
   h. 94 = ___ + ___ (90 + 4)

2. Complete DBE Worksheet 85, pg 43.

5. Homework activity – 5 minutes

Do the following questions in your homework book.

1. Divide the following numbers by using the method that was used in class. Remember to write the numbers in expanded notation first.
   a. 48 ÷ 4 = ____ (12)
   b. 55 ÷ 5 = ____ (11)

2. Complete DBE Worksheet 115, pg 106.

Reflection on lesson:

Date:

Lesson Topic: Division

Teacher's notes

CAPS Topics:1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 1.15 Division

Lesson vocabulary: Divide, share, distributive property

Prior knowledge

In Grade 2 the learners should have learnt how to:

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

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 10s between 100 and 900, e.g. 710, 720, 730 …
- Count 5/8/10 steps in 5s from 100. Where are you now? (125, 140, 150)

Mental maths activity - 10 minutes

	What is 100 less than...?	**Answer**		What is 100 less than...?	**Answer**
1.	376	276	6.	802	702
2.	768	668	7.	971	871
3.	321	221	8.	453	353
4.	453	353	9.	199	99
5.	567	467	10.	567	467

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

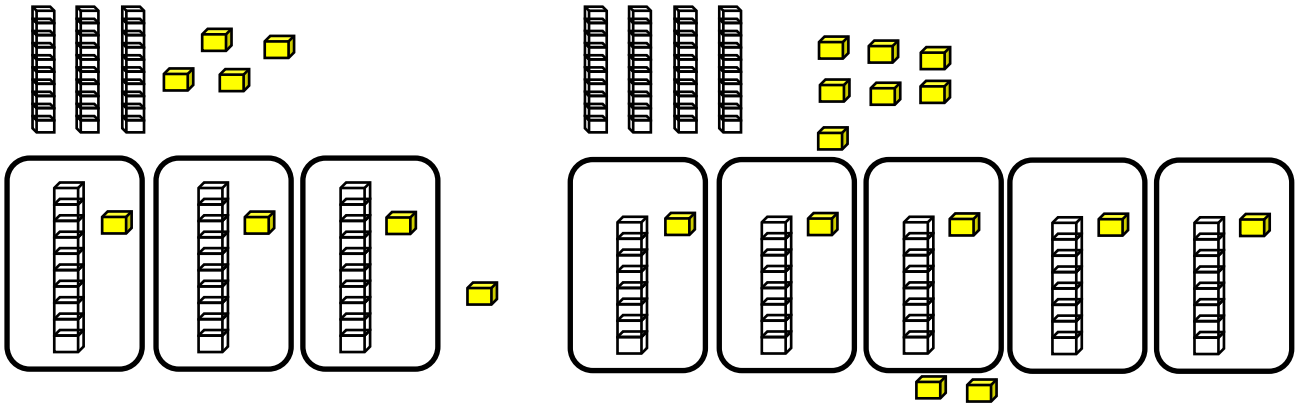
Resources: Slates/white boards, base ten blocks

Concepts

- Solve word problems in context and explain own solutions to problems that involve equal sharing and grouping up to 100 with answers that can include remainders.
- Divide numbers to 99 by 2, 3, 4, 5, 10
- Use appropriate symbols ÷, =, +, □

Activity 1: Revise the distributive property with the learners.

- Do the following examples using base 10 blocks:
- 34 ÷ 3 = □ 47 ÷ 5 = □
- Share the tens and then the units.



- Ask how many units are left. That will be a remainder (rem).
- In the first example the remainder is 1. So 34 ÷ 3 = 11 rem 1
- In the second example the remainder is 2. So 47 ÷ 5 = 9 rem 2

Activity 2: Ask learners that we can also show the same calculations on the board as follows:

(30 + 4) ÷ 3
= (30 ÷ 3) + (4 ÷ 3)
= 10 + 1 rem 1
= 11 rem 1

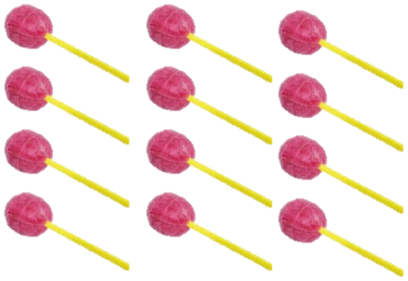
(40 + 7) ÷ 5
= (40 ÷ 5) + (7 ÷ 5)
= 8 + 1 rem 2
= 9 rem 2

Remediation: Draw the following on the slates/whiteboards. Ask the learners to share 15 counters amongst 4 friends. (3 each, rem 3)
Now ask the learners to share 34 marbles amongst 3 children. How many marbles will be left? Do the sum with them. (30 + 4) ÷ 3 (11 rem 1). Make up other similar examples to do until they understand.
Enrichment: See Enrichment Activity Cards

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

Do the following questions in your maths book.

1. Share 14 sweets amongst:
    a. How many sweets each?
    b. How many left over?

3 children.	5 children	6 children
 (4 each and 2 sweets left over)	(2 each and 4 sweets left over)	(2 each and 2 sweets left over)

2. Calculate the following. Remember to use these:
    a. Share 30 marbles amongst 4 children. How many marbles are left? (7 rem 2))
    b. Share 19 marbles between 2 children. How many marbles are left? (9 rem 1)

5. Homework activity – 5 minutes

Do the following questions in your homework book.

1. Calculate the following. Remember to use these:
    a. Share 47 marbles amongst 5 children. How many marbles are left? (9 rem 2)
    b. Share 29 marbles amongst 4 children. How many marbles are left? (7 rem 1)

Reflection on lesson:

Date:

Lesson Topic: Grouping and sharing leading to division

Teacher's notes

CAPS Topics:1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 1.9 Grouping and sharing leading to division

Lesson vocabulary: Grouping, sharing, division, number sentence, problem, solve

Prior knowledge

In Grade 2 the learners should have learnt how to:

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

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 100s from any given number between 0 and 900, e.g. 713, 613, 513.....
- 25, 125, 225..... …
- Count 10/15/20 steps in 5s from 100. Where are you now? (150, 175, 200)

Mental maths activity - 10 minutes

	What is 200 more than...?	**Answer**		What is 200 more than...?	**Answer**
1.	376	576	6.	265	465
2.	768	968	7.	763	963
3.	321	521	8.	28	228
4.	453	653	9.	706	906
5.	567	767	10.	219	419

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Slates/white boards, unifix blocks (remediation)

Concepts

- Solve word problems in context and explain own solutions to problems that involve equal sharing and grouping up to 100 with answers that can include remainders.

Activity 1: Do the following problems with the learners

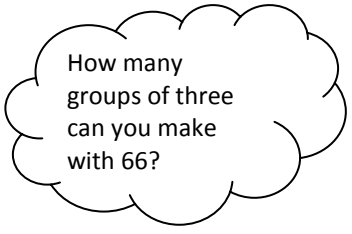
- The farmer wants to sell apples. He sells them in bags of 3 apples. He has 66 apples. How many bags of apples can he make up?

- Use the layout shown below to illustrate on the board how you have shared.

$66 \div 3 = \square$ ⬭ ⬭ ⬭

$66 = 30 + 30 + 6$

30 → 10 groups of 3 + 30 → 10 groups of 3 + 6 → 2 groups of 3



- He can make 10 bags + 10 bags + 2 bags ⟶ 22 bags.

- *How can we write this as a division number sentence?* (66 ÷ 3 = 22)

Activity 2: Do another problem solving example with the learners

- Three teachers share 98 books so that they each get the same number of books for their classes. How many books does each teacher get for her class?

- Ask the learners to draw three circles (one for each teacher) on their slates/white boards and to share the books between the circles. They should begin by thinking about all the 'big' number facts they remember about their 3x tables.

- *How can we write this as a division number sentence?* (98 ÷ 3 = 32 rem 2)

Activity 3: Learners do the following calculation in pairs on their whiteboards.

- Mum divides 62 eggs equally over 5 days. How many eggs does she have for each day? (15 rem 2).

Remediation: Give each learner 30 unifix blocks. Ask them how many groups of 5 they can make? Ask them to now share the blocks among the five learners. How many blocks does each learner get? (6)

Enrichment: See Enrichment Activity Cards

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

Do the following questions in your maths book.

Draw a picture and write a division number sentence and answer for these problems:

1. The baker wants to sell bread rolls. He sells them in bags of 6 each. He has 56 rolls. How many bags of rolls can he make up? (56 ÷ 6 = 9 rem 2).

2. Draw circles and write a division number sentence and answer for this problem.
   Four children share 84 sweets so that they all get the same number of sweets. How many sweets does each child get? (84 ÷ 4 = 21).

3. Solve the problem, by drawing a picture and then write a number sentence:
   Phetogo has 55 marbles. He wants to put it in bags of 5 each to give to his friends. How many bags of 5 marbles each can he make up? (55 ÷ 5 = 11).

5. Homework activity – 5 minutes

Do the following questions in your homework book.

1. Solve the problem, by drawing circles and then write a number sentence:
   Four sisters want to share R60 so that they all get the same amount of money. How many rands will each sister get? (R60 ÷4 = R15).

2. Solve the problem, by drawing circles and then write a number sentence:
   Six boys want to share 25 toy cars so that they all get the same number of toy cars to play with. How many toy cars will each boy get? (25 ÷ 6 = 4 rem 1).

Reflection on lesson:

Mathematics Assessment Task 1 Grade 3

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

Total Marks: 25

Question 1 (4)

Find any two numbers that are bigger than 826. Write down the number and number name.

776	884	777	475	867	825	747	826

a. _____

_____

b. _____

_____

Question 2 (1)

Put these numbers in order from the biggest to the smallest.

799	909	819	790	881	991	959

Use these blocks to provide your answer.

Question 3 (2)

Write the following number in hundred, tens and units:

a. 956

_____

Question 4 (2)

Write down the value of the following numbers:

a. The 9 in 697 _____

b. The 9 in 967 _____

Question 5 (2)

Round these numbers off to the nearest ten:

a. 96 _____ b. 83 _____

Question 6 (3)

Calculate the following by breaking down both numbers:

613 + 254 = ☐

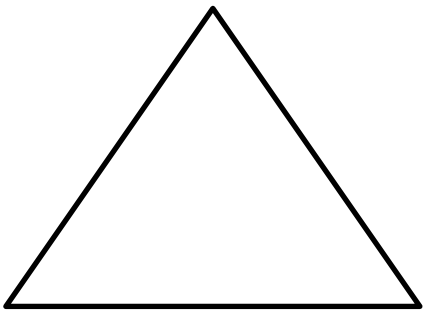
Question 7 (2)

Do the following by breaking down one number:

776 – 126 = ☐

Question 8 (1)

Draw one line of symmetry in the triangle:



Question 9 (2)

Circle the coins that you will use to make up 780c:

How much is it in rands and cents? _____

Question 10 (4)

Solve the problems. Draw a picture, write a number sentence and then the answer.

a. Phetogo has 65 marbles. He wants to put them into bags of 5 each to give to his friends. How many bags of 5 marbles each can he make up?

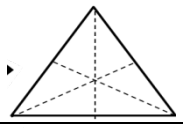
b. Travis has a 50c piece, four 20c and six 10c pieces. Toffees cost R1, 70. How much change will he get?

Question 11 (2)

Calculate the answer:

36 ÷ 3 = _____

Grade 3 Lesson 19 Written Assessment 1 MEMO

Question	Marks
1.(2 marks per correct answer-1 mark for number and 1 mark for number name) a. 884 eight hundred and eighty-four b. 867 eight hundred and sixty-seven	(4)
2. (1 mark for correct answer) 991, 959, 909, 881, 819, 799, 790	(1)
3. (1 mark per correct answer) 956 = 900 + 50 + 6	(2)
4. (1 mark per correct answer) a. 90 b. 900	(2)
5.(1 mark per correct answer) a. 100 b. 80	(2)
6.(1 mark per correct answer) 613 + 254 = _____ = (600 + 10 + 3) + (200 + 50 + 4) = (600 + 200) + (10 + 50) + (3 + 4) = 800 + 60 + 7 = 867	(3)
7.(1 mark for correct answer) 776 – 126 = 650 =(776) – (100 + 20 + 6) = (776 -100) – 20 – 6) = (676-20) -6 = 656-6 = 650	(2)
8. (1 mark per correct answer – any one of the lines is correct) 	(1)
9. (1 mark per correct answer – circling correct coins and total)  R7, 80	(2)
10. (2 marks for the correct answer to each part) a. 65 ÷ 5 = 13 b. 50c + 20c + 20c + 20c + 20c + 10c + 10c + 10c + 10c + 10c + 10c = R1, 90 He will get <u>20c</u> change.	(4)
11. (1 mark for correct answer)  = (30 + 6) ÷ 3 = (30 ÷ 3) + (6 ÷ 3) = 10 + 2 = 12	(2)

Date:

Lesson Topic: Division

Teacher's notes

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

Lesson vocabulary: Multiplication, division, inverse operations, multiply, divide

Prior knowledge

In Grade 2 the learners should have learnt how to:

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

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 2s from any given multiple between 0 and 900, e.g. 699, 687, 695 …

Mental maths activity - 10 minutes

	Calculate the following:	Answer		Calculate the following:	Answer
1.	24 ÷ 8 =	3	6.	3 x 8 = ☐	24
2.	☐ ÷ 3 = 8	24	7.	8 + 8 + ☐ =24	8
3.	8 x ☐ =24	3	8.	3 x ☐ = 24	8
4.	How many tens in 24?	2	9.	How many units in 24?	4
5.	24 - 8 =	16	10.	24 + 100 =	124

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Slates/white boards

Concepts

- Solve word problems in context and explain own solutions to problems that involve equal sharing and grouping up to 100 with answers that can include remainders.
- Divide numbers to 99 by 2, 3, 4, 5, 10
- Use appropriate symbols ÷, x, +, =, ☐
- Multiply 2, 3, 4, 5, 10 to a total of 100

Activity 1: Ask the learners what they know about multiplication that can help them calculate division.

- Give them the following example:
- 72 ÷ 3 = ☐
- What do I know?

I know:

10 x 3 = 30

Double 30 = 60

4 x 3 = 12

and 60 + 12 = 72

- 10 x 3 = 30
- 10 x 3 = 30
- 30 + 30 = 60
- 72 – 60 = 12

- 4 x 3 = 12
- 10 + 10 + 4 = 24
- Therefore 72 ÷ 3 = 24

Give them another example:

84 ÷ 4 = ☐ (24)

- What do I know?

- 10 x 4 = 40
- 10 x 4 = 40
- 40 + 40 = 80
- 80 + 4 = 84
- 4 x 1 = 4
- 10 + 10 + 1 = 21
- Therefore 84 ÷ 4 = 21

I know:

10 x 4 = 40

Double 40 = 80

4 x 1 = 4

and 80 + 4= 84

Activity 2: Ask learners to use the method used above to do this calculation on their whiteboards

- 64 ÷ 2 = ☐ (32)

Remediation: Let the learners do the same sum on their slates/white boards. Let them circle the 10's and the 4 that were used in the multiplication sum. This will help to show them which numbers are added at the end.

Enrichment: See Enrichment Activity Cards

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

Do the following questions in your DBE Workbook.

1. Complete Worksheet 116, pgs. 108 and 109.

5. Homework activity – 5 minutes

Do the following questions in your DBE Workbook.

1. Complete DBE Worksheet 117, pgs. 110 and 111.

Reflection on lesson:

Date:

Lesson Topic: Multiplication and division–inverse operations

Teacher's notes

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

Lesson vocabulary: Multiplication, division, inverse operations, multiply, divide

Prior knowledge

In Grade 2 the learners should have learnt how to:

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

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 5s from any given number between 0 and 900, e.g. 704, 709, 714 …

Mental maths activity - 10 minutes

	Calculate the following	**Answer**		Calculate the following	**Answer**
1.	3 multiplied by 8	24	6.	20 +19 =	39
2.	4 times 2	8	7.	3 groups of 5	15
3.	Three tens	30	8.	Half of 20	10
4.	Double 8	16	9.	20 + 21=	41
5.	5 rows of 4	20	10.	17 - 9 =	8

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Slates/white boards

Concepts

- Solve word problems in context and explain own solutions to problems that involve equal sharing and grouping up to 100 with answers that can include remainders.
- Divide numbers to 99 by 2, 3, 4, 5, 10
- Use appropriate symbols ÷, x, +, =, □
- Multiply 2, 3, 4, 5, 10 to a total of 100

Activity 1: Revise inverse operations (addition and subtraction) with the learners.

Ask the learners if they remember what the inverse operation for addition is. (subtraction)

Do examples on the board, e.g.

200 + 350 = 550

inverse operation 550 – 350 = 200

- Ask *What does the inverse operation do? It undoes what the operation has done.*
- Do some more examples to illustrate addition and subtraction as inverse operations.

Activity 2: Inverse operations – doubling and halving

Ask the learners if they remember what the inverse operation for doubling is. (halving)

Do examples on the board, e.g.

double 20 = 20 + 20 = 40

inverse operation half of 40 = 20

- Ask *What does the inverse operation do? It undoes what the operation has done.*
- Do some more examples to illustrate doubling and halving as inverse operations.

Activity 3: Inverse operations – multiplication and division

Ask the learners if they know what the inverse operation for multiplication is. (division)

Do examples on the board, e.g.

4 x 5 = 20

inverse operation 20 ÷ 5 = 4

- Ask *What does the inverse operation do? It undoes what the operation has done.*
- Do some more examples to illustrate multiplication and division as inverse operations.
- For example:
  - 3 x 9 = 27 and 27 ÷ 9 = 3
  - 4 x 8 = 32 and 32 ÷ 8 = 4

Remediation: Use arrays (done in multiplication) first with concrete apparatus and then with drawings (multiplication) to show how division is the inverse of multiplication.

Write the number sentences.

o o o o o o o o o o o o o o o	5 x 3=15 15÷ 3=5 3 x 5=15 15÷ 5=3

Enrichment: See Enrichment Activity cards

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

Do the following questions in your DBE Workbook.

1. Complete DBE Worksheet 112, pgs. 100 and 101.

5. Homework activity – 5 minutes

Do the following questions in your DBE Workbook.

1. Complete DBE Worksheet 115, pg. 107.

Reflection on lesson:

Date:

Lesson Topic: Multiplication and division–inverse operations

Teacher's notes

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

Lesson vocabulary: Multiplication, division, inverse operations, multiply, divide

Prior knowledge

In Grade 2 the learners should have learnt how to:

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

Assessment

Formal Task 1 Activity 3: Practical Assessment activity today. Assess all learners using the observation criteria.

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 10s from any given multiple between 0 and 900, e.g. 704, 714, 724 …
- Count 5/10/12 steps in 10s from 79. Where are you now? (120, 179, 199)

Mental maths activity - 10 minutes

	Calculate the following	**Answer**		Calculate the following	**Answer**
1.	5 multiplied by 8	40	6.	30 + 29 =	59
2.	4 times 3	12	7.	6 groups of 5	30
3.	Seven tens	70	8.	Half of 40	20
4.	Double 14	28	9.	15 + 16=	31
5.	3 rows of 4	12	10.	25 - 9 =	16

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Slates/white boards

Concepts

- Solve word problems in context and explain own solutions to problems that involve equal sharing and grouping up to 100 with answers that can include remainders.
- Divide numbers to 99 by 2, 3, 4, 5, 10
- Use appropriate symbols ÷, x, +, =, □
- Multiply 2, 3, 4, 5, 10 to a total of 100

Activity 1: Work this problem out on the board.

A bakery sells bread rolls in bags of 12. They have 120 rolls. How many bags of 12 rolls each can they make up? Ask:

- *What type of a problem is this?* (Sharing problem)
- *What do you know about these numbers*?
- Write these on the board as the learners give you the answers.

(12 x 10 = 120
The inverse of this is
120 ÷ 10 = 12 or 120 ÷ 12 = 10)

- *What numbers do we know that will help us to solve this problem?* (120 bread rolls, 12 in a bag)
- *What is the question*? (How many bags?)
- *How can we work this out using division?* (ask how many times does 12 go into 120)
- *How can we work this out using multiplication?* (ask what times 12 is equal to 120)
- The solution is 120 rolls put into 12 bags.
- Using division we work it out by saying 120 ÷ 12 = 10. The answer is 10 bags
- Using multiplication we work it out by saying 12 x 10 = 120. The answer is 10 bags

Activity 2: Ask learners to work this out on their whiteboards

- Five friends share 45 sweets so that they all get the same number of sweets. How many sweets does each get? (9 sweets)
  - *How can we work this out using division?* (ask how many times does 9 go into 45)
  - *How can we work this out using multiplication?* (ask what times 9 is equal to 45)

- Five friends share 47 sweets so that they all get the same number of sweets. How many sweets does each get? (9 sweets remainder 2)
  - *How can we work this out using division?* (ask how many times does 9 go into 47)
  - *How can we work this out using multiplication?* (ask what times 9 is equal to 47)

Assessment – check by oral questioning that learners can express the inverse relationship between division or multiplication.

Remediation: Give the learners some more examples of inverse operations based on the array work done in Lesson 21.

Enrichment: See Enrichment Activity Cards

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

Do the following questions in your maths books.

Take this activity in and mark it as part of the assessment task for today

1. Mr James bought 24 apples. He put them equally in 3 baskets. *How many apples did he put in each basket?* (8 apples).

2. Mr James bought 26 apples. He put them equally in 3 baskets. *How many apples did he put in each basket?* (8 apples rem 2).

3. Sue and Peter share 24 smarties equally. *How many smarties does Peter have?* (12 smarties).

4. Sue and Peter share 25 smarties equally. *How many smarties does Peter have?* (12 smarties rem 1).

5. Homework activity – 5 minutes

Do the following in your homework books.

1. Complete DBE Worksheet 118, pgs. 112 and 113.

Reflection on lesson:

Date:

Lesson Topic: Division - Consolidation

Teacher's notes

CAPS Topics:1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 1.15 Division

Lesson vocabulary: Divide, multiply, pattern, times table

Prior knowledge

In Grade 2 the learners should have learnt how to:

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

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 5s from any given multiple between 0 and 900, e.g. 801, 806, 811
- Count 5/8/10 steps in 10s from 60. Where are you now? (110, 140, 160)

Mental maths activity - 10 minutes

	Calculate the following	**Answer**		Calculate the following	**Answer**
1.	3 multiplied by 8	24	6.	6 x 4=	24
2.	4 times 2	8	7.	4 x 6=	24
3.	Three tens	30	8.	24÷ 6=	4
4.	Double 8	16	9.	24 ÷ ☐ = 3	8
5.	5 rows of 4	20	10.	50+ ☐ =70	20

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Slates/white boards

Concepts

- Solve word problems in context and explain own solutions to problems that involve equal sharing and grouping up to 100 with answers that can include remainders.
- Divide numbers to 99 by 2, 3, 4, 5, 10
- Multiply 2, 3, 4, 5, 10 to a total of 100

Activity 1: Draw the following table on the board before the lesson:

x	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
2s	2	4	6	8	10	12	14	16	18	20
4s	4	8	12	16	20	24	28	32	36	40

- Ask the learners if they can see the pattern.
- The first line is the "2 times " table.
- The second line the "2 times " table is doubled 2.

Date:

Activity 2: Draw another table on the board leaving the row for the 5 times table blank.
Ask the learners to copy it onto their white boards.

x	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
5s	(5)	(10)	(15)	(20)	(25)	(30)	(35)	(40)	(45)	(50)
10s	10	20	30	40	50	60	70	80	90	100

- Ask the learners if they can see the pattern.
- The second line is the "times 10" table
- Ask learners to fill in the "5 times" table in the first row.

Activity 2: Draw another table on the board. This is a division table.

- Ask learners to complete this table on their whiteboards.

÷	10	20	30	40	50	60	70	80	90	100
5	(2)	(4)	(6)	(8)	(10)	(12)	(14)	(16)	(18)	(20)
10	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)

Remediation: Let the learners draw the table from Activity 2 on their slates/white boards. Help them to fill in the first row. Give each learner 50 counters. They can use the counters to do the division if they need to.

Enrichment: See Enrichment Activity Cards

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

Draw and complete the following multiplication and division tables in your maths books.

1.

x	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
3	(3)	(6)	(9)	(12)	(15)	(18)	(21)	(24)	(27)	(30)
6	(6)	(12)	(18)	(24)	(30)	(36)	(42)	(48)	(54)	(60)

2.

÷	**6**	**12**	**18**	**24**	**30**	**36**	**42**	**48**	**54**	**60**
6	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3	(2)	(4)	(6)	(8)	(10)	(12)	(14)	(16)	(18)	(20)

5. Homework activity – 5 minutes

Do the following calculations in your homework books.

Use any method that you are comfortable with. Remember to show your working.

1. My brother has 44 toy cars. He wants to share them amongst himself and his 3 friends when they come over to play. How many cars will they each get to play with? (44 ÷ 4 = 11)
2. The lady baked 48 cupcakes. She gave all the cupcakes to her friends. Each friend got 5 cupcakes. How many cupcakes did they each get and how many was left over for her? (48 ÷ 5 = 9 rem 3)

Reflection on lesson:

Date:

Lesson Topic: Division - Consolidation

Teacher's notes

CAPS Topics:1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 1.15 Division

Lesson vocabulary: Divide, equal sharing, grouping, problem solving, calculate, method

Prior knowledge

In Grade 2 the learners should have learnt how to:

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

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 5s between 0 and 900, e.g. 825, 830, 835 …
- Count 10/12/15 steps in 10s from 75. Where are you now? (175, 195, 225)

Mental maths activity - 10 minutes

	Calculate the following:	**Answer**		Calculate the following:	**Answer**
1.	29 + 30 =	59	6.	1 x 20 =	20
2.	4 groups of 5	20	7.	20 ÷ 5 =	4
3.	Half of 30	15	8.	6 x 0 =	0
4.	21 + 22=	43	9.	10 ÷2 =	5
5.	6 multiplied by 3	18	10.	5 x 3 =	15

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Slates/white board, counters

Concepts

- Solve word problems in context and explain own solutions to problems that involve equal sharing and grouping up to 100 with answers that can include remainders.
- Divide numbers to 99 by 2, 3, 4, 5, 10
- Use appropriate symbols ÷, =, ☐

Activity 1: Do the word problems in this activity with the learners. This will give you the opportunity to see which method the learners are not very familiar with and to revise it with them during remediation.

- Write the following word problems on the board:
    1. Dad has 84 tools in his shed. He wants to put them into 4 drawers. How many tools will he have to put into one drawer? (84 ÷ 4 = 21)
    2. I have 32 stickers. If I stick 3 stickers in a book, how many children can get stickers? (32 ÷ 3 = 10 rem 2)
    3. I made 21 party packs. 7 friends are coming to my party. How many packs will each friend get? (21 ÷ 7 = 3)
- Ask the learners do the calculations for the *first* problem on their slates/white boards.

Date:

- Learners should use any method they choose, based on methods you have taught them over the past few days.
- Once the learners have completed the first calculation, ask them to tell you which method they used.
- Now get them to complete the next two problems that you have written up on the board.

Remediation: Use counters and slates/white boards to revise division the using different method(s) you have taught them over the past few days. Check which methods they are not yet familiar with. Make sure that they can all do at least one division method efficiently.

Enrichment: See Enrichment Activity Cards

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

Do the following questions in your maths book.

Calculate the following. Use any method that you have learned in class. Show your method.

1. The vendor has 63 tomatoes. He wants to sell them in packets of 3 each. How many packets of tomatoes will he be able to make up? (63 ÷ 3 = 21)

2. I have 55 silk worms. I want to share them between myself and my four friends. How many worms will we each get? (55 ÷ 5 = 11)

5. Homework activity – 5 minutes

No homework today

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 1.16 Mental Mathematics 1.10 Sharing leading to fractions, 1.17 Fractions

Lesson vocabulary: Fractions, fractions squares, fraction table, sharing, unitary fractions, non-unitary fractions, halves, quarters, eights, thirds, sixths and fifths.

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Solve word problems in context and explain own solutions to problems that involve equal sharing leading to solutions that include unitary fractions e.g. ½, ¼, 1/3, 1/5.
- Use and name fractions including halves, quarters, thirds and fifths.
- Recognise fractions in diagrammatic form.
- Write fractions as 1 half, 2 thirds.

Assessment

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

1. Mental maths

Counting – 5 min

- Count backwards in 10s from any given number between 0 and 900, e.g. 817, 807, 797 …
- Count 5/10 steps of 10 backwards from 817. Where are you now?

Mental maths activity - 10 minutes

	Calculate the following:	**Answer**		Calculate the following:	**Answer**
1.	1 x 1 =	1	6.	3 x 5 =	15
2.	1 x 2 =	2	7.	3 x6 =	18
3.	2 x 2 =	4	8.	4 x 5 =	20
4.	2 x 3 =	6	9.	5 x 1 =	5
5.	3 x 4 =	12	10.	10 x 2 =	20

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Fraction squares, fraction circles (see printable resources) – one copy per pair

Concepts

- Use and name unitary and non-unitary fractions including halves, quarters, eights, thirds, sixths and fifths.
- Recognise fractions in diagrammatic form.
- Begin to recognise that two halves or three thirds make one whole and that 1 half and two quarters are equivalent.
- Write fractions as 1 half, 2 thirds.

Activity 1: Learners work in pairs. One person from each pair uses the fraction squares and the other uses fraction circles.

- Ask them the following questions:
- *Is one half bigger or smaller than one quarter?* (bigger)
- *Is one quarter bigger or smaller than one third?* (smaller)

- *What can you tell me about two quarters and a half?* (they are the same size)
- *What can you tell me about one third and three quarters?* (one third is smaller than three quarters)

Help learners to realise that even though the shapes differ the fractions are still the same. In other words a half is a half in relation to the whole circle or square. Ask questions about eights, thirds, sixths and fifths as well.

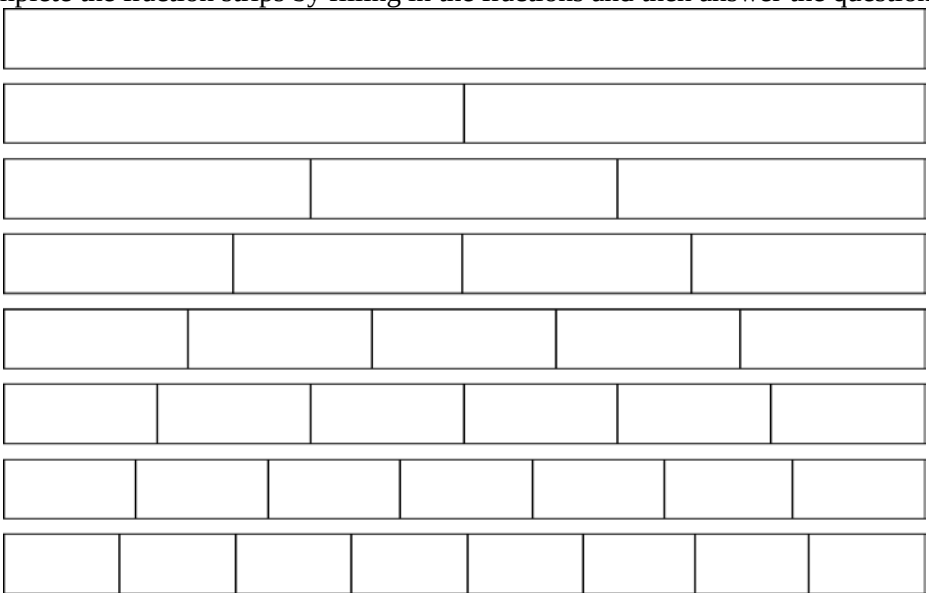
Remediation: Give the learners fraction squares. Ask learners to place the strip that shows one whole in front of them.Ask them to place the half strips below that. You might need to guide them. Now place the thirds, then the quarters. Ask learners: *Which is bigger than a half, two thirds or a quarter? (*Two thirds)

Enrichment: See Enrichment Activity Cards

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

Do the following questions in your maths book.

1. Complete the fraction strips by filling in the fractions and then answer the questions below.



2. Fill in bigger than/smaller than / the same
    a. one half is _____ (smaller than) three quarters
    b. two quarters are _____ (equal to) one half
    c. three quarters are _____ (more than) one third
    d. three sixths are _____ (equal to) four eighths

3. How many eighths are the same as one whole? ____ (8)

4. How many quarters is the same as three sixths? _____ (2)

5. Homework activity – 5 minutes

Do the following questions in your homework book.

1. Draw a fraction table. Show the following: whole, halves, thirds, quarters, eights.
2. Give three examples where fractions are equal (various e.g. two halves and one whole / two quarters and one half / six eights and three quarters)

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 1.16 Mental Mathematics 1.10 Sharing leading to fractions, 1.17 Fractions

Lesson vocabulary: Sharing, fractions, shared, unitary and non-unitary fractions including halves, quarters, eights, thirds, sixths and fifths, fraction circles, fraction squares.

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Solve word problems in context and explain own solutions to problems that involve equal sharing leading to solutions that include unitary fractions e.g. ½, ¼, 1/3, 1/5.
- Use and name fractions including halves, quarters, thirds and fifths.
- Recognise fractions in diagrammatic form.
- Write fractions as 1 half, 2 thirds.

Assessment

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

1. Mental maths

Counting – 5 min

- Count backwards in 10s from any given number between 0 and 900, e.g. 192, 202, 212..... 942, 932, 922 …

Mental maths activity - 10 minutes

	Calculate the following:	**Answer**		Calculate the following:	**Answer**
1.	4 x 2 =	8	6.	1 x 20 =	20
2.	3 x 2 =	6	7.	5 x 4 =	20
3.	5 x 2 =	10	8.	6 x 3 =	18
4.	6 x 2 =	12	9.	10 x 2 =	20
5.	7 x 2 =	14	10.	5 x 3 =	15

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Counters

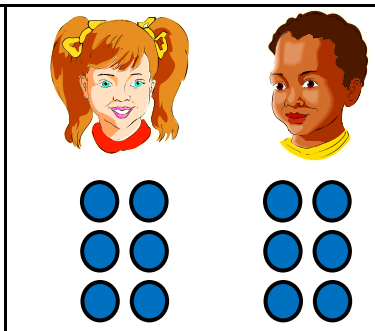
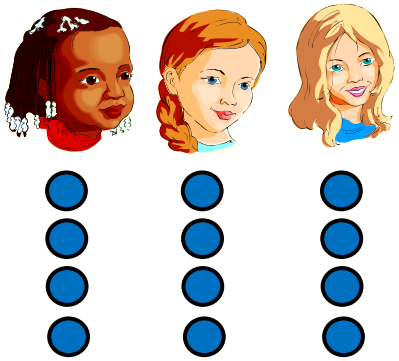
Concepts

- Solve word problems in context and explain own solutions to problems that involve equal sharing leading to solutions that include unitary and non-unitary fractions e.g. ½, ¼, 3/4, 2/5.
- Use and name unitary and non-unitary fractions including halves, quarters, eights, thirds, sixths and fifths.
- Begin to recognise that two halves or three thirds make one whole and that 1 half and two quarters are equivalent.
- Write fractions as 1 half, 2 thirds.

Date:

Activity 1: Draw the following on the board:

- Repeat the activity using different numbers.
- Learners may use counters to assist them.

12 counters shared between 2 learners.		• *How many counters did each one get?* (6) • *What fraction did they get?* (one half) • *What helped you to know that you found one half?* (2 learners)
12 counters shared amongst 3 learners.		• *How many counters did each one get?* (4) • *What fraction did each girl get?* (one third) • *What helped you to know that you found one third?* (3 learners)

Remediation: Give the learners the fraction circles or fraction squares. Ask them to show you halves or give learners six counters. Ask them what one half of the counters will be. Guide them by distributing the counters on the fraction circles or squares equally. *We can say: We had six counters. One half of the counters is three. We can say one half of six is three.* Do the same with thirds and quarters.
Enrichment: See Enrichment Activity Cards

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

Do the following activities in your maths book.

1. Do the following questions in your DBE Workbook.
   Complete DBE Worksheet 121, pgs. 118 and 119.
2. Arrange these numbers from largest to smallest
   124, 142, 185 (185, 142, 124)
   800, 900, 500 (900, 800, 500)
3. Arrange these numbers from smallest to largest
   882, 784, 683(683, 784, 882)
   879, 1 000, 698(698, 879, 1000)

Homework activity – 5 minutes

Do the following questions in your DBE Workbook.

1. Complete DBE Worksheet 126, pgs. 128 & 129.

Reflection on lesson:

Date:

Lesson Topic: Fractions - solutions which include unitary fractions

Teacher's notes

CAPS Topics: 1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 1.17 Fractions

Lesson vocabulary: Fractions, unitary and non-unitary fractions, halves, quarters, eights, thirds, sixths, fifths, diagrammatic form, dozen

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 1: Assess a group of learners today.

1. Mental maths

Counting – 5 min

- Count backwards and forwards in 10s from any given number between 0 and 900
  e.g. 352, 362, 372...../ 722, 712, 702 …

Mental maths activity - 10 minutes

	Calculate the following:	**Answer**		Calculate the following	**Answer**
1.	10 x 10 =	100	6.	10 x 0 =	0
2.	10 x 6 =	60	7.	10 x 2 =	20
3.	10 x 8 =	80	8.	10 x 4 =	40
4.	10 x 9 =	90	9.	10 x 3 =	30
5.	10 x 1 =	10	10.	10 x 5 =	50

2. Homework/Corrections – 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Fraction strips and circles (see Term 3 printable resources), unifix blocks.

Concepts

- Count forwards and backwards in 2s from any number between 0 and 700, e.g. 661, 663, 665
- Use and name unitary and non-unitary fractions including halves, quarters, eights, thirds, sixths and fifths.
- Recognise fractions in diagrammatic form.
- Write fractions as 1 half, 2 thirds.

Activity 1: (Revision of division with remainders)

- *Do the following examples on the board. You may need to do more examples if necessary.*

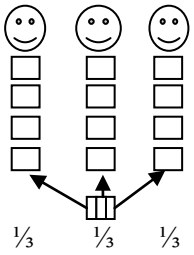
A carpenter has 26 table legs. *How many tables can he make?* (26 ÷ 4 = 6 rem 2)	25 eggs. *How many dozens?* (25 ÷ 12 = 2 rem 1)	Three boys share 13 biscuits equally. *How much will each boy get?* (13 ÷ 3= 4 rem 1)

NOTE: In the following activity fraction symbols are used. This is done because the DBE workbooks use fraction numerals in the relevant activities selected and learners need to know how to read them.

Date:

Activity 2: Do the following example practically and use drawings to illustrate on the board:

- Three boys share 13 biscuits equally. How much will each boy get?
  13 ÷ 3= 4 rem 1

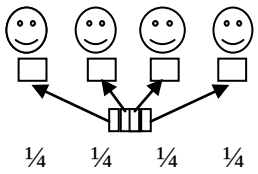


Ask *Can the friends share the one remaining biscuit*? *How*?

(We cut the remaining biscuit into three equal parts so that each friend gets one piece.)

Now how much will each boy get? (4 and 1 third)

- Four friends share 5 bars of chocolate equally. How much will each friend get?
  5 ÷ 4= 1 rem 1



Ask *Can the friends share the one remaining bar of chocolate*? *How*?

(We cut the remaining bar of chocolate into four equal parts so that each friend gets one piece.)

Now how much will each friend get? (1 and one quarter)
Show learners how to write 1¼ on the board.
How much will each friend get? Each friend will get 1¼ bar of chocolate.

Activity 3: Learners do the following calculations on their whiteboards. They need to draw to show their calculations.

- Mum makes three skirts with 7 meters of material. All the skirts are the same size. How many meters of material does she use for one skirt? (2 and 1 third (⅓) meters of material.)
- Eight teachers share 17 boxes of chalk. How many boxes of chalk will each teacher get? (2 and 1 eighth boxes of chalk)

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 cubes each time.)

Enrichment: See Enrichment Activity Cards

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 9 chocolate bars amongst 4 friends so that they all get the same amount of chocolate and there is nothing left over. (2 and 1 quarter bars of chocolate)
2. Find one quarter of 21 sweets (5 and 1fifth)
3. Grandmother gives Kiki R12. Kiki wants to save a third of the money. *How much money should she save?*(R4)
4. Share 16 apples equally among 5 children so that they all get the same amount of apples and there is nothing left over. (3 and 1 fifth)

5. Homework activity – 5 minutes

Do the following questions in your homework book.

1. Complete DBE Worksheet 124, pgs. 124 and 125.

Reflection on lesson:

Date:

Lesson Topic: Putting fractions together

Teacher's notes

CAPS Topics:1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 1.10 Sharing leading to fractions, 1.17 Fractions

Lesson vocabulary: Fractions, sixths, unitary, non-unitary fractions , quarters, halves, thirds, sixths, fifths and eighths,.

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Solve word problems in context and explain own solutions to problems that involve equal sharing leading to solutions that include unitary fractions e.g. ½, ¼, 1/3, 1/5.
- Use and name fractions including halves, quarters, thirds and fifths.
- Recognise fractions in diagrammatic form.

Assessment

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

1. Mental maths

Counting – 5 min

- Count backwards and forwards in 10s from any given number between 0 and 900, e.g. 452, 462, 472...../ 522, 512, 502 …
- Count 10/12 steps of 10 backwards from 3651. Where are you now?

Mental maths activity - 10 minutes

	Calculate the following:	**Answer**		Calculate the following	**Answer**
1.	1 x 1 =	1	6.	3 x 4 =	12
2.	4 x 5 =	20	7.	2 x 1 =	2
3.	5 x 2 =	10	8.	8 x 0 =	0
4.	3 x 1 =	3	9.	9 x 10 =	90
5.	7 x 3 =	21	10.	6 x 5 =	30

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Fraction circles, fraction squares (see printable resources)

Concepts

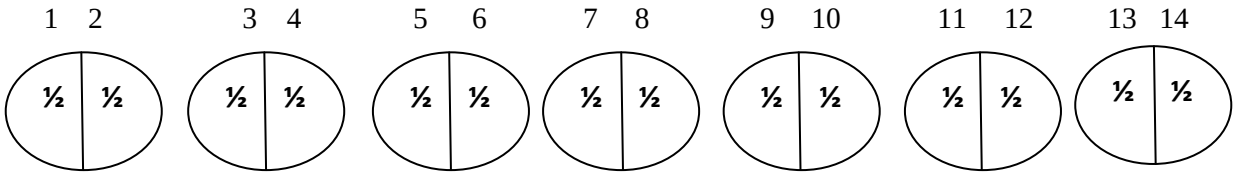
- Use and name unitary and non-unitary fractions including halves, quarters, eights, thirds, sixths and fifths.
- Recognise fractions in diagrammatic form.
- Begin to recognise that two halves or three thirds make one whole and that 1 half and two quarters are equivalent.
- Write fractions as 1 half, 2 thirds.

Activity 1: Do the following questions practically and with drawings on the board.

- A gogo gives half an orange to each of her grandchildren. She had 14 grandchildren. *How many oranges does she need?*
- In this lesson we can again familiarise learners with the symbol and word form for writing fractions so that they will be able to use the DBE workbook and learn this notation.

Date:

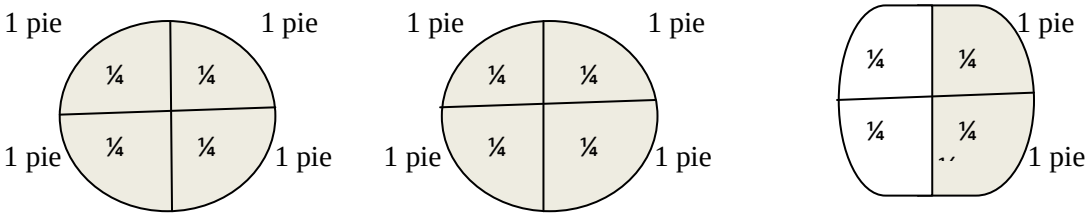
- How many grandchildren? (14) How many oranges for each child? (half)
- ½ + ½ =1 orange



Fourteen halves = 7 oranges
How many oranges does she need? (She needs 7 oranges)

- I want to bake 12 apple pies with a quarter of an apple in each pie. How many apples do I need?

How many apple pies? (10) How many apples in each? (¼) ¼ + ¼ + ¼ + ¼ =1apple



Ten quarters = 2 and a half apples
How many apples does she need? (She needs 2 and a half apples)

Activity 2: Learners draw and solve the following problems on their white boards.

- I drink one third of a glass of milk every day. *How much milk will I drink in two weeks?* (4 and 2 thirds of a glass)
- The driver uses one fifth of a tank of petrol each day. *How many tanks of petrol will he use in 10 days?* (2 tanks)

Remediation: Instead of using fraction circles, use fraction squares. Do the same activities again with the learners – the different shaped wholes will give the learners another opportunity to come to grips with the work. Make sure you allow the learners to talk about what they are doing and listen to them to see if they are expressing themselves clearly and correctly.

Enrichment: See Enrichment Activity Cards

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

Do the following questions in your DBE Workbook.

Complete DBE Worksheet 122, pgs. 120 and 121.

5. Homework activity – 5 minutes

Do the following questions in your homework book.

1. Draw the fraction squares in your book, but use only halves, quarters, sixths and eights.
2. Answer the following questions:
3. Two quarters are the same as _____ (one half)
4. Four sixths are the same as _____ (two thirds)
5. Four eights are the same as _____ (on half/ two quarters)
6. Six eights are the same as _____ (three quarters)
7. One half is the same as _____ (two quarters/three sixths/four eights)

Reflection on lesson:

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: 3-D objects, boxes, balls, spheres, prisms, cylinders, pyramids, cones, roll slide

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Recognise and name 3-D objects in the classroom and in pictures: ball shapes (spheres), box shapes (prisms), cylinders.
- Describe, sort and compare 3-D objects in terms of size, objects that can roll and objects that can slide.

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 4s from any given multiple between 0 and 900, e.g. 704, 708, 712 …

Mental maths activity - 10 minutes

	Calculate the following:	**Answer**		Calculate the following:	**Answer**
1.	2 x 10 =	20	6.	25 x 4 =	100
2.	20 x 2 =	40	7.	3 x 30 =	90
3.	32 x 2 =	64	8.	10 x 5 =	50
4.	48 x 2 =	96	9.	32 x 1 =	32
5.	15 x 3 =	45	10.	12 x 0 =	0

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Boxes/box shape and ball/ball shape objects, toothpicks, straws, magazines

Concepts

- Recognise and name 3-D objects in the classroom and in pictures: Ball shapes (spheres), box shapes (prisms), cylinders, pyramids, cones.

Activity 1: Place a variety of objects on your table. As you discuss each object draw it on the board.

- Ask the learners to show you objects in the class or on your table that look like a ball / has a ball shape.
  Revise with them that a ball in mathematics is called a sphere.
  Ask: *Is a tennis ball a sphere?* (Yes, it is perfectly round.)
  What about a rugby ball? (No, it is not a sphere, it is shaped more like an egg.)
- Ask the learners to show you objects in the class or on your table that look like boxes or have a box shape.
  Revise with them that a box shape in mathematics is called a prism.

Date:

Ask: *What are the things we know about prisms?* (The opposite faces are the same. The sides are rectangles. All the surfaces are flat.)
*Name some prisms you know. (*Triangular prism, rectangular prism, cube)

- Ask the learners to show you objects in the class or on your table that look like boxes or have a pyramid shape.
  Ask: *What are the things we know about pyramids?* (The bases can be any shape with straight sides. The sides/ faces are triangles. All the surfaces are flat. They join at a point at the top.)
- Ask the learners to show you objects in the class or on your table that look like cylinders.
- Ask: *What are the things we know about cylinders?* (They have circles as the base and the top. The side is curved.)
- Ask: *What are the things we know about cones?* (They have circles as the base and the top. The side joins at a point at the top.)

Activity 2: (Optional) Learners work in groups of four.
Give learners toothpicks/ straws, cut out 2-D shapes and clay. Ask learners to build the shapes discussed in Activity 1 above.
As they do this go from group to group asking questions such as

- *Show me the triangles on the sides of the pyramid.*
- *Do the opposite sides of this prism have to be the same size?*
- *Why?*

Remediation: Give learners a mixture of box/box shapes, pyramids and balls/ball shape objects. Ask them to sort them into three groups. Let them name the groups, also using their mathematical names.

Enrichment: See Enrichment Activity Cards

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

Do the following questions in your maths book.

1. Complete DBE Worksheet 123, pgs. 122 and 123

2. Find/ draw pictures of objects that look like balls, boxes, cones cylinders and pyramids. Label the shapes.

5. Homework activity – 5 minutes

No homework

Reflection on lesson:

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, face, geometric solids

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Recognise and name 3-D objects in the classroom and in pictures: ball shapes (spheres), box shapes (prisms), cylinders.
- Describe, sort and compare 3-D objects in terms of size, objects that can roll and objects that can slide.

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 3s from any given multiple between 0 and 900, e.g. 513, 516, 519 …

Mental maths activity - 10 minutes

	Calculate	**Answer**		Calculate	**Answer**
1.	15 –__= 12	3	6.	4 – __ = 1	3
2.	14 – __ = 4	10	7.	12 – __ = 6	6
3.	13 – __ = 12	1	8.	20 – __ = 15	5
4.	20 – __ = 13	7	9.	14 – __ = 6	8
5.	1 – __ = 1	0	10.	15 – __ = 10	5

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: 3-D geometric solids (collect old containers), pictures of the 3-D objects (see Term 3 printable resources), sticky tape

Concepts

- Describe, sort and compare 3-D objects in terms of 2-D shapes that make up the faces of 3-D objects, flat or curved surfaces.

Activity 1: Work in groups of four.

- Give each group as many as you can of the following 3-D geometric solids or show them pictures of cubes, pyramids, balls, cones, cylinders and spheres.
- Draw 2-D shapes – circles, squares and triangles on the board.
- Ask the learners to identify the 2-D shapes on the 3-D objects that they have collected.
    - Cones and cylinders: Circles
    - Cubes and prisms: squares, rectangles, triangles
    - Pyramids : Triangles, squares, rectangles

Date:

Activity 2: Discuss these questions with your learners. Learners can give the name of the shape or draw it when they answer the questions.

1. *The faces of a pyramid are* (1 square and four triangles).
2. *The faces of a prism are* (6 rectangles).
3. *A* (sphere/ ball shape) *has only one round surface.*
4. Ben has one of each of these objects: a triangular prism, a rectangular prism, a cube, a triangular based pyramid and a square based pyramid.
    - He is looking at one object. Altogether it has four sides. *What objects is he looking at?* (triangular based pyramid.)
    - He is looking at two objects. Altogether they have twelve sides. *What objects is he looking at?* (cube and rectangular prism)
    - He is looking at two objects. Both have five sides. *What objects is he looking at?* (triangular prism and a square based pyramid.)

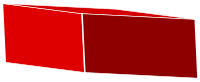
Remediation: After having matched the 2-D shapes with the 3-D objects, the learners use the 2-D shapes to make the 3-D objects.

Enrichment: See Enrichment Activity Cards

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

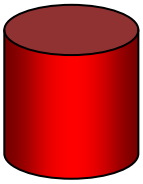
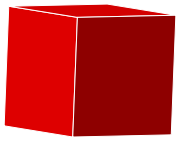
Do the following questions in your maths book.

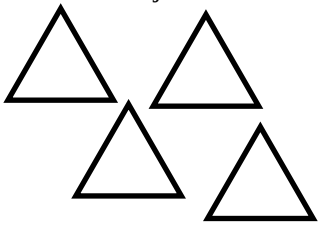
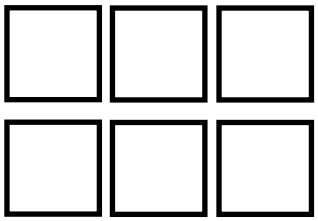
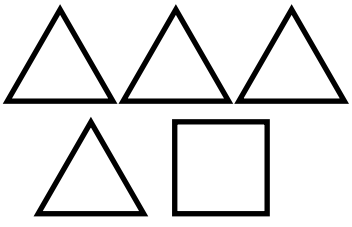
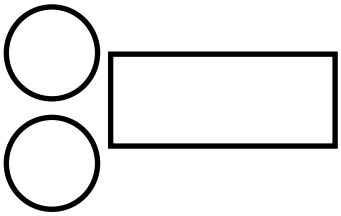
1. Name the objects.


_____ (cylinder)

_____ (cube/prism)

_____(pyramid)

2. Draw lines to match the 2-D shape and the 3-D object.

1. 
2. 
3. 
4. 

a. 
b. 
c. 
d. 

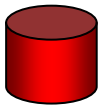
(Answers: 1-d, 2-a, 3-b, 4-c)

Date:

5. Homework activity – 5 minutes

Do the following questions in your homework book.

Draw the 2-D shapes that will make up the faces of these 3-D objects.

Reflection on lesson:

Date:

Lesson Topic: Perimeter

Teacher's notes

CAPS Topics:1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 4.5 Perimeter

Lesson vocabulary: Perimeter, label, cm, m, centimetres, metres, calculate, informal units.

Prior knowledge

In Grade 3 Term 3 the learners should have learnt how to:

- Investigate the distance around 2-D shapes and 3-D objects using direct comparisons or informal units.

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 100s between 0 and 1 000, e.g. 100, 200, 300 …

Mental maths activity - 10 minutes

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

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

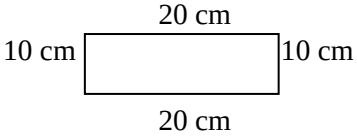
Resources: Plastic or paper cut-out shapes (squares, rectangles, triangles) in different sizes – to be prepared before the lesson

Concepts

- Investigate the distance around 2-D shapes and 3-D objects using direct comparisons or informal units.

Activity 1: Draw a triangle, square and rectangle on the board.

- Tell the learners that we are going to work out the perimeter of each shape.
- Use the blackboard ruler to measure the sides of each shape. Remind learners that we measure from the 'zero' on the ruler and not from the edge.
- Write the measurement in centimetres next to each side.
- Add all four sides of each shape to get the perimeter.



(Answer: 20 cm + 10 cm + 20 cm + 10 cm = 60 cm)

Activity 2: Work in pairs.

- Give each group plastic or paper cut out shapes in different sizes – rectangles, squares and triangles.
- Tell the learners that they are going to work out the perimeter of each shape.

- They need to use their rulers to measure the sides of each shape and then add all the measurements together to get the perimeter.

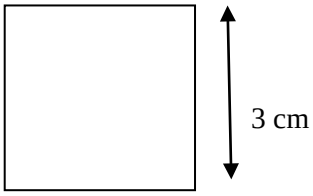
Remediation: Give the learners a square. Show them how to measure, using their rulers, starting at 0cm. Add all the sides to get the perimeter.

Enrichment: See Enrichment Activity Cards

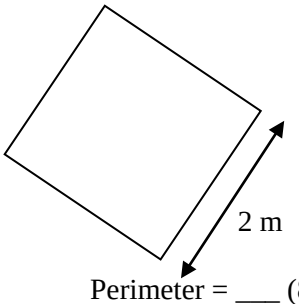
4. Classwork activity (Group/independent work) – 25 minutes

Do the following questions in your maths book.

1. Find the perimeter of these squares:

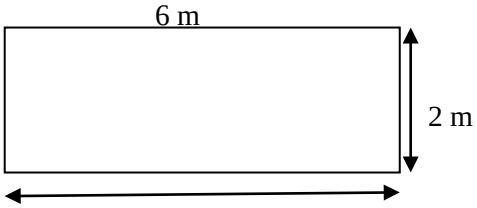


Perimeter = __ (12 cm)

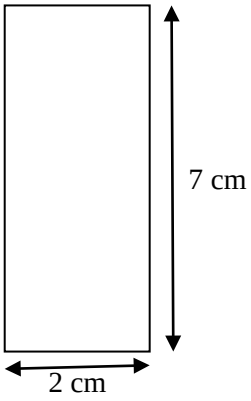


Perimeter = ___ (8 m)

2. Find the perimeter of these rectangles:



Perimeter = ___ (16 m)

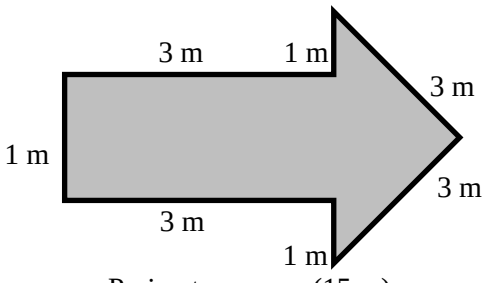


Perimeter = ___ (18 cm)

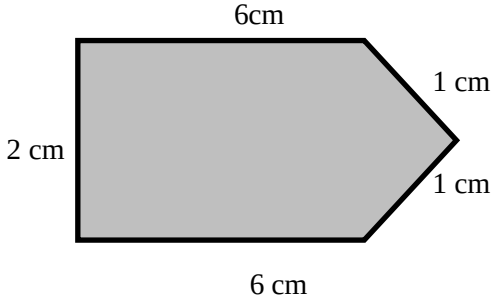
5. Homework activity – 5 minutes

Do the following questions in your homework book.

1. Calculate the perimeter of the following shapes.



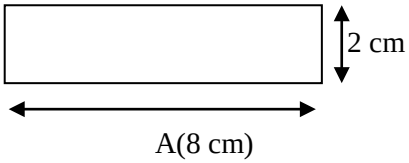
Perimeter = ___ (15 m)



Perimeter = ___ (16 cm)

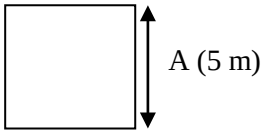
Date:

2. The perimeter of this rectangle is 20 cm. Calculate the length of side A.



A(8 cm)

3. The perimeter of this square is 20 m. Calculate the length of side A



Reflection on lesson:

Date:

Lesson Topic: Area

Teacher's notes

CAPS Topics:1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 4.6 Area

Lesson vocabulary: Area, estimate, investigate, estimate, tiling, squares

Prior knowledge

In Grade 3 Term 3 the learners should have learnt how to:

- Investigate the distance around 2-D shapes and 3-D objects using direct comparisons or informal units.

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 50s between 0 and 1 000, e.g. 350, 400, 450 …
-

Mental maths activity - 10 minutes

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

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Squares template and shapes (see printable resources) **Keep cut out to use again in lesson 34**

Concepts

- Investigate the area using tiling.

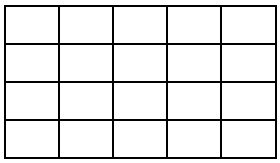
Activity 1: Work in pairs.

- Give learners copy of the squares template and let them cut out all the squares for this lesson. Also give them a copy of the two rectangular shapes.
- Place the pile of squares in front of the group. Ask learners where they have seen tiles before (bathroom/kitchen walls, floors etc). Tell them that before someone tiles a wall or floor they need to estimate the number of tiles they will need so that they buy enough. Tell them that they will now pretend that the squares they have cut are tiles for a floor.
- Ask them to each estimate how many squares would cover the floor (rectangular shapes). Each learner writes down their estimate.
- Learners pack out the squares on the rectangular shapes to check their estimations. Ensure that there are no gaps or overlaps. Who was closer?
- Learners should check their tiling to measure the area of the two rectangular shapes using the small tiles. *Make sure they know how to lay the tiles without overlapping/leaving any gaps.*
- Tell learners that when we measure the surface of a space we call this the 'Area'. Write the word on the board and get the children to say it after you.

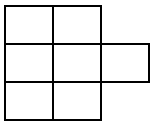
Date:

Activity 2: Before the lesson draw grids on the board with all the blocks the same size.

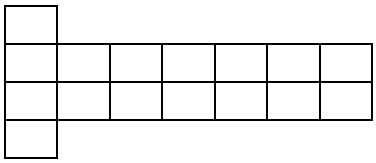
- Ask learners to help you to count the number of squares /tiles in each drawing.
- What is the area of each of these shapes, using the given tiles in the shapes?



(20 tiles)



(7 tiles)



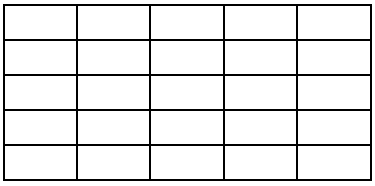
(16 tiles)

Remediation: Let the learners use their cut out squares. Give them different size squares and rectangles. Ask them to pack the cut out squares on the shapes to see what the area of each shape is.
Enrichment: See Enrichment Activity Cards

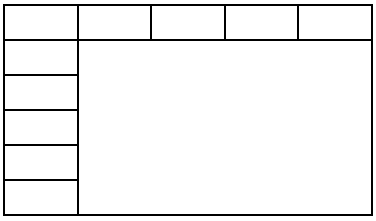
4. Classwork activity (Group/independent work) – 25 minutes

Do the following questions in your maths book.
What is the area of these shapes?

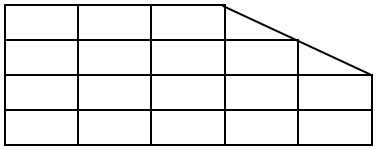
1. _____ tiles (25)



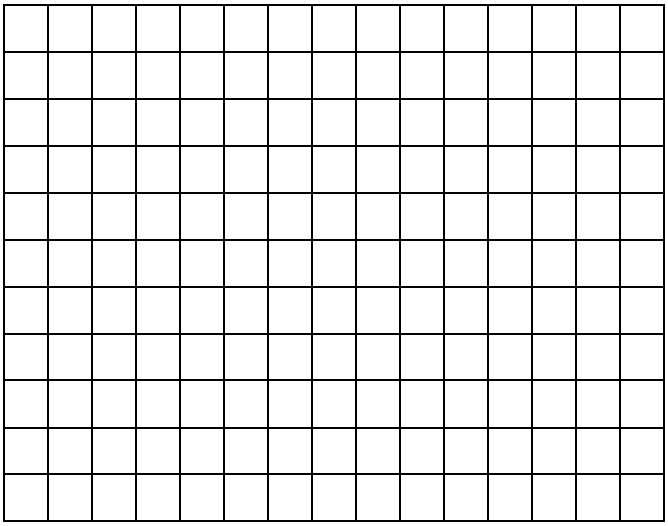
2. _____ tiles (30)



3. _____ tiles (18)



4. Use some squares ☐ and half squares ◺ to draw three figures on the grid paper blow. Each figure should have an area of 12 squares.



5. Homework activity – 5 minutes

Do the following questions in your DBE Workbook.
Complete DBE Worksheet 109, pgs. 94 and 95.

Reflection on lesson:

Mathematics Assessment Task 2 Grade 3

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

Total Marks: 25

Question 1 (2)

Give the inverse operation and answer for the following:

a. 53 + 29 = 81

_____

b. 18 x 2 = 36

_____

Question 2 (2)

Calculate the following divison:

72 ÷ 3 = ☐

Question 3 (3)

Solve this problem. Show a division calculation where you use 

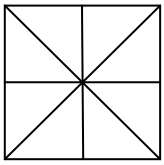
A lady baked 45 cupcakes. She gave away all of the cupcakes to her friends. Each friend got 5 cupcakes.

a. How many friends did she give cakes to?

b. How many cakes were left for her?

Question 4 (4)

Fill in the missing fractions words. Use the diagram to help you.



a. One whole has _____ halves.

b. One half is bigger than three _____.

c. _____ quarters is the same as one whole.

d. Four eighths are the same as _____.

Question 5 (2)

Share 20 counters among 4 children. How many counters will each child get? What fraction of counters will each child get?

a. Each child will get _____ counters.

b. Each child will get _____ of the counters.

Question 6 (2)

a. How much is one half of 12 cupcakes? _____

b. How much is two thirds of R18? _____

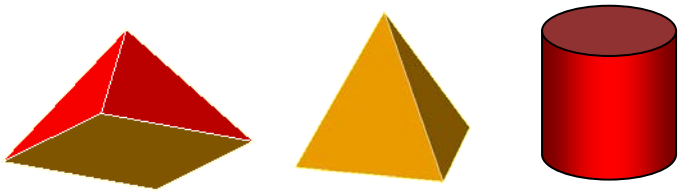
Question 7 (4)

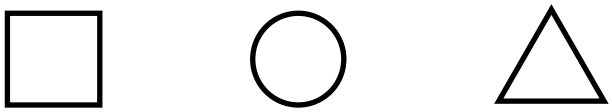
Draw the following:

Prism	Cylinder	Sphere	Cone

Question 8 (3)

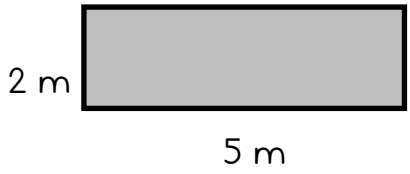
Draw lines to match the base of the 3-D objects with the 2-D shapes.





Question 9 (2)

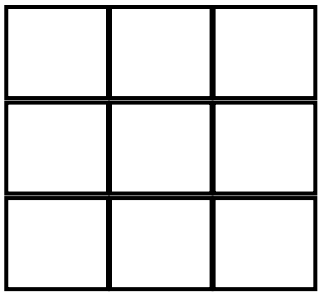
What is the perimeter of this rectangle? Show your number sentence and answer.



_____

Question 10 (1)

What is the area of this square?



_____ tiles

Grade 3 Lesson 33 Written Assessment 2 MEMO

Question	Marks
1.(1 mark per correct answer) a. 53 + 29 = 81 inverse is 81 – 29 = 53 b. 18 x 2 = 36 inverse is 36 ÷ 2 = 18	(2)
2. (1 mark for correct answer and 1 mark for working – any correct working accepted) 72 ÷ 3 = 60 ÷ 3 + 12 ÷ 3 = 20 + 4 = 24	(2)
3. (1 mark per correct answer and 1 mark for working) a. = (40 + 5) ÷ 5 = (40 ÷ 5) + (5 ÷ 5) = 8 + 1 = 9 b. There were no cakes left for her.(1 mark)	(3)
4.(1 mark per correct answer) a. Two b. Eighths c. Four d. one half	(4)
5.(1 mark per correct answer) a. 5 b. one quarter	(2)
6. (1 mark per correct answer) a. 6 b. 12	(2)
7. (1 mark for each correct drawing) Learners must draw: Any box  any cylinder  any ball  any cone 	(4)
8. (1 mark for each pair of correctly matched shapes) 	(3)
9. (1 mark for the correct answer and 1 mark for the working) 2 m + 2 m + 5 m + 5 m = 14 m	(2)
10. (1 mark per correct answer) 9 tiles	(1)

Date:

Lesson Topic: Perimeter and Area

Teacher's notes

CAPS Topics:1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 4.6 Area

Lesson vocabulary: Perimeter, area, distance, comparisons, formal units, 2-D shapes, 3-D objects

Prior knowledge

In Grade 3 Term 3 the learners should have learnt how to:

- Investigate the distance around 2-D shapes and 3-D objects using direct comparisons or informal units.

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 50s between 0 and 1 000, e.g. 750, 700, 650 …

Mental maths activity - 10 minutes

	Calculate the following:	**Answer**		Calculate the following:	**Answer**
1.	20 – 6+ 5 =	19	6.	19 + 5 – 6 =	18
2.	16– 6+ 5 =	15	7.	13+ 5 – 6 =	12
3.	12– 6+ 5 =	11	8.	17+ 5 – 6 =	16
4.	9– 6+ 5 =	8	9.	20+ 5 – 6 =	19
5.	18– 6+ 5 =	17	10.	25+ 5 – 6 =	24

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Square and rectangular shaped objects from the classroom, slates/white boards, square cut outs from lesson 32

Concepts

- Investigate the distance around 2-D shapes and 3-D objects using direct comparisons or informal units.
- Investigate the area using tiling.

Activity 1: Work in groups of four.

- Give each group some objects from the classroom that resemble squares, triangles and rectangles.
- Ask the learners to use their rulers to measure the perimeter of the objects.
- They can write their answers on their slates/white boards.
- Swop the objects between the groups.
- When all the groups have had a chance to measure all the objects, let the groups compare their answers.

Activity 2: Use the square cut outs from lesson 32.

- Give the groups different size cuts outs to of which they must find the area.
- Learners should estimate the area of each of the shapes and write their estimates on their slates.

Date:

- Measure the area of each cut out shape using the paper tiles. (*Lay out the tiles on the shapes and count how many tiles it takes to cover the shape completely. There should be no gaps between the tiles and no overlapping.*)
- Compare the measured tile amounts with the estimates and discuss.
- The groups can compare their answers as soon as everybody is finished.

Remediation: Let the learners use their cut out squares. Give them different size squares and rectangles. Ask them to pack the cut out squares on the shapes to see what the area of each shape is.

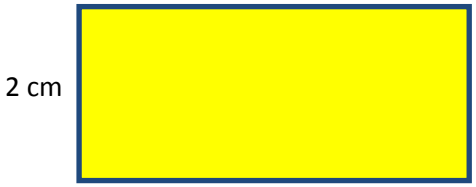
Enrichment: See Enrichment Activity Cards

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

Do the following questions in your maths workbook.

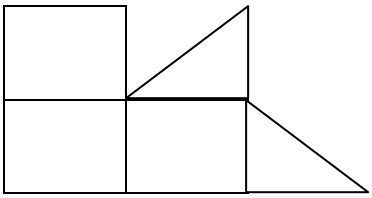
1. What is the perimeter of the shapes? Use your rulers to measure the sides.

Perimeter = _____(18 cm)

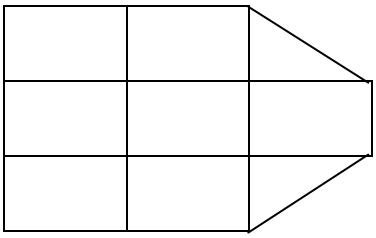


Perimeter = _____ (14 cm)

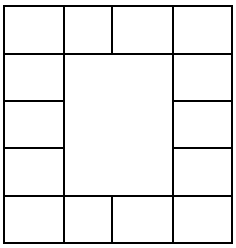
2. What is the area of these figures? Use the tiles to count the units.



(4) tiles



(8) tiles



(20) tiles

5. Homework activity – 5 minutes

No homework.

Reflection on lesson:

Date:

Lesson Topic: 2-D Shapes

Teacher's notes

CAPS Topics:1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 3.3 2-D shapes

Lesson vocabulary: Shapes, rectangles, circles, triangles, squares, straight sides, round sides

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Recognise and name 2-d shapes: circles, triangles, squares, rectangles.
- Describe, sort and compare 2-D shapes in terms of: size, colour, shape, straight sides, round sides.

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 50s between 0 and 1 000, e.g. 600, 650, 700 …
- Count forwards in 50s 7 steps from 250. How far did you count?

Mental maths activity - 10 minutes

	Calculate the following:	**Answer**		Calculate the following:	**Answer**
1.	40 ÷ 10 = ...	4	6.	10 ÷ 10 = ...	1
2.	20 ÷ 10 = ...	2	7.	50 ÷ 10 = ...	5
3.	60 ÷ 10 = ...	6	8.	80 ÷ 10 = ...	8
4.	90 ÷ 10 = ...	9	9.	100 ÷ 10 = ...	10
5.	30 ÷ 10 = ...	3	10.	70 ÷ 10 = ...	7

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Plastic/paper shapes –circles, squares, rectangles and triangles, 3 square pieces of paper per learner for Homework

Concepts

- Recognise and name 2-D shapes: circles, triangles, squares, rectangles.
- Describe, sort and compare 2-D shapes in terms of: shape, straight sides, round sides.

Activity 1: **Learners work in pairs**

- Give each group plastic/paper shapes – triangles, rectangles, circles and squares.
- Ask them to name each shape.
- Ask them to say if the shape has round or straight sides.
- Ask them to group them into two groups – straight sides and round sides.

Activity 2: Learners work in pairs

1. Draw a triangle. Draw three more, but all should look different. Discuss with your partner what is different about each one.

Date:

2. Draw a rectangle. Draw three more, but all should look different. Discuss with your partner what is different about each one.
3. Draw a square. Draw three more, but all should look different. Discuss with your partner what is different about each one.
4. Draw a square. Draw three more, but all should look different. Discuss with your partner what is different about each one.

Remediation: Give each learner a circle, square, rectangle and triangle. Ask them to take each one on its own and to feel the sides. *What is the difference between feeling a circle and a rectangle?* (When tracing your finger around the sides of a circle you don't have to stop at a corner, like you have to do with a square.)

Enrichment: See Enrichment Activity Cards

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

Do the following questions in your DBE Workbook.

Complete DBE Worksheet 123, pg. 122.

5. Homework activity – 5 minutes

Do the following questions in your homework book.

1. Draw and name this shape:  (square) It has _____ _____(four straight) sides.
2. Draw and name this shape:  (circle) It has _____ (round) sides.
3. Use your 3 square pieces of paper. Fold each one twice to make a different shape (rectangle, triangle, square). Stick them in your book.

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, o'clock, quarter, past/to, half, hour, length of time, minutes, analogue clock, and digital clock.

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Tell 12-hour time in hours, half hours and quarter hours on analogue clocks.
- Use clocks to calculate length of time in hours or half hours.

Assessment

Formal Task 2 Activity 3: Practical Assessment. Assess all learners today using the observation criteria.

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 25s from any multiple between 0 and 1 000, e.g. 400, 425, 450…

Mental maths activity - 10 minutes

	Calculate the following:	**Answer**		Calculate the following:	**Answer**
1.	30 ÷ 10 = ...	3	6.	10 ÷ 10 = ...	1
2.	70 ÷ 10 = ...	7	7.	50 ÷ 10 = ...	5
3.	20 ÷ 10 = ...	2	8.	100 ÷ 10 = ...	10
4.	80 ÷ 10 = ...	8	9.	60 ÷ 10 = ...	6
5.	40 ÷ 10 = ...	4	10.	0 ÷ 10 = ...	0

2. Homework– 15 minutes

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

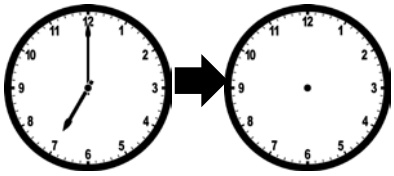
3. Lesson content – concept development – 30 minutes

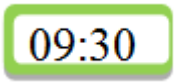
Resources: Draw the analogue clocks on the board before he lesson commences.

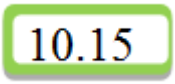
Concepts

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

Activity 1: Draw clocks on the board to show the following:





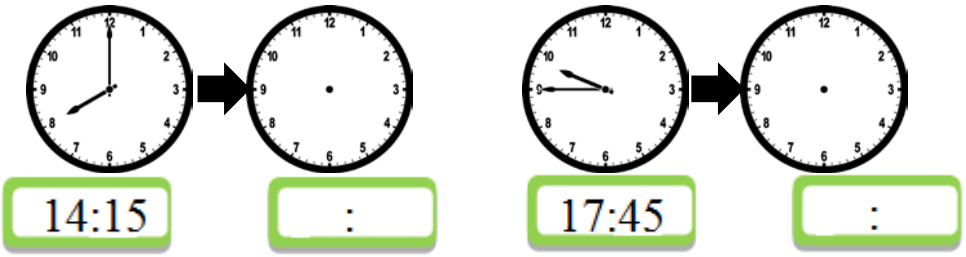


- I woke up at seven o'clock and had breakfast at half past seven.
- I left home at half past nine. I got back home at 10.15.
- Use the clocks to work out the time passed. Use analogue and digital clocks.
- *How much time passed between when I woke up and had breakfast?* (15 min)
- *How much time passed while I was out?* (45 min)

Date:

Activity 2: Draw clocks on the board and ask the learners to give you a sentence to describe what happened between two given times.

- *We went to the shops at eight o'clock. We got home at _____.*
- *First break started at quarter to ten and finished at _____.*
- Do other examples showing different lengths of time. Use analogue and digital clocks.

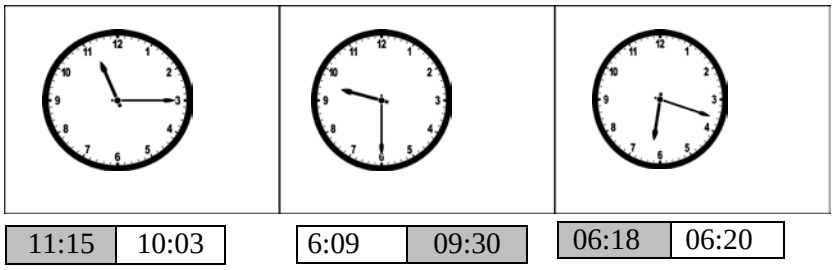


Remediation: Draw clocks on the board with the times filled in in both the clocks. Give the children the sentence, e.g. I wake up at seven o'clock and eat breakfast at half past seven. Let them look at the hands on the clock. Ask them how long it is from seven o'clock to half past seven.
Enrichment: See Enrichment Activity Cards

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

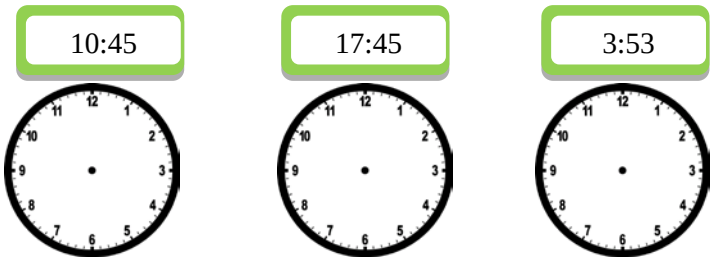
Do the following questions in your maths book.

1. Colour the correct answer:



11:15	10:03	6:09	09:30	06:18	06:20

2. Indicate the given digital times on the analogue clocks below:



3. Draw clocks to show 3 o'clock and half past four in the afternoon and tell a story to go with these times.
4. How much time passed between 3 o'clock and half past four in the afternoon?

5. Homework activity – 5 minutes

Do the following questions in your homework book.

1. Our maths class started at eight o'clock and finished at quarter to ten. Show both of the times on an analogue and a digital clock.
2. Draw digital clocks to show 10:15 and 11:00 and tell a story to go with them.
3. How much time passed between 10:15 and 11:00?

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 Mathematics4.1 Time

Lesson vocabulary: Time, half an hour, quarter of an hour, difference in time, analogue, digital clocks

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Tell 12-hour time in hours, half hours and quarter hours on analogue clocks.
- Use clocks to calculate length of time in hours or half hours.

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 25s from any multiple between 0 and 1 000, e.g. 875, 850, 825…
- Count forwards in 25s 5/3/10 steps from 200. How far did you count?

Mental maths activity - 10 minutes

	Calculate the following:	**Answer**		Calculate the following:	**Answer**
1.	..... ÷ 10 = .	90	6.	... ÷ 10 = 5	50
2.	..... ÷ 10 = 2	20	7.	... ÷ 10 = 7	70
3.	..... ÷ 10 = 1	10	8.	... ÷ 10 = 3	30
4.	..... ÷ 10 = 6	60	9.	...÷ 10 = 8	80
5.	..... ÷ 10 = 0	00	10.	... ÷ 10 =10	100

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Slates/white boards, analogue and digital clocks

Concepts

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

Activity 1: Do the following on the board:

- Give each learner a slate/white board.
- Draw a clock showing 10 o'clock on the board.
- Ask the learners to draw a clock showing a quarter of an hour before ten o'clock.
- As soon as they are done, let them hold up their slates/white board to show their answer.
- Ask one of the learners to come to the board and draw the correct answer for the other learners to check their answers.
- Do the same for the following:
    - Half past ten. Pay particular attention to the position of the hour hand which should not be on the ten but half way between the ten and eleven.

- A quarter to eleven. Pay particular attention to the position of the hour hand which should not be on the ten but three quarters of the way between the ten and eleven.
- What was the time half an hour before ten o'clock?
- What was the time a quarter of an hour after ten o'clock?
- What was the time a half an hour after ten o'clock?

Remediation: Draw two clocks with different times on it and ask: Look at the two clocks. *What is the difference in time?* Make your own word sum that will go with each. E.g. half past eight and nine o'clock - We started with our mathematics worksheet at half past eight and completed it by nine o'clock. It took us half an hour.

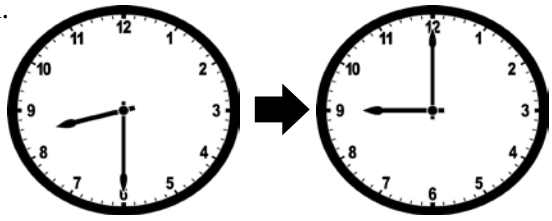
Enrichment: See Enrichment Activity Cards

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

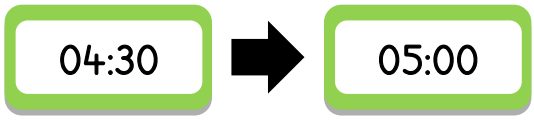
Do the following questions in your maths book.

1. Look at the two clocks. What is the difference in time? Make your own story that will go with each.

a.



b.



2. I left school at 14:15. I arrived at home at 14:45. How long did it take me to get home? (30 minutes)
3. Mary reads one page in 15 minutes. How many pages will she read in two hours? (8 pages)

5. Homework activity – 5 minutes

Do the following questions in your DBE Workbook.

Complete DBE Worksheet 106, pg. 88

Reflection on lesson:

Date:

Lesson Topic: Mass

Teacher's notes

CAPS Topics:1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 4.3 Mass

Lesson vocabulary: Mass, grams, kilograms, heavier, lighter, scale, compare, order and record.

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Compare, order and record the mass of commercially packaged objects which have their mass stated in kilograms.
- Read their mass on bathroom scales.

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 25s from a multiple between 0 and 1 000, e.g. 750, 725, 700....

Mental maths activity - 10 minutes

	Calculate the following:	**Answer**		Calculate the following:	**Answer**
1	..... ÷ 10 = .8	80	6.	... ÷ 10 = 1	10
2	..... ÷ 10 = 4	40	7.	... ÷ 10 = 7	70
3	..... ÷ 10 = 9	90	8.	... ÷ 10 = 2	20
4	..... ÷ 10 = 5	50	9.	...÷ 10 = 10	100
5	..... ÷ 10 = 3	30	10.	... ÷ 10 = 6	60

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Pictures of a range of products with a mass of 1 kg, 2 kg, 3 kg, products with masses in grams, bathroom scale

Concepts

- Compare, order and record the mass of commercially packaged objects which have their mass stated in kilograms.
- Read their mass on bathroom scales.

Activity 1:

Show the learners the bathroom scale that you have brought from home.

- Discuss the calibration and what types of mass you can measure using a bathroom scale.
- Allow a few learners who would like to come and stand on the scale to come and find out their mass in kilograms.
- Let the learners look around the class and see what other items they could find the mass of using the bathroom scale. E.g. items such as a heavy school suit bag, a pile of maths books. (items must be able to balance on the scale and not cover the mass meter)
- Discuss what items one could not find the mass of using the bathroom scale. *Why not?* (Lighter items, the bathroom scale measures in kilograms.)

Date:

Activity 2:

1. Place a range of products that have a mass of 1, 2 or 3 kg and some products that have a mass measured in grams on a table in front of the class, e.g.:

2. Hold up a 1 kg product and a product with its mass in grams e.g. 1 kg Skip and 500 g Omo. Show and read the mass to the class. Ask *Which is lighter – 500 g Omo or 1 kg Skip?* Invite a few learners to hold the items and feel the mass.
   - Ask *Why is the 500 g lighter than the 1kg?* (Even though the number 500 is a bigger number than 1, the grams are very much smaller than kilograms. 1000 grams make one kg. Therefore 500 g weighs less than 1 000 g which is the same as 1 kg.)

3. Do the same with various other options and combinations e.g. Provita and Red Label.

4. Ask learners to come up with suggestions of items which can provide a combined mass of 1/2/3 kg items. They may use single or multiple items e.g. 8 packets of Provita have the same mass as 2 kg Skip..

Remediation: Give the learners a bathroom scale to weigh items in the class, like book bags. First show them the scale. Show learners how it works by pressing on the scale so that the dial moves. Make sure learners understand where zero is.

Enrichment: See Enrichment Activity Cards

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

Do the following questions in your DBE Workbook.

Complete DBE Worksheet 102a, pg. 79.

5. Homework activity – 5 minutes

Do the following questions in your DBE Workbook.

1. Complete DBE Worksheet 102b, pg. 78.

Reflection on lesson:

Date:

Lesson Topic: Capacity

Teacher's notes

CAPS Topics:1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 4.4 Capacity

Lesson vocabulary: Capacity, litres, millilitres, most, least, more than, less than, compare, order and record , standard cup, tea spoon

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Estimate, measure, compare, order and record the capacity of objects by measuring in litres using bottles with a capacity of 1 litre and a measuring jug which has numbered calibration lines in litres.
- Compare, order and record the capacity of commercially packaged objects whose capacity is stated in litres.

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 25s from any multiple between 0 and 1 000, e.g. 125, 150, 175.../ 875, 850, 825…
- Count forwards in 25s 7 steps from 750. How far did you count?

Mental maths activity - 10 minutes

	Calculate the following:	**Answer**		Calculate the following:	**Answer**
1.	4 x 10 =	40	6.	40 ÷ 10.= ...	4
2.	4 x ...= 40	10	7.	40 ÷ 4 = ...	10
3.	...x 10 =40	4	8.	10 x 4 =	40
4.	40 ÷...= 4	10	9.	Half of 40	20
5.	... ÷ 10.= 4	40	10.	Double 40	80

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Pictures of products on which you can see the capacity, 250 ml cup, teaspoon, an empty 1litre bottle

Concepts

- Compare, order and record the capacity of commercially packaged objects whose capacity is stated in litres.
- Know that a standard cup is 250 millilitres
- Know that a teaspoon is 5 millilitres.

Date:

Activity 1: Work in groups of four.

- Give each group pictures of products on which they can see the capacity, e.g.

- Ask the learners to order the containers from the one that holds the least to the one that holds the most.

Activity 2: Answer the following questions (based on your pictures).

- The capacity of the Sunlight Liquid container is _____(5 litres).
- The capacity of the milk container is _____.(1 litre).
- The capacity of the Vanish container is _____(1 litre).
- The capacity of the Dettol container is _____.(2 litres).
- The capacity of the green milkshake bottles is _____ .(500 ml).
- The capacity of the Fanta container is _____.(340 ml).
- The capacity of the _____(Sunlight Liquid) container is largest. It contains ___ (4 litres) more than the Vanish.

Activity 3: Calculate:

Talk about filling from the smaller container into the bigger container. When you do this work out how many times you will need to pour from the smaller one into the bigger one in order to fill it.

Examples: (use your product pictures and measurements if they are different)

How many milkshake bottles (500ml) will fill

- *The Sunlight Liquid container?* (5 litres is 5 000 ml, need 10); *The milk container?* (2)

How many standard cups (250ml) will fill

- *The Vanish container?* (4) , *The Dettol container?* (8)

Remediation: Show learners a standard cup. Ask them how much it can hold. (250 ml) A standard cup can hold 250 ml. Demonstrate to learners that four standard cups will fill a 1 litre container. Empty the 1 litre container. Pour in one cup of liquid. Is the bottle almost filled up to 1 litre? (No) Pour in another cup of liquid.The 1 litre bottle is now filled halfway.Pour in another cup of liquid. Is the bottle almost filled up to 1 litre? (No – needs one more cup) Revise that a teaspoon holds 5 ml.

Enrichment: See Enrichment Activity Cards

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

Do the following questions in your DBE Workbook.

1. Complete DBE Worksheet 127, pgs. 130 and 131.

5. Homework activity – 5 minutes

No homework

Reflection on lesson:

Date:

Lesson Topic: Mass and Capacity Revision

Teacher's notes

CAPS Topics:1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 4.4 Capacity

Lesson vocabulary: Mass, capacity, measure, difference, compare, order and record, litres, kilograms

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Compare, order and record the mass of commercially packaged objects which have their mass stated in kilograms.
- Estimate, measure, compare, order and record the capacity of objects by measuring in litres using bottles with a capacity of 1 litre and a measuring jug which has numbered calibration lines in litres.
- Compare, order and record the capacity of commercially packaged objects whose capacity is stated in litres.

Assessment

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

1. Mental maths

Counting – 5 min

- Count forwards in 20s from any multiple between 0 and 1 000, e.g. 400, 420, 440…
- Count 4/6/8 steps forwards in 20s steps from 200. How far did you count?

Mental maths activity - 10 minutes

	Calculate the following:	**Answer**		Calculate the following:	**Answer**
1.	5 x 10 =	50	6.	7 x 7 =	49
2.	3 x 11 =	33	7.	6 x 3 =	18
3.	12 x 4 =	48	8.	4 x 9 =	36
4.	7 x 8 =	56	9.	5 x 9 =	45
5.	6 x 4 =	24	10.	4 x 8 =	32

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Plastic cup (250 ml), empty plastic 2 litre bottle, extra container – per group, bathroom scale.

Concepts

- Compare, order and record the mass of commercially packaged objects which have their mass stated in kilograms
- Compare, order and record the capacity of commercially packaged objects whose capacity is stated in litres.

Activity 1: Work in groups of four – preferably outside

- Give each group a plastic 250 millilitre measuring cup, a plastic 2 litre bottle and water in an extra container.

Date:

- Ask the learners to answer the following questions, using their cups and bottles to help them to get the answer.
- *How much water can a standard cup hold?* (250 ml)
- *How many cups of water to half fill the bottle?* (4)
- *How many cups to fill the bottle?* (8)
- *How much is half of the bottle?* (1 litre)
- *How much is 2 cups of water?* (500ml)

Activity 2: Still working outside use a bathroom scale to do this activity

- Ask each group to send one of the group each time, to find the mass of the following:
  - 1 litre of water
  - 1 cup of water
  - 2 litres of water
- Explain to the learners that although we measure liquid in litres of millilitres, the containers still have mass when it is full or half full.
- We can say that there are 2 litres of water in the bottle. When we find its mass it has a mass of .....kg. .
  Let learners measure the mass of 1 litre, two litres and three litres of water. They record their findings.

How much water	
Capacity	**Mass**
1 litre	
2 litres	
3 litres	
4 litres	
What do you notice?	

This is a good exercise to do, to show the learners the relationship between mass and capacity of water.

Remediation: Show learners a standard cup. Ask them how much it can hold. (250 ml) A standard cup can hold 250 ml. Demonstrate to learners that four standard cups will fill a 1 litre container. Empty the 1 litre container. Pour in one cup of liquid. Is the bottle almost filled up to 1 litre? (No) Pour in another cup of liquid.The 1 litre bottle is now filled halfway. Pour in another cup of liquid. Is the bottle almost filled up to 1 litre? (Yes) Revise that a teaspoon holds 5 ml.

Enrichment: See Enrichment Activity Cards

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

Do the following questions in your DBE Workbook.

1. Complete DBE Worksheet 102b, pgs. 80 and 81.

5. Homework activity – 5 minutes

Do the following questions in your DBE workbook.

1. Complete DBE Worksheet 106, pg. 89

Reflection on lesson:

Date:

Lesson Topic: Length - Revision

Teacher's notes

CAPS Topics:1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 4.2 Length

Lesson vocabulary: Length, centimetres, metres, compare, measuring tape, longer, shorter, estimate, measure, compare, order, record, standard unit of length.

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Estimate, measure, compare, order and record length using metres and the standard unit of length.

Assessment

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

1. Mental maths

Counting – 5 min

- Count backwards in 20s from any multiple between 0 and 1 000, e.g. 1000, 980, 960…
- Count 8/10/12 steps forwards in 20s steps from 300. How far did you count?

Mental maths activity - 10 minutes

	Calculate	**Answer**			**Answer**
1.	20 ÷ 2 =.....	10	6.	20÷ 10 =.....	2
2.	20 ÷ 5 =.....	4	7.	0 ÷ 20 =.....	0
3.	20 ÷ 1 =.....	20	8.	20 -.....= 7	13
4.	20 ÷ 4 =.....	5	9.	Half of 20	10
5.	20 ÷ 20 =.....	1	10.	Double 20	40

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Measuring tapes, rulers

Concepts

- Estimate, measure, compare, order and record length using metres and the standard unit of length.
- Estimate, measure and record lengths in centimetres using a ruler.

Activity 1: Ask the learners to take out their rulers and DBE Workbooks.

- Ask the learners to measure the length of their DBE Workbooks, using their rulers.
- Measure the width of your DBE Workbook.
- Measure the block in which you wrote your name on the front cover of your DBE Workbook,

Activity 2: Work in groups of four – measure in metres

- Give each group a measuring tape and tell them what to measure. E.g. the perimeter of the carpet, the height of the door frame, the width of the window frame, height of the board, etc.
- Each group will get a chance to measure all the items.
- The groups can now compare their measurements.

Date:

Remediation: Ask the learners if they can remember where to start measuring when using their rulers and measuring tapes. (Remember to start measuring from zero (0). Give them smaller objects to measure with their rulers and the larger items to measure, using the measuring tape.

Enrichment: See Enrichment Activity Cards

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

Do the following questions in your DBE Workbook.

Complete DBE Worksheet 114, pgs. 104 and 105.

5. Homework activity – 5 minutes

Do the following questions in your homework book.

1. Arrange these numbers from biggest to smallest
    a. 900, 908, 809 (908, 900, 809)
    b. 312, 321,30 2 (321, 312, 302)
2. What will you use to measure the length of your pencil? _____ (ruler)
3. What will you use to measure the length of your bed? _____ (measuring tape)
4. Draw and label a line that is 10 cm long.
5. Draw and label a line that is 4 cm longer than the first line.
6. Draw and label a line that is shorter than both these lines.

Reflection on lesson:

Date:

Lesson Topic: Data

Teacher's notes

CAPS Topics:1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 5.6 Analyse and interpret data

Lesson vocabulary: Data, table, frequency table, tally table, bar graph, pictograph, analyse, represent, one-to-one correspondence.

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Analyse data from representations
- Represent data in a pictograph with one-to-one correspondence.

Assessment

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

1. Mental maths

Counting – 5 min

- Count backwards in 20s from any multiple between 0 and 1 000, e.g. 940, 920, 900, ...
- Count 10/12/13 steps forwards in 20s steps from 500. How far did you count?

Mental maths activity - 10 minutes

	Calculate	**Answer**		Calculate	**Answer**
1.	6 ÷ 2 = ...	3	6	4÷ 2 = ...	2
2.	2÷ 2 = ...	1	7	16÷ 2 = ...	8
3.	14÷ 2 = ...	7	8	18÷ 2 = ...	9
4.	20÷ 2 = ...	10	9	10÷ 2 = ...	5
5.	8÷ 2 = ...	4	10	12÷ 2 = ...	6

2. Homework– 15 minutes

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

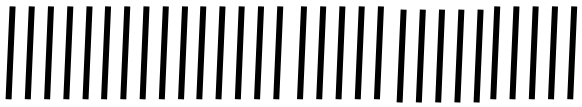
3. Lesson content – concept development – 30 minutes

Resources: Slates/white boards

Concepts

- Analyse data from representations
- Represent data in a pictograph with one-to-one correspondence.
- Represent data in a bar graph.

Activity 1: **Draw the following on the board:**

- 

- Ask the learners to count how many lines there are. (30)
- Then draw this on the board:

Date:

- Ask them to count how many lines there are. (30)
- Which was easier to count? (second group)
- Explain to them that 4 lines with the line through it, is 5. (this is a system using a tally to count)

Activity 2: Give the learners slates/white boards.

- Draw the following tally table on your slates/white boards:
- The learners that visited the aquarium counted this:

Sea creatures	
Sharks	𝍸 𝍸
Fish	𝍸 𝍸 𝍸 𝍸
Jelly-fish	𝍸
Sea stars	𝍸
Stingrays	||

Remediation: Draw a pictograph and bar graph with the information collected. Ask the learners the following questions: *Which sea creature did you see the most of? Which sea creature did you see the least of?*

Enrichment: See Enrichment Activity Cards

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

Do the following questions in your maths book.

1. Use the information on your slate/whiteboard to draw frequency table in your book

Sea creatures	
Sharks	(10)
Fish	(20)
Jelly-fish	(5)
Sea stars	(5)
Stingrays	(2)

2. Answer the following questions:

a) How many sharks did they see? (10)
b) How many fish did they see? ____ (20)
c) How many jelly-fish did they see? _____ (5)
d) How many sea stars did they see? _____ (5)
e) How many stingrays did they see? _____ (2)
f) What type of sea creature did they see the most of? _____ (fish)

Date:

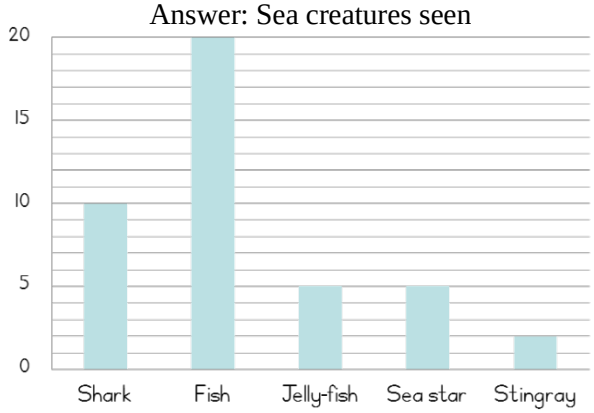
5. Homework activity – 5 minutes

Do the following questions in your homework book.

1. Draw a bar graph using this information:

Sea creatures	
Sharks	(10)
Fish	(20)
Jelly-fish	(5)
Sea stars	(5)
Stingrays	(2)

Answer: Sea creatures seen



Reflection on lesson:

Date:

Date:

Lesson Topic: Data

Teacher's notes

CAPS Topics:1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 5.6 Analyse and interpret data

Lesson vocabulary: Data, pictograph, bar graph, represent, analyse, information

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Analyse data from representations
- Represent data in a pictograph with one-to-one correspondence.

Assessment

No assessment today

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 20s from any multiple between 0 and 1 000, e.g. 400, 420, 440…../920, 900, 880.....
- Count forwards and backwards in 100s between 0 and 1 000, e.g. 500, 600, 700 …

Mental maths activity - 10 minutes

	Calculate the following:	**Answer**		Calculate the following:	**Answer**
1	__ x 10 =50	5	6.	__ x 10 = 90	9
2	__ x 10 =30	3	7.	__ x 2 =18	9
3	__ x 2 = 12	6	8.	__ x 2 = 14	7
4	__ x 2 = 20	10	9.	__ x 10 = 70	7
5	__ x 10 = 60	6	10.	__ x 2 = 0	0

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: Slates/white boards

Concepts

- Analyse data from representations
- Represent data in a pictograph with one-to-one correspondence.
- Represent data in a bar graph.

Activity 1: Write the following information on the board:

- This is what the people ordered at a restaurant on Friday night.
  8 hamburgers, 6 hot dogs, 10 pap and meat, 15 rice and chicken and 11 curry pie.
- Draw a table on your slates/white boards to show this data.
- Now look at your table and answer these questions:
  - *How many people chose rice and chicken?* ____ (15
  - *How many people chose curry pie?* _____ (11)
  - *What is the most popular meal?* _____ (rice and chicken)
  - *What is the least popular meal?* _____ (hotdogs)

Date:

Remediation: Draw a pictograph and bar graph with the information collected.Ask the learners the following questions: What was the most popular meal? What was the meal that was the least popular?

Enrichment: See Enrichment Activity Cards

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

Answer the following questions in your maths book.

1. Draw and complete a pictograph, using the information in your table on your slate:

Key: (Favourite meals)

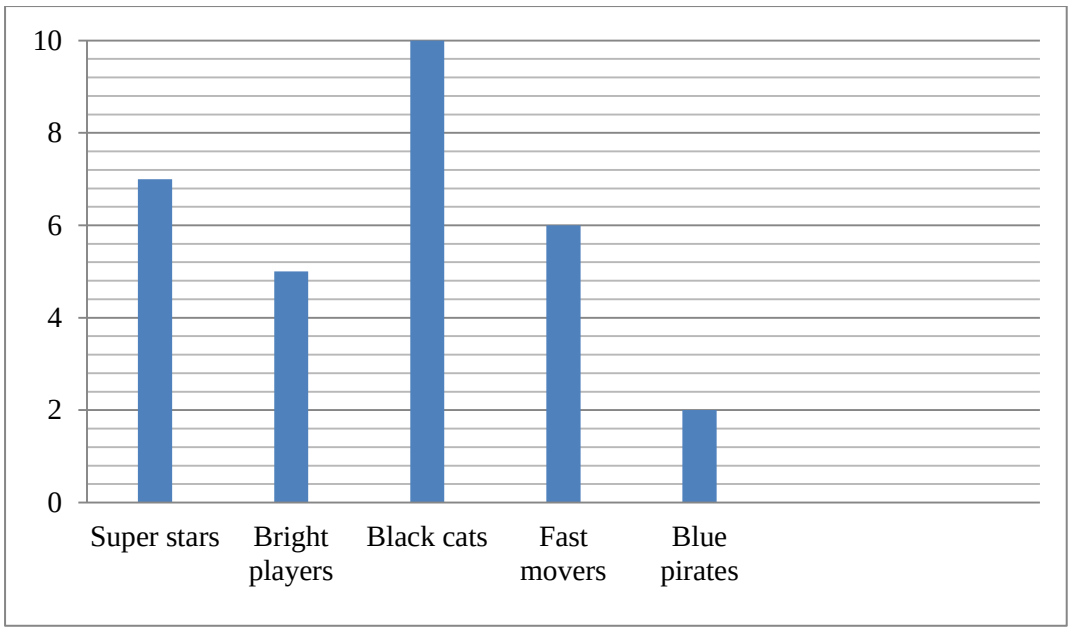
20					
15					
10					
5					
	(hamburger)	(hotdog)	(pap and meat)	(rice and chicken)	(curry pie)

5. Homework activity – 5 minutes

Do the following questions in your homework book.

1. Answer the questions using the bar graph below:

Soccer matches won



2. How many matches did each of these teams win?
   Super stars (7) ____ Bright players (5) ____ Black cats (10) _____
   Fast movers (6) _____ Blue pirates (2) _____

3. Who won the most matches? _____ (Black cats)
   Who won the least matches? _____ (Blue pirates)
   Who came second? _____ (Super stars)
   Who came second last?_____ (Bright players)
4. What is the difference in wins between Super stars and Black cats? _____ (3)

Reflection on lesson:

Date:

Lesson Topic: Number patterns

Teacher's notes

CAPS Topics:1.1 Count objects 1.2 Count forwards and backwards 1.16 Mental Mathematics 2.2 Number patterns

Lesson vocabulary: Number patterns, multiples, forwards, backwards, sequence, extend

Prior knowledge

In Grade 2 the learners should have learnt how to:

- Copy, extend and describe simple number sequences to at least 200.
- Sequences should show counting forwards and backwards in 1s from any number and 2s, 3s, 4s, 5s and 10s from any multiple between 0 and 200.

Assessment

No assessment today

1. Mental maths

Counting – 5 min

- Count forwards and backwards in 20s from any multiple between 0 and 1 000, e.g. 700, 720, 740…../280, 260, 240.....
- Count 5/10 steps forwards and backwards in 20s steps from 500. How far did you count?

Mental maths activity - 10 minutes

	Calculate the following:	**Answer**		Calculate the following:	**Answer**
1	.... x 10 = 70	7	6.	.... x 10 = 50	5
2	0 x 10 = ...	0	7.	... x 3 = 0	0
3	9 x .... = 45	5	8.	6 x .... = 24	4
4	....÷3 = 11	33	9.	....÷5 = 8	40
5	28 ÷4 =	7	10.	36 ÷ 4 =	9

2. Homework– 15 minutes

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

3. Lesson content – concept development – 30 minutes

Resources: 900 – 1 000 number board (see printable resources), counters

Concepts

- Copy, extend and describe simple number sequences to at least 1 000.
- Sequences should show counting forwards and backwards in 1s from any number and 2s, 3s, 4s, 5s and 10s from any multiple between 0 and 200.
- 20s, 25s, 50s, 100s to at least 1 000.

Activity 1: Give each learner a 900 - 1 000 number board and counters.

- Ask them to use their counters to show the multiples of fives on their number board, starting at 901. Ask if they can see the pattern. (901, 906, 911, 916, 921, 926, … - the numbers end in a 1 or a 6 each time)
- Show the multiples of fours, starting at 903. Ask if they can see the pattern.
- Show the multiples of threes, starting at 902. Ask if they can see the pattern.

Date:

Remediation: Draw number lines on the board. Make hoops (jumps) while counting in twos. Ask the learners what number is between 900 and 902, 902 and 904, etc.

Enrichment: Enrichment Activity Cards

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

Do the following questions in your DBE Workbook.

1. Complete DBE Worksheet 113, pgs. 102 and 103.
2. Complete DBE Worksheet 118, pgs. 112 and 113.
3. Complete DBE Worksheet 120, pgs. 116 and 117.

5. Homework activity – 5 minutes

No homework

Reflection on lesson:

Mental Mathematics Grade 3

Lesson 5	Lesson 6	Lesson 7	Lesson 8	Lesson 9
Monday	Tuesday	Wednesday	Thursday	Friday
Date:	Date:	Date:	Date:	Date:
Answer the following: • What is 1 more than 736? • What is 1 less than 702? • What is 2 more than 636? • What is 2 less than 502? • What is 3 more than 736? • What is 3 less than 702? • What is 4 more than 636? • What is 4 less than 782? • What is 10 more than 696? • What is 10 less than 799?	Give the number between: • 753 and 755 • 120 and 122 • 445 and 447 • 154 and 156 • 170 and 172 • 730 and 732 • 456 and 458 • 114 and 116 • 102 and 104 • 510 and 512	Answer the following: • What is 10 more than 521? • What is 20 more than 521? • What is 30 more than 521? • What is 40 more than 521? • What is 50 more than 521? • What is 10 less than 521? • What is 20 less than 521? • What is 30 less than 521? • What is 40 less than 521? • What is 50 less than 521?	Calculate • What is 2 more than 700? • What is 2 less than 700? • What is 4 more than 700? • What is 4 less than 700? • What is 5 more than 700? • What is 5 less than 700? • What is 10 more than 700? • What is 10 less than 700? • What is 20 more than 700? • What is 20 less than 700?	• What is 10 more than 750? • What is 11 more than 750? • What is 10 less than 750? • What is 11 less than 750? • What is 12 more than 750? • What is 20 more than 750? • What is 100 more than 750? • What is 110 more than 750? • What is 120 more than 750? • What is 130 more than 750?

Lesson 10	Lesson 11	Lesson 12	Lesson 13	Lesson 14
Monday	Tuesday	Wednesday	Thursday	Friday
Date:	Date:	Date:	Date:	Date:
Which number is the biggest? • 145, 154, 150 • 120, 122, 102 • 800, 700, 600 • 321, 312, 333 • 102, 103, 101 Which number is the smallest? • 154, 120, 145 • 130, 152, 153 • 48, 47, 46 • 98, 87, 89 • 100, 102, 105	Give the number between: • 145 and 147 • 350 and 352 • 123 and 125 • 788 and 790 • 654 and 656 • 130 and 132 • 102 and 104 • 98 and 100 • 555 and 557 • 111 and 113	What is the smallest number? • 120, 125, 110 • 130, 135, 145 • 248, 489, 698 • 122, 578, 10 • 689, 102, 487 • 105, 213, 578 • 487, 458, 132 • 252, 245, 265 • 102, 104, 101 • 301, 105, 605	What is the biggest number? • 120, 125, 110 • 130, 135, 145 • 248, 489, 698 • 122, 578, 10 • 689, 102, 487 • 105, 213, 578 • 487, 458, 132 • 252, 245, 265 • 102, 104, 101 • 301, 105, 605	What is the smallest number? • 784, 874, 478 • 511, 115, 151 • 123, 312, 213 • 702, 207, 720 • 987, 978, 789 What is the biggest number? • 478, 784, 874 • 511, 115, 151 • 123, 312, 213 • 207, 702, 720 • 987, 789, 978

Lesson 15	Lesson 16	Lesson 17	Lesson 18	Lesson 19
Monday	Tuesday	Wednesday	Thursday	Friday
Date:	Date:	Date:	Date:	Date:
Answer the following: • What is 1 more than 799? • What is 1 less than 642? • What is 2 more than 658? • What is 2 less than 789? • What is 3 more than 456? • What is 3 less than 785? • What is 4 more than 487? • What is 4 less than 800? • What is 10 more than 755? • What is 10 less than 723?	What is 100 more than...? • 814 • 206 • 54 • 154 • 754 • 876 • 867 • 786 • 768 • 687	What is 100 less than...? • 376 • 768 • 321 • 453 • 567 • 802 • 971 • 453 • 199 • 567	What is 200 more than...? • 376 • 768 • 321 • 453 • 567 • 265 • 763 • 28 • 706 • 219	Assessment Task 1

Lesson 20	Lesson 21	Lesson 22	Lesson 23	Lesson 24
Monday	Tuesday	Wednesday	Thursday	Friday
Date:	Date:	Date:	Date:	Date:
Calculate the following: • 24 ÷ 8 = • □ ÷ 3 = 8 • 8 x □ =24 • How many tens in 24? • 24 – 8 = • 3 x 8 =□ • 8 + 8 +□=24 • 3 x □ = 24 • How many units in 24? • 24 + 100 =	Calculate the following • 3 multiplied by 8 • 4 times 2 • Three tens • Double 8 • 5 rows of 4 • 20 +19 = • 3 groups of 5 • Half of 20 • 20 + 21= • 17 – 9 =	Calculate the following • 5 multiplied by 8 • 4 times 3 • Seven tens • Double 14 • 3 rows of 4 • 30 + 29 = • 6 groups of 5 • Half of 40 • 15 + 16 = • 25 – 9 =	Calculate the following • 3 multiplied by 8 • 4 times 2 • Three tens • Double 8 • 5 rows of 4 • 6 x 4= • 4 x 6= • 24÷ 6= • 24 ÷ □= 3□ • 50+ □=70	Calculate the following: • 29 + 30 = • 4 groups of 5 • Half of 30 • 21 + 22= • 6 multiplied by 3 • 1 x 20 = • 20 ÷ 5 = • 6 x 0 = • 10 ÷ 2 = • 5 x 3 =

Lesson 25	Lesson 26	Lesson 27	Lesson 28	Lesson 29
Monday	Tuesday	Wednesday	Thursday	Friday
Date:	Date:	Date:	Date:	Date:
Calculate the following: • 1 x 1 = • 1 x 2 = • 2 x 2 = • 2 x 3 = • 3 x 4 = • 3 x 5 = • 3 x 6 = • 4 x 5 = • 5 x 1 = • 10 x 2 =	Calculate the following: • 4 x 2 = • 3 x 2 = • 5 x 2 = • 6 x 2 = • 7 x 2 = • 1 x 20 = • 5 x 4 = • 6 x 3 = • 10 x 2 = • 5 x 3 =	Calculate the following: • 10 x 10 = • 10 x 6 = • 10 x 8 = • 10 x 9 = • 10 x 1 = • 10 x 0 = • 10 x 2 = • 10 x 4 = • 10 x 3 = • 10 x 5 =	Calculate the following: • 1 x 1 = • 4 x 5 = • 5 x 2 = • 3 x 1 = • 7 x 3 = • 3 x 4 = • 2 x 1 = • 8 x 0 = • 9 x 10 = • 6 x 5 =	Calculate the following: • 2 x 10 = • 20 x 2 = • 32 x 2 = • 48 x 2 = • 15 x 3 = • 25 x 4 = • 3 x 30 = • 10 x 5 = • 32 x 1 = • 12 x 0 =

Lesson 30	Lesson 31	Lesson 32	Lesson 33	Lesson 34
Monday	Tuesday	Wednesday	Thursday	Friday
Date:	Date:	Date:	Date:	Date:
Calculate: • 15 – ___ = 12 • 14 – ___ = 4 • 13 – ___ = 12 • 20 – ___ = 13 • 1 – ___ = 1 • 4 – ___ = 1 • 12 – ___ = 6 • 20 – ___ = 15 • 14 – ___ = 6 • 15 – ___ = 10	Calculate the following: • 1 + ___ = 11 • 12 + ___ = 16 • 19 + ___ = 19 • 4 + ___ = 9 • 1 + ___ = 10 • 13 + ___ = 16 • 15 + ___ = 17 • 14 + ___ = 19 • 4 + ___ = 11 • 5 + ___ =11	Calculate the following: • 18 – 8 – 5 = • 17 – 7 – 5 = • 16 – 6 – 5 = • 15 – 5 – 5 = • 14 – 4 – 5 = • 13 – 3 – 5 = • 12 – 2 – 5 = • 11 – 1 – 5 = • 10 – 1 – 5 = • 9 – 1 – 5 =	Assessment Task 2	Calculate the following: • 20 – 6 + 5 = • 16 – 6 + 5 = • 12 – 6 + 5 = • 9 – 6 + 5 = • 18 – 6 + 5 = • 19 + 5 – 6 = • 13 + 5 – 6 = • 17 + 5 – 6 = • 20 + 5 – 6 = • 25 + 5 – 6 =

Lesson 35	Lesson 36	Lesson 37	Lesson 38	Lesson 39
Monday	Tuesday	Wednesday	Thursday	Friday
Date:	Date:	Date:	Date:	Date:
Calculate the following: • 40 ÷ 10 = … • 20 ÷ 10 = … • 60 ÷ 10 = … • 90 ÷ 10 = … • 30 ÷ 10 = … • 10 ÷ 10 = … • 50 ÷ 10 = … • 80 ÷ 10 = … • 100 ÷ 10 = … • 70 ÷ 10 = …	Calculate the following: • 30 ÷ 10 = …. • 70 ÷ 10 = …. • 20 ÷ 10 = …. • 80 ÷ 10 = …. • 40 ÷ 10 = …. • 10 ÷ 10 = …. • 50 ÷ 10 = …. • 100 ÷ 10 = . • 60 ÷ 10 = …. • 0 ÷ 10 = ….	Calculate the following: • …… ÷ 10 = • …… ÷ 10 = 2 • …… ÷ 10 = 1 • …… ÷ 10 = 6 • …… ÷ 10 = 0 • … ÷ 10 = 5 • … ÷ 10 = 7 • … ÷ 10 = 3 • …÷ 10 = 8 • … ÷ 10 =10	Calculate the following: • …… ÷ 10 = 8 • …… ÷ 10 = 4 • …… ÷ 10 = 9 • …… ÷ 10 = 5 • …… ÷ 10 = 3 • … ÷ 10 = 1 • … ÷ 10 = 7 • … ÷ 10 = 2 • …÷ 10 = 10 • … ÷ 10 = 6	Calculate the following: • 4 x 10 = • 4 x … = 40 • … x 10 = 40 • 40 ÷ … = 4 • … ÷ 10.= 4 • 40 ÷ 10.= … • 40 ÷ 4 = …. • 10 x 4 = • Half of 40 • Double 40

Lesson 40	Lesson 41	Lesson 42	Lesson 43	Lesson 44
Monday	Tuesday	Wednesday	Thursday	Friday
Date:	Date:	Date:	Date:	Date:
Calculate the following: • 5 x 10 = • 3 x 11 = • 12 x 4 = • 7 x 8 = • 6 x 4 = • 7 x 7 = • 6 x 3 = • 4 x 9 = • 5 x 9 = • 4 x 8 =	Calculate • 20 ÷ 2 =..... • 20 ÷ 5 =..... • 20 ÷ 1 =..... • 20 ÷ 4 =..... • 20 ÷ 20 =..... • 20÷ 10 =..... • 0 ÷ 20 =..... • 20 -.....= 7 • Half of 20 • Double 20	Calculate • 6 ÷ 2 = ... • 2÷ 2 = ... • 14÷ 2 = ... • 20÷ 2 = ... • 8÷ 2 = ... • 4÷ 2 = ... • 16÷ 2 = ... • 18÷ 2 = ... • 10÷ 2 = ... • 12÷ 2 = ...	Calculate the following: • ____ x 10 =50 • ____ x 10 =30 • ____ x 2 = 12 • ____ x 2 = 20 • ____ x 10 = 60 • ____ x 10 = 90 • ____ x 2 =18 • ____ x 2 = 14 • ____ x 10 = 70 • ____ x 2 = 0	Calculate the following: • .... x 10 = 70 • 0 x 10 = ... • 9 x .... = 45 • ....÷3 = 11 • 28 ÷ 4 = • .... x 10 = 50 • ... x 3 = 0 • 6 x .... = 24 • ....÷ 5 = 8 • 36 ÷ 4 =

Classwork

Classwork Lesson 5	Monday	Date:
Complete DBE Worksheet 98, pgs. 70 and 71.		
Classwork Lesson 6	**Tuesday**	**Date:**
Complete DBE Worksheet 103, pgs. 82ṅ83.		
Classwork Lesson 7	**Wednesday**	**Date:**
Complete DBE Worksheet 100, pgs. 74 and 75.		
Classwork Lesson 8	**Thursday**	**Date:**
Complete DBE Worksheet 111, pgs. 98 and 99.		
Classwork Lesson 9	**Friday**	**Date:**
1. Add 437 and 82 2. Add 106 and 628 3. 467 take away 132		
Classwork Lesson 10	**Monday**	**Date:**
1. 524 + 90 = 2. 475 + 312 = 3. 679 – 247 =		
Classwork Lesson 11	**Tuesday**	**Date:**
1. Complete the following: a. Double 123 = _____ b. Double 246 = _____ c. Double 204 = _____ 2. Use near doubles to add the following. a. 25 + 26 = _____ b. 200 + 201 = _____ c. 130 + 129 = _____		

Classwork Lesson 12	Wednesday	Date:
1. Draw two different ways in which you can get 80c. 2. Draw two different ways in which you can get R55. 3. Solve the following problem: Pedro's granny gave him R5. Which 3 sweets can he buy? The sweets cost: Choc chuckle R2,70; Gums R1, 80; Sour worms R1,40; Peach treats R1,60; Magic mints R2,20; Toffees R1, 20		
Classwork Lesson 13	**Thursday**	**Date:**
1. Write the following numbers from biggest to smallest a. 120, 125, 110 b. 130, 135, 145 c. 248, 489, 698 2. Do the following questions in your DBE Workbook. DBE Worksheet 107, pg. 90.		
Classwork Lesson 14	**Friday**	**Date:**
1. For each shape Predict and draw the number of number of lines of symmetry and write your answer down in the 'We predict' column. Cut out the shape and fold to find all the lines of symmetry. Draw and write down your answers in the "We found" column. When you have completed the worksheet discuss with another pair what you predicted and what you found.		
Classwork Lesson 15	**Monday**	**Date:**
Play the game: DBE Worksheet 97, pg. 68.		
Classwork Lesson 16	**Tuesday**	**Date:**
1. Write in expanded notation. a) 19 = _____ + _____ b) 41 = _____ + _____ c) 24 = _____ + _____ d) 58 = _____ + _____ e) 63 = _____ + _____ f) 82 = _____ + _____ g) 76 = _____ + _____ h) 94 = _____ + _____ 2. Complete DBE Worksheet 85, p 43.		

Classwork Lesson 17	Wednesday	Date:
1. Share 14 sweets amongst: How many sweets each? How many left over? 2. Calculate the following: Share 30 marbles amongst 4 children. How many marbles are left? (7 rem 2)) Share 19 marbles between 2 children. How many marbles are left? (9 rem 1)		
Classwork Lesson 18	**Thursday**	**Date:**
1. Draw a picture and write a division number sentence and answer for these problems: The baker wants to sell bread rolls. He sells them in bags of 6 each. He has 56 rolls. How many bags of rolls can he make up? 2. Draw circles and write a division number sentence and answer for this problem. Four children share 84 sweets so that they all get the same number of sweets. How many sweets does each child get? 3. Solve the problem, by drawing a picture and then write a number sentence: Phetogo has 55 marbles. He wants to put it in bags of 5 each to give to his friends. How many bags of 5 marbles each can he make up?		
Classwork Lesson 20	**Monday**	**Date:**
Complete Worksheet 116, pgs. 108 and 109.		
Classwork Lesson 21	**Tuesday**	**Date:**
Complete DBE Worksheet 112, pgs. 100 and 101.		
Classwork Lesson 22	**Wednesday**	**Date:**
1. Mr James bought 24 apples. He put them equally in 3 baskets. How many apples did he put in each basket? 2. Mr James bought 26 apples. He put them equally in 3 baskets. How many apples did he put in each basket? 3. Sue and Peter share 24 smarties equally. How many smarties does Peter have? 4. Sue and Peter share 25 smarties equally. How many smarties does Peter have?		

Classwork Lesson 23	Thursday	Date:

Draw and complete the following multiplication and division tables.

1.

×	1	2	3	4	5	6	7	8	9	10
3										
6										

2.

÷	6	12	18	24	30	36	42	48	54	60
6										
3										

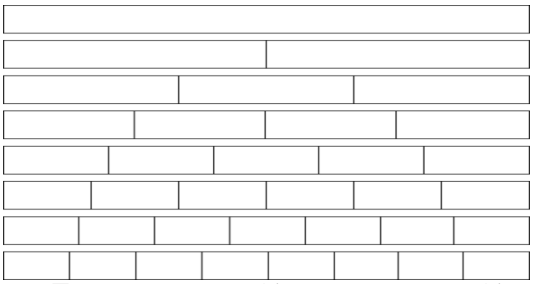
Classwork Lesson 24	Friday	Date:

Calculate the following. Use any method that you have learned in class. Show your method.

1. The vendor has 63 tomatoes. He wants to sell them in packets of 3 each. How many packets of tomatoes will he be able to make up?
2. I have 55 silk worms. I want to share them between myself and my four friends. How many worms will we each get?

Classwork Lesson 25	Monday	Date:

1. Complete the fraction strips by filling in the fractions and then answer the questions below.



2. Fill in bigger than/smaller than / the same

a. one half is _____ three quarters
b. two quarters are _____ one half
c. three quarters are _____ one third
d. three sixths are _____ four eighths

3. How many eighths are the same as one whole? _____
4. How many quarters is the same as three sixths? _____

Classwork Lesson 26	Tuesday	Date:

1. Do the following questions in your DBE Workbook.
Complete DBE Worksheet 121, pgs. 118 and 119.
2. Arrange these numbers from largest to smallest
124, 142, 185
800, 900, 500
3. Arrange these numbers from smallest to largest
882, 784, 683
879, 1 000, 698

Classwork Lesson 27	Wednesday	Date:

1. Share 9 chocolate bars amongst 4 friends so that they all get the same amount of chocolate and there is nothing left over.
2. Find one quarter of 21 sweets
3. Grandmother gives Kiki R12. Kiki wants to save a third of the money. How much money should she save?
4. Share 16 apples equally among 5 children so that they all get the same amount of apples and there is nothing left over.

Classwork Lesson 28	Thursday	Date:

Complete DBE Worksheet 122, pgs. 120 and 121.

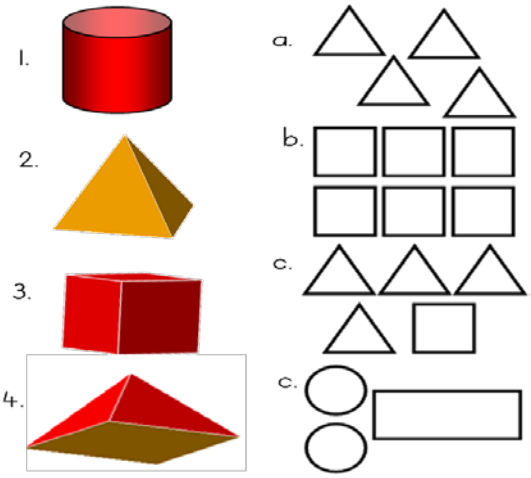
Classwork Lesson 29	Friday	Date:

1. Complete DBE Worksheet 123, pgs. 122 and 123.
2. Find/ draw pictures of objects that look like balls, boxes, cones cylinders and pyramids. Label the shapes.

Classwork Lesson 30	Monday	Date:

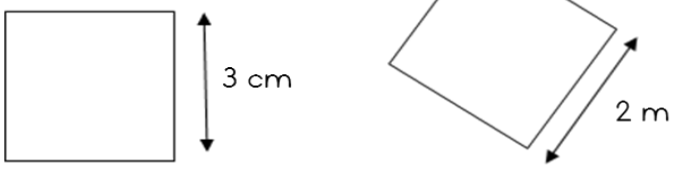
1. Name the objects.

2. Draw lines to match the 2-D shape and the 3-D object.



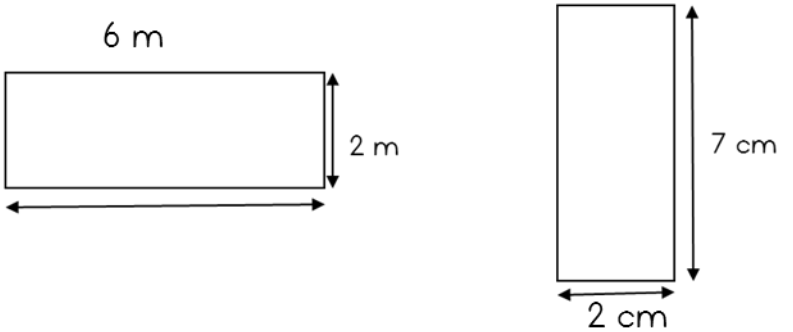
Classwork Lesson 31	Tuesday	Date:

1. Find the perimeter of these squares:



Perimeter = ____ Perimeter = _____

2. Find the perimeter of these rectangles:

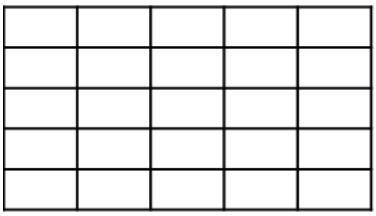


Perimeter = _____ Perimeter = _____

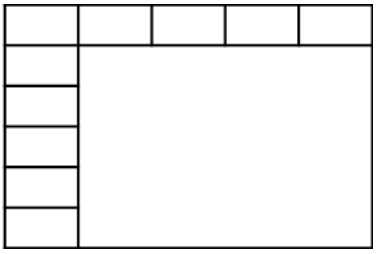
Classwork Lesson 32	Wednesday	Date:

What is the area of these shapes?

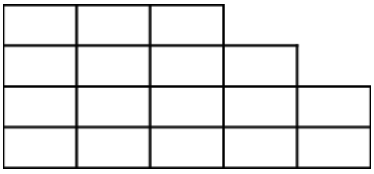
1. _____ tiles



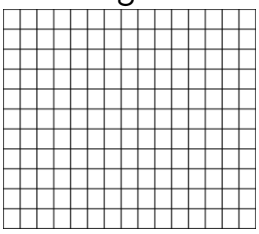
2. _____ tiles



3. _____ tiles



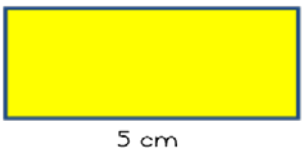
4. Use some squares and half squares to draw three figures on the grid paper blow. Each figure should have an area of 12 squares.



Classwork Lesson 34	Friday	Date:

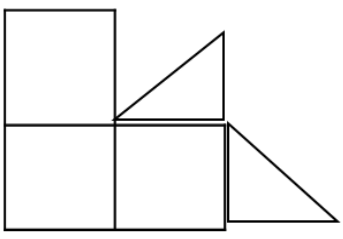
1. What is the perimeter of the shapes? Use your rulers to measure the sides.

Perimeter = _____

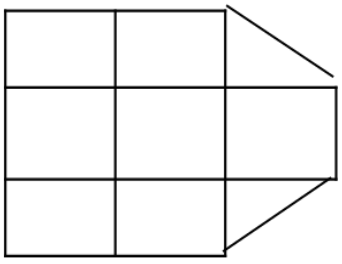


Perimeter = _____

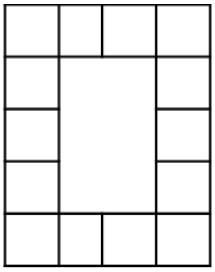
2. What is the area of these figures? Use the tiles to count the units.



_____ tiles



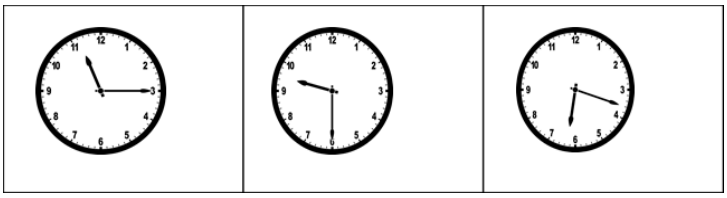
_____ tiles



_____ tiles

Classwork Lesson 35	Monday	Date:
Complete DBE Worksheet 123, pg. 122.		
Classwork Lesson 36	**Tuesday**	**Date:**

1. Colour the correct answer:



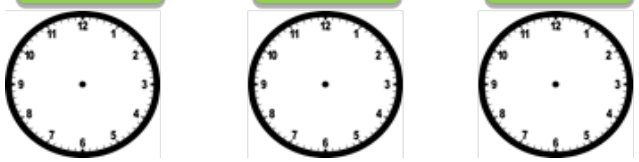
11:15	10:03

6:09	09:30

06:18	06:20

2. Indicate the given digital times on the analogue clocks below:

10:45 17:45 3:53

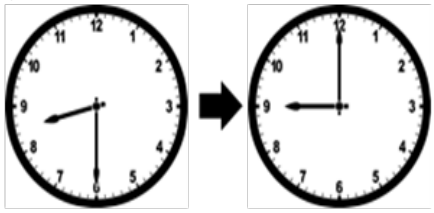


3. Draw clocks to show 3 o'clock and half past four in the afternoon and tell a story to go with these times.
4. How much time passed between 3 o'clock and half past four in the afternoon?

Classwork Lesson 37	Wednesday	Date:

1. Look at the two clocks. What is the difference in time? Make your own story that will go with each.

a.



b. 04:30 → 05:00

2. I left school at 14:15. I arrived at home at 14:45. How long did it take me to get home?
3. Mary reads one page in 15 minutes. How many pages will she read in two hours?

Classwork Lesson 38	Thursday	Date:
Complete DBE Worksheet 102a, pg. 79.		
Classwork Lesson 39	**Friday**	**Date:**
Complete DBE Worksheet 127, pgs. 130 and 131.		
Classwork Lesson 40	**Monday**	**Date:**
Complete DBE Worksheet 102b, pgs. 80 and 81.		

Classwork Lesson 41	Tuesday	Date:
Complete DBE Worksheet 114, pgs. 104 and 105.		

Classwork Lesson 42	Wednesday	Date:

1. Use the information on your slate/whiteboard to draw frequency table in your book

Sea creatures	
Sharks	(10)
Fish	(20)
Jelly-fish	(5)
Sea stars	(5)
Stingrays	(2)

2. Answer the following questions:
   a) How many sharks did they see?
   b) How many fish did they see? _____
   c) How many jelly-fish did they see? _____
   d) How many sea stars did they see? _____
   e) How many stingrays did they see? _____
   f) What type of sea creature did they see the most of? _____

Classwork Lesson 43	Thursday	Date:

1. Draw and complete a pictograph, using the information in your table on your slate:
Key: (Favourite meals)

20					
15					
10					
5					

Classwork Lesson 44	Friday	Date:

1. Complete DBE Worksheet 113, pgs. 102 and 103.
2. Complete DBE Worksheet 118, pgs. 112 and 113.
3. Complete DBE Worksheet 120, pgs. 116 and 117.

Homework

Homework Lesson 5	Monday	Date:
Complete DBE Worksheet 99, pgs. 72 and 73.		
Homework Lesson 6	**Tuesday**	**Date:**
Complete DBE Worksheet 104, pgs. 84 and 85.		
Homework Lesson 7	**Wednesday**	**Date:**
Complete DBE Worksheet 101, pgs. 76 and 77.		
Homework Lesson 8	**Thursday**	**Date:**
Draw number lines to help you round off the following numbers to the nearest ten: 1. 84 _____ 2. 96 _____ 3. 23 _____ 4. 55 _____ Put the smallest number first: 5. 145, 457, 45 6. 133, 132, 130 Put the biggest number first: 7. 130, 310, 301 8. 445, 554, 454		
Homework Lesson 10	**Monday**	**Date:**
DBE Worksheet 108, pgs. 92 and 93.		
Homework Lesson 11	**Tuesday**	**Date:**
Complete DBE Worksheet 105, pgs. 86 and 87.		
Homework Lesson 12	**Wednesday**	**Date:**
1. Peter bought 5 books for R80 each. How much change will he get from R500? 2. Romy bought 4 ice creams at R1,75 each. How much change will she get from R10?		
Homework Lesson 13	**Thursday**	**Date:**
DBE Worksheet 107, pg. 91.		
Homework Lesson 15	**Monday**	**Date:**
Complete DBE Worksheet 97, pg. 69.		

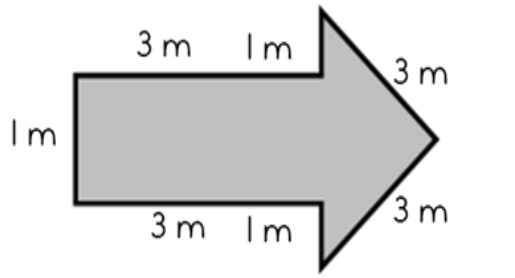
Homework Lesson 16	Tuesday	Date:
1. Divide the following numbers by using the method that was used in class. Remember to write the numbers in expanded notation first. a. 48 ÷ 4 = _____ b. 55 ÷ 5 = _____ 2. Complete DBE Worksheet 115, p 106.		
Homework Lesson 17	**Wednesday**	**Date:**
1. Calculate the following. Remember to use these: a. Share 47 marbles amongst 5 children. How many marbles are left? b. Share 29 marbles amongst 4 children. How many marbles are left?		
Homework Lesson 18	**Thursday**	**Date:**
1. Solve the problem, by drawing circles and then write a number sentence: Four sisters want to share R60 so that they all get the same amount of money. How many rands will each sister get? 2. Solve the problem, by drawing circles and then write a number sentence: Six boys want to share 25 toy cars so that they all get the same number of toy cars to play with. How many toy cars will each boy get?		
Homework Lesson 20	**Monday**	**Date:**
Complete DBE Worksheet 117, pgs. 110 and 111.		
Homework Lesson 21	**Tuesday**	**Date:**
Complete DBE Worksheet 115, pg. 107.		
Homework Lesson 22	**Wednesday**	**Date:**
Complete DBE Worksheet 118, pgs. 112 and 113.		
Homework Lesson 23	**Thursday**	**Date:**
1. My brother has 44 toy cars. He wants to share them amongst himself and his 3 friends when they come over to play. How many cars will they each get to play with? 2. The lady baked 48 cupcakes. She gave all the cupcakes to her friends. Each friend got 5 cupcakes. How many cupcakes did they each get and how many was left over for her?		
Homework Lesson 25	**Monday**	**Date:**
1. Draw a fraction table. Show the following: whole, halves, thirds, quarters, eights. 2. Give three examples where fractions are equal.		

Homework Lesson 26	Tuesday	Date:
Complete DBE Worksheet 126, pgs. 128 in 129.		
Homework Lesson 27	**Wednesday**	**Date:**
Complete DBE Worksheet 124, pgs. 124 and 125.		
Homework Lesson 28	**Thursday**	**Date:**

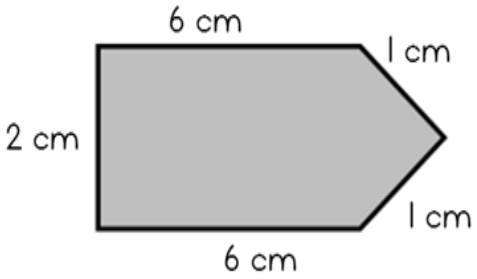
1. Draw the fraction squares in your book, but use only halves, quarters, sixths and eights.
2. Answer the following questions:
3. Two quarters are the same as _____
4. Four sixths are the same as _____
5. Four eights are the same as _____
6. Six eights are the same as _____
7. One half is the same as _____

Homework Lesson 30	Monday	Date:
Draw the 2-D shapes that will make up the faces of these 3-D objects.		
Homework Lesson 31	**Tuesday**	**Date:**

1. Calculate the perimeter of the following shapes.

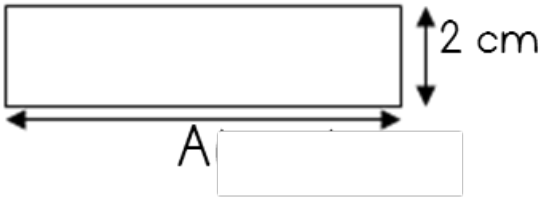


Perimeter = _____



Perimeter = _____

2. The perimeter of this rectangle is 20cm. Calculate the length of side A.



3. The perimeter of this square is 20m. Calculate the length of side A

Homework Lesson 32	Wednesday	Date:
Complete DBE Worksheet 109, pgs. 94 and 95.		
Homework Lesson 35	**Thursday**	**Date:**
1. Draw and name this shape:  It has _____ _____. 2. Draw and name this shape:  It has _____. 3. Use your 3 square pieces of paper. Fold each one twice to make a different shape (rectangle, triangle, square). Stick them in your book.		
Homework Lesson 36	**Monday**	**Date:**
1. Our maths class started at eight o'clock and finished at a quarter to ten. Show the times on an analogue and a digital clock. 2. Draw digital clocks to show 10:15 and 11:00 and tell a story to go with them. 3. How much time passed between 10:15 and 11:00?		
Homework Lesson 37	**Tuesday**	**Date:**
Complete DBE Worksheet 106, pg. 88		
Homework Lesson 38	**Wednesday**	**Date:**
Complete DBE Worksheet 102b, pg. 78.		
Homework Lesson 40	**Thursday**	**Date:**
Complete DBE Worksheet 106, pg. 89		
Homework Lesson 41	**Monday**	**Date:**
1. Arrange these numbers from biggest to smallest a. 900, 908, 809 b. 312, 321,30 2 2. What will you use to measure the length of your pencil? _____ 3. What will you use to measure the length of your bed? _____ 4. Draw and label a line that is 10 cm long. 5. Draw and label a line that is 4 cm longer than the first line. 6. Draw and label a line that is shorter than both these lines.		

Homework Lesson 42	Tuesday	Date:

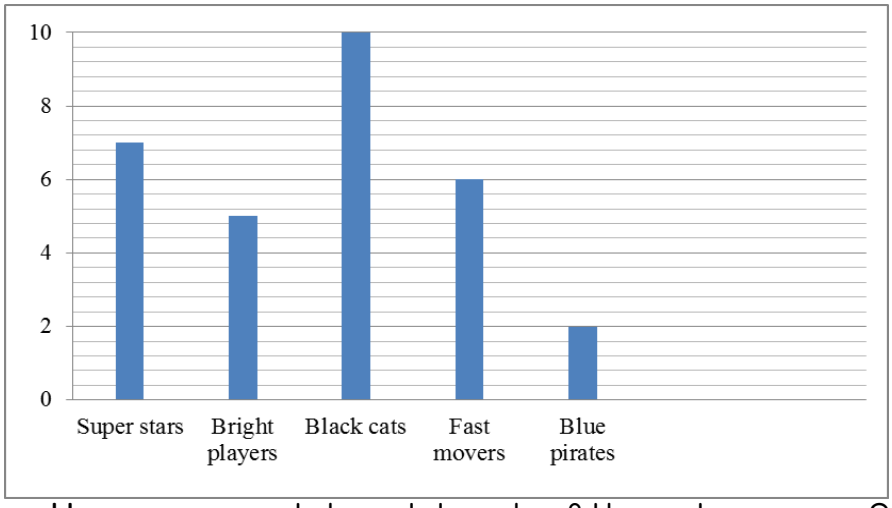
Draw a bar graph using this information:

Sea creatures	
Sharks	(10)
Fish	(20)
Jelly-fish	(5)
Sea stars	(5)
Stingrays	(2)

Homework Lesson 43	Wednesday	Date:

Answer the questions using the bar graph below:

Soccer matches won



2. How many matches did each of these teams win?

Super stars _____ Bright players _____ Black cats _____

Fast movers _____ Blue pirates _____

3. Who won the most matches? _____

Who won the least matches? _____

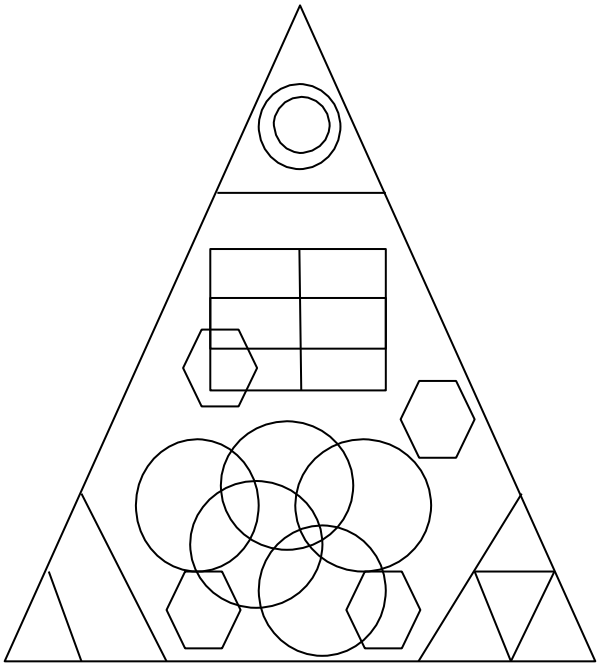
Who came second? _____

Who came second last? _____

4. What is the difference in wins between Super stars and Black cats?

Enrichment Activity 19.1

Count the different shapes.



How many ⬡ are there?

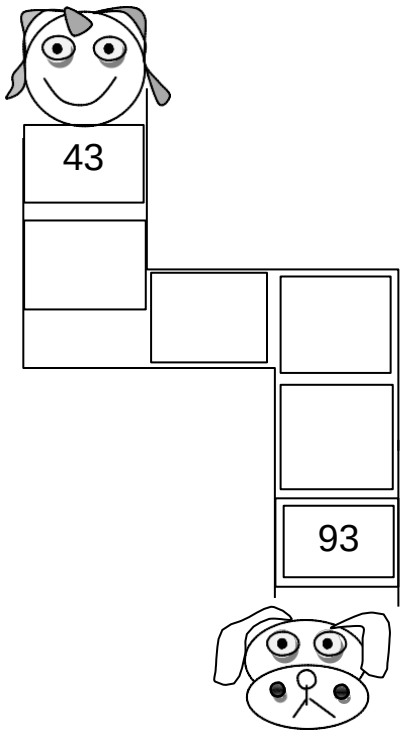
How many ▭ are there?

How many △ are there?

How many ○ are there?

Enrichment Activity 19.2

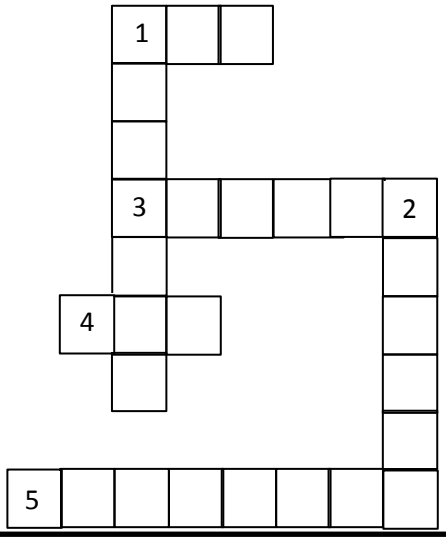
Find Sarah's lost dog.



Enrichment Activity 19.3

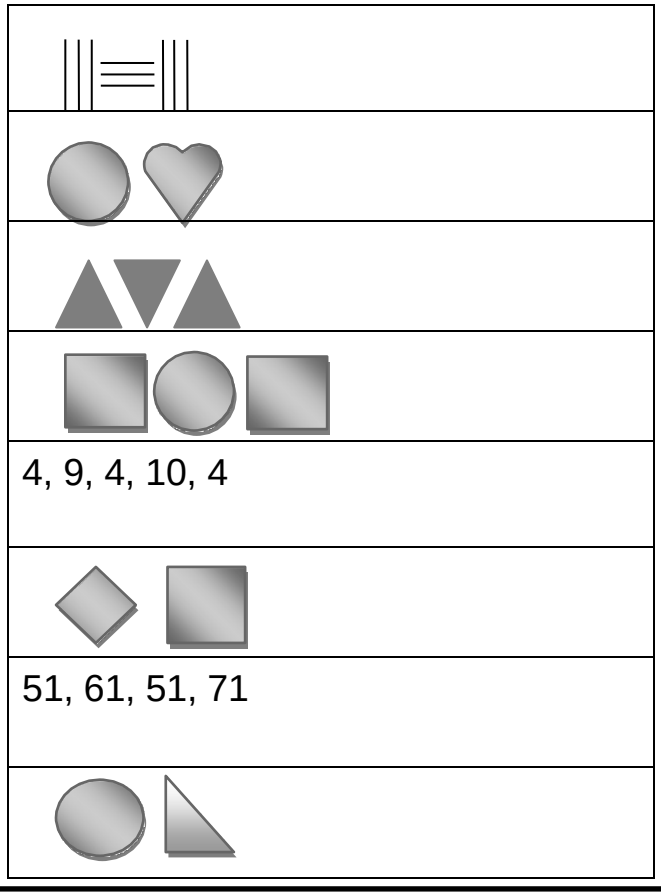
Work out the sums and complete the cross word puzzle by filling in the number names:

Down	Across
1.101–85=	1.66÷_=11
2.55÷5=	3.3x_= 36
	4.93 -_= 83
	5.133–114=



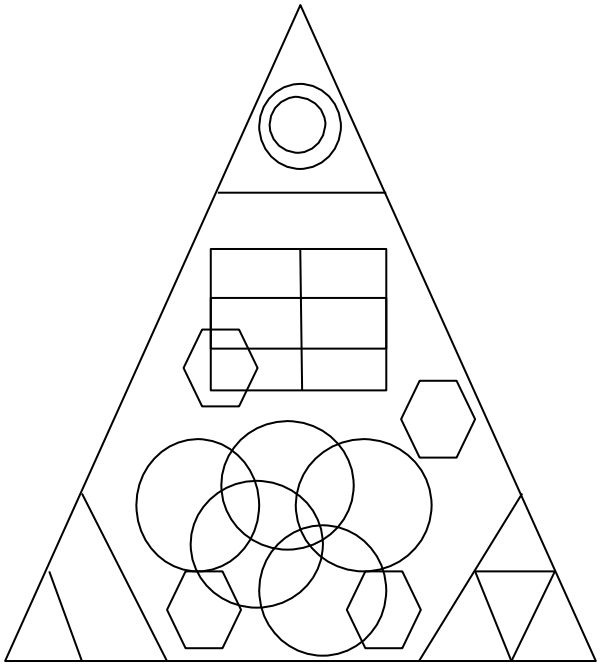
Enrichment Activity 19.4

Complete the following patterns.



Enrichment Answers 19.1

Count thedifferentshapes.



How many ⬡ are there? (5)

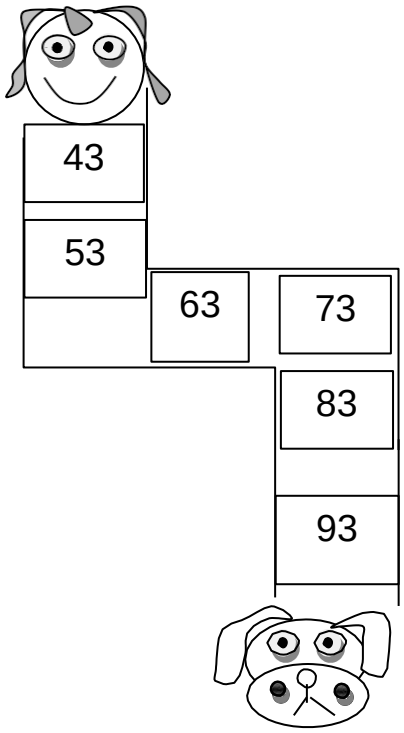
How many ▭ are there? (6)

How many △ are there? (5)

How many ○ are there? (7)

Enrichment Answers 19.2

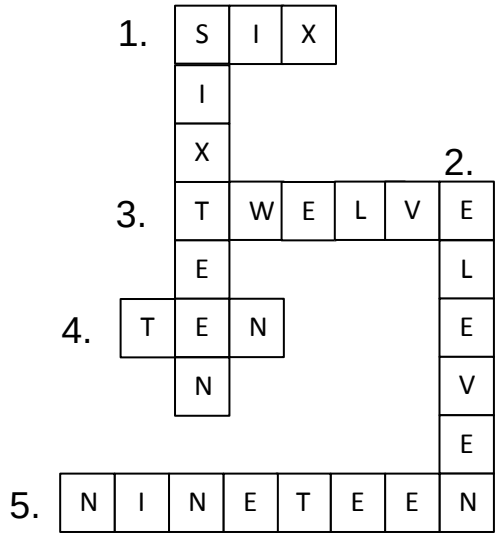
Find Sarah's lost dog.



Enrichment Answers19.3

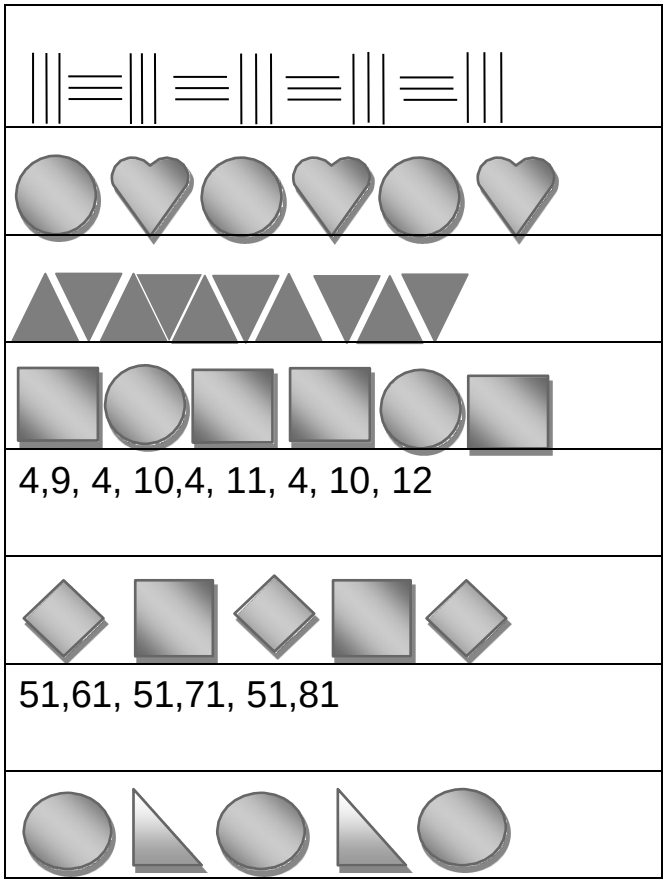
Work out the sums and complete the cross word puzzle by filling in the number names:

Down	Across
1.101–85=	1.66÷_=11
2.55 ÷5=	3.3x_= 36
	4.93-_= 83
	5.133 –114=



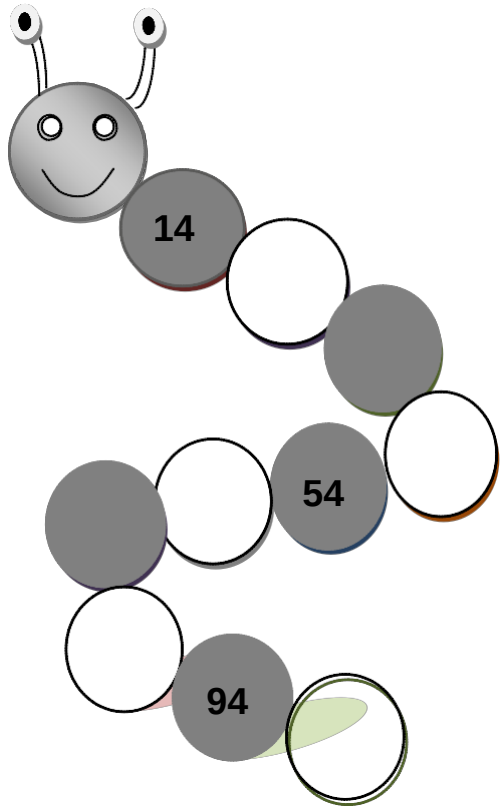
Enrichment Answers 19.4

Complete the following patterns.



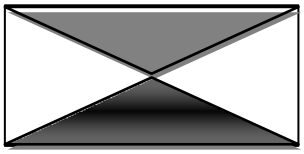
Enrichment Activity 20.1

Figure out the pattern to complete the worm.

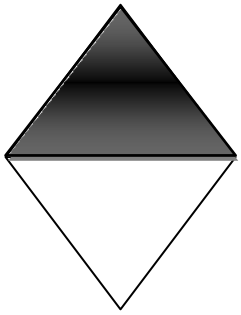


Enrichment Activity 20.2

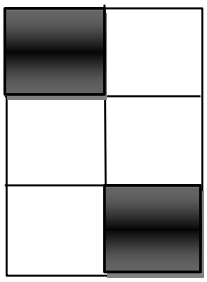
Which fraction of the shape is coloured? Choose the correct answer.



Half
Sixth
Third



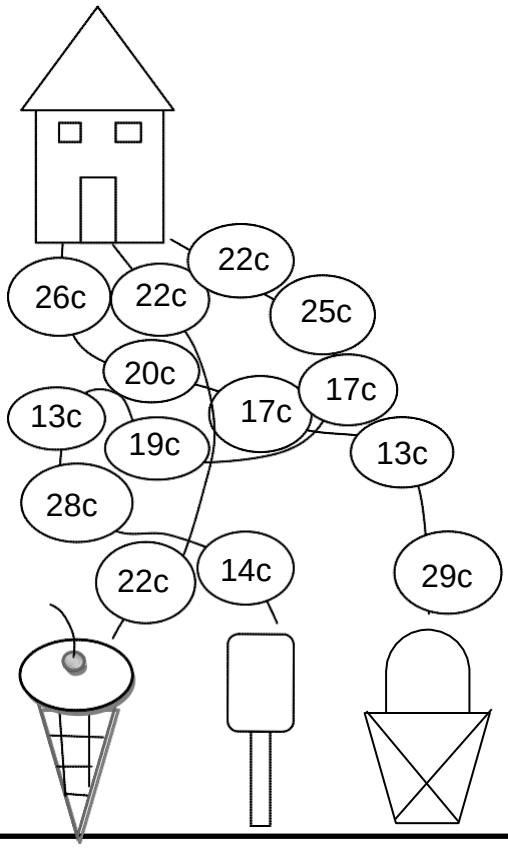
Half
Eight
Quarter



Half
Seventh
Fourth

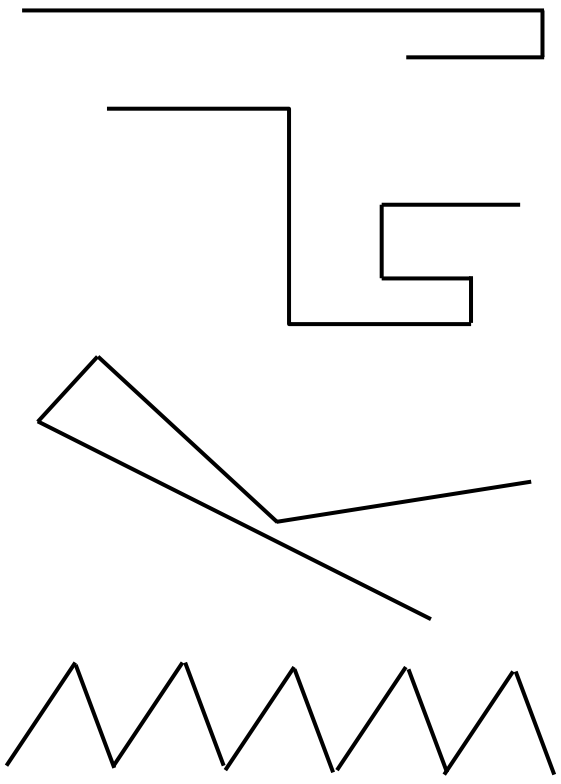
Enrichment Activity 20.3

Follow the paths and then circle the ice-cream that is the cheapest.



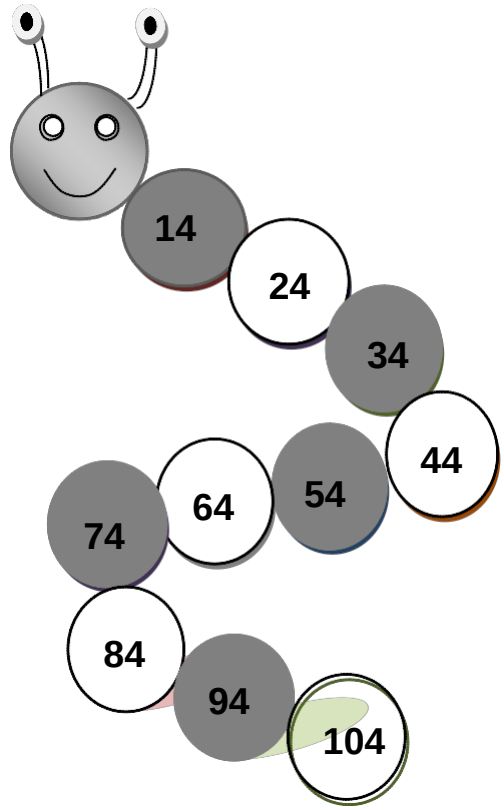
Enrichment Activity 20.4

Circle the line that is the longest. You may use a ruler to measure the lines.



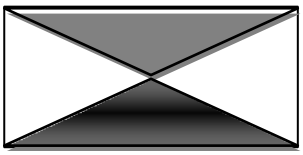
Enrichment Answers 20.1

Figure out the pattern to complete the worm.

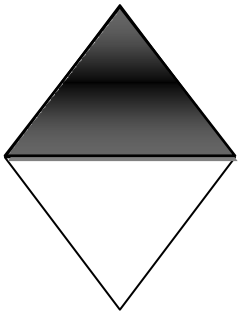


Enrichment Answers 20.2

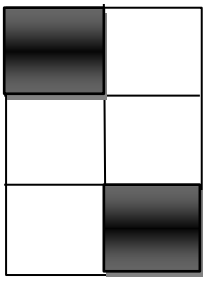
Which fraction of the shape is coloured? Choose the correct answer.



Half
Sixth
Third



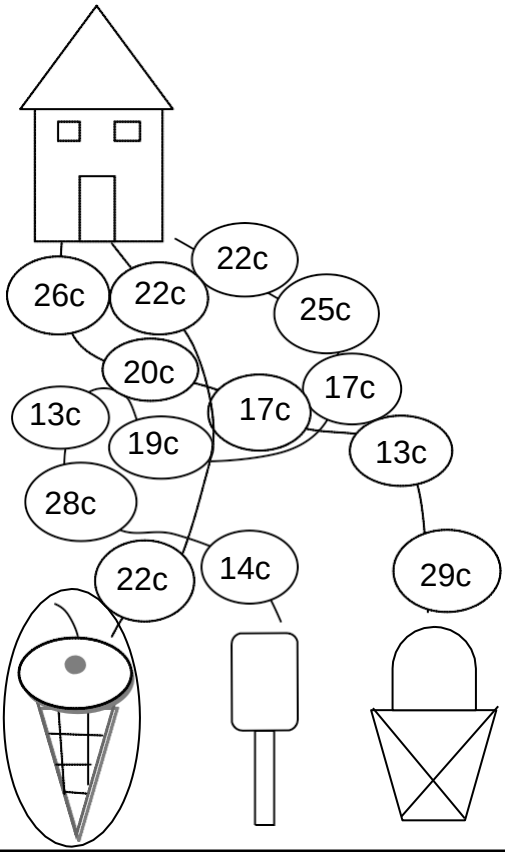
Half
Eight
Quarter



Third
Seventh
Fourth

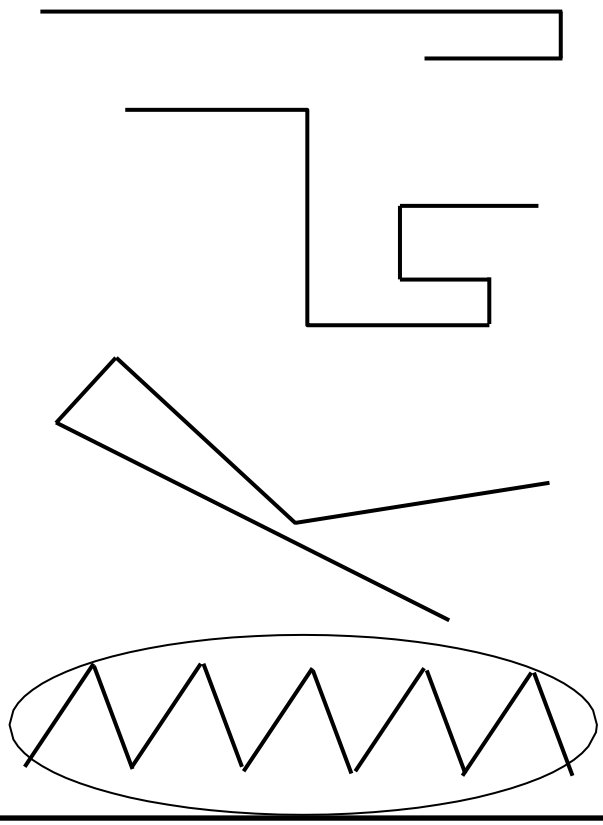
Enrichment Answers 20.3

Follow the paths and then circle the ice-cream that is the cheapest.



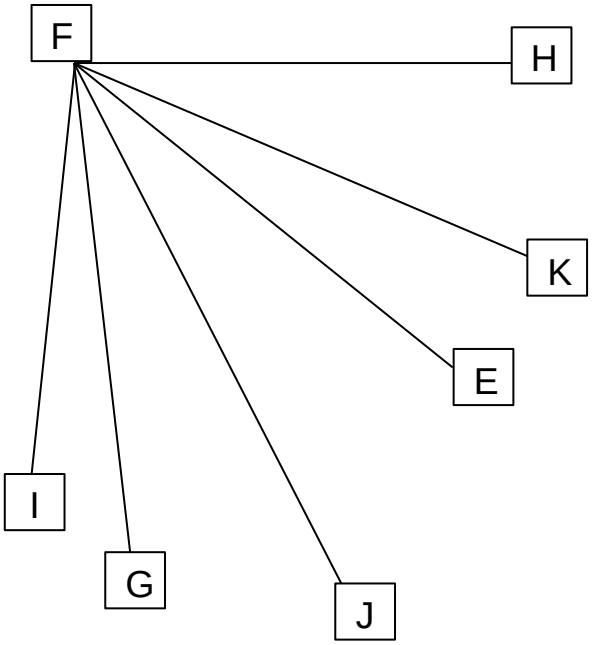
Enrichment Answers 20.4

Circle the line that is the longest. You may use a ruler to measure the lines.



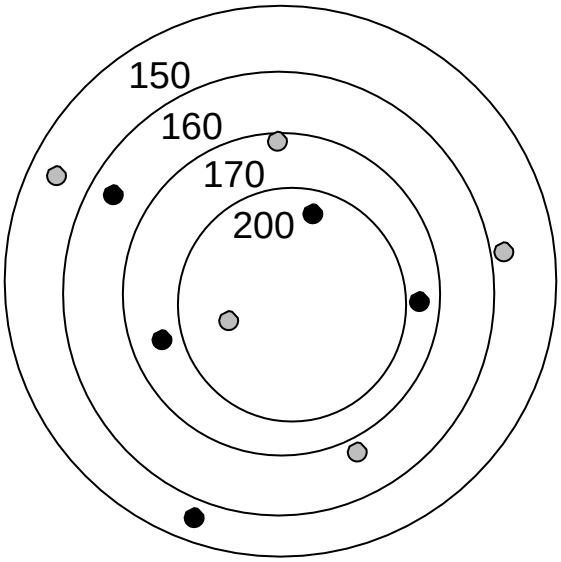
Enrichment Activity 21.1

Which line will be the longest? E to For F to G or F to H or F to I or F to J or F to K?



Enrichment Activity 21.2

Jane and Jake are playing marbles. Add their scores to see who is winning.



Jake

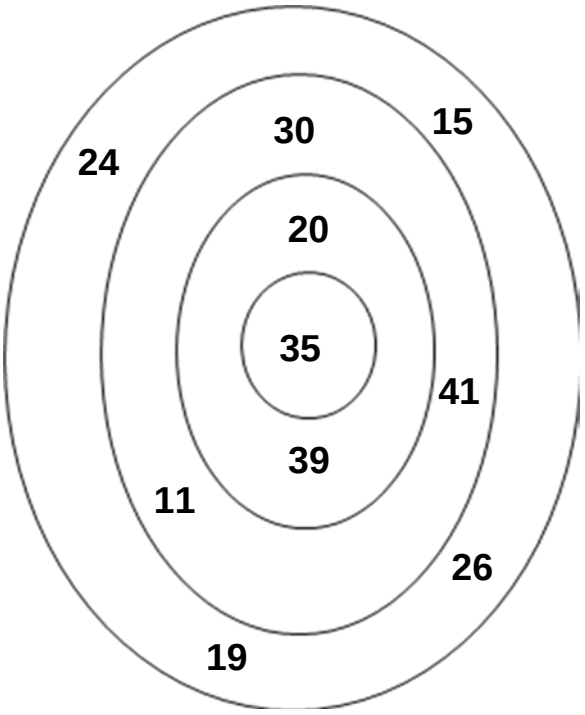
Jane

Enrichment Activity 21.3

Divide this square into16 smaller squares.

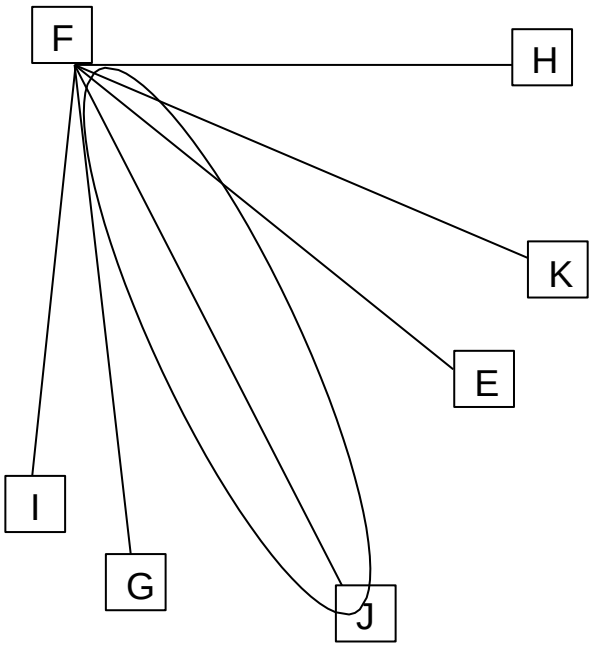
Enrichment Activity 21.4

Use the numbers and figure out how many sums you can make with 50 as the answer.



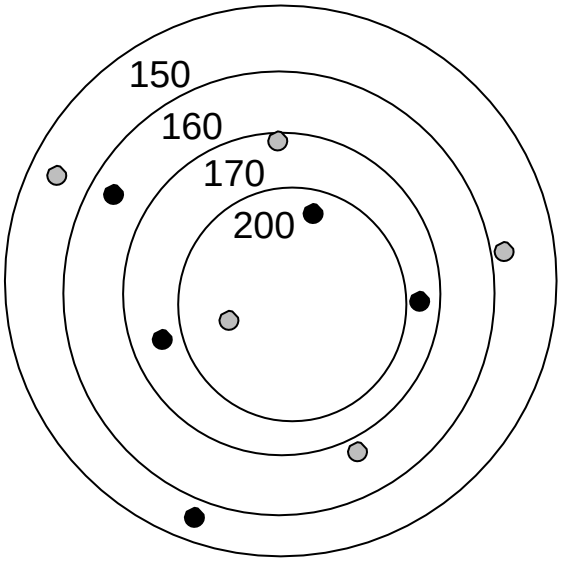
Enrichment Answers 21.1

Which line will be the longest? E to For F to G or F to H or F to I or F to J or F to K?



Enrichment Answers 21.2

Jane and Jake are playing marbles. Add their scores to see who is winning.

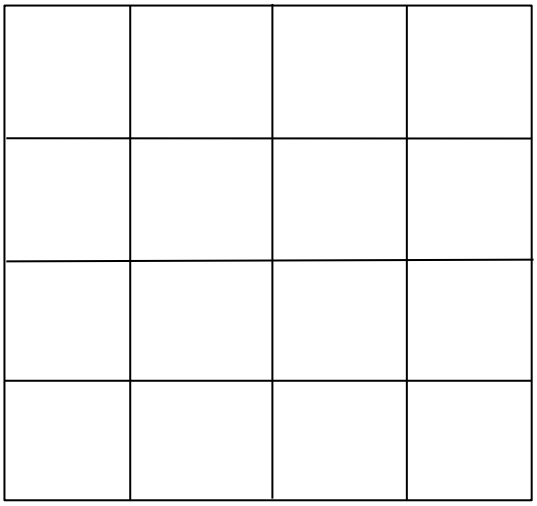


Jake 850

Jane 830

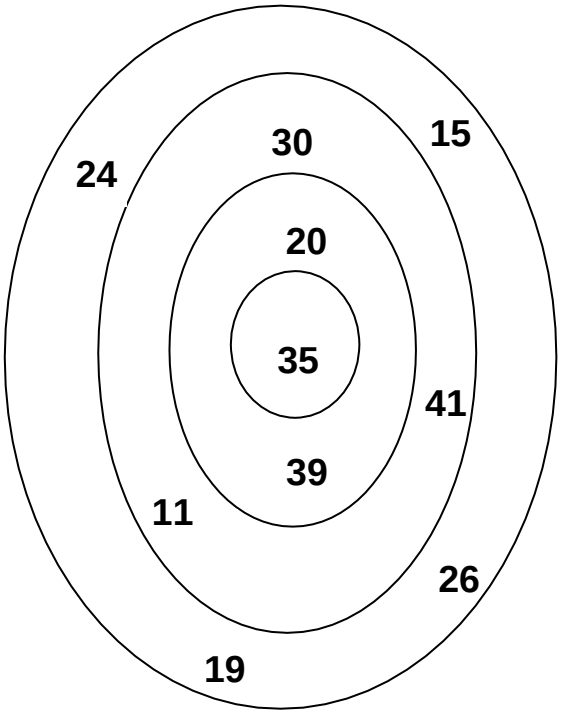
Enrichment Answers 21.3

Divide this square into16 smaller. squares.



Enrichment Answers 21.4

You can make 4 sums. 26 + 24; 11+19+20; 39+11; 30 + 20.



Enrichment Activity 22.1

Match the problems in block A with the answers in block B.

Block A	Block B
5 x 14 =	20
20 x 5 =	70
16 + 33 =	83
12 + 46 =	40
60 ÷ 3 =	138
10 x 7 =	49
40 x 1 =	70
27 + 111 =	58
44 + 39 =	100

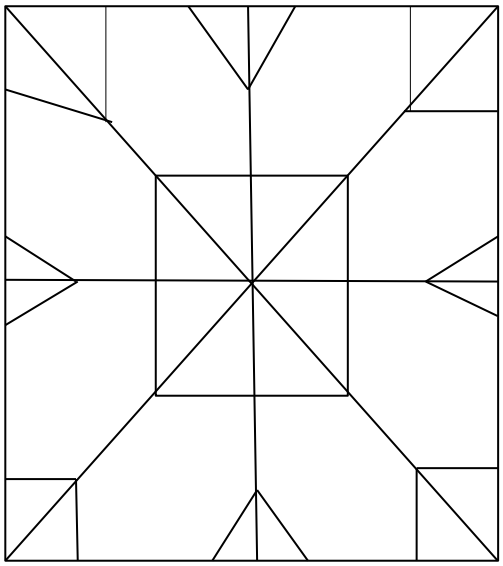
Enrichment Activity 22.2

Try to work out the sums in these blocks.

x	18	70	150
22			
34			
16			
80			
100			

Enrichment Activity 22.3

How many △ do you see?



12 triangles ☐ 33 triangles ☐

46 triangles ☐ 26 triangles ☐

Enrichment Activity 22.4

Match the numbers with the number names.

Numbers
200
224
96
99
412
514
671

Number names
Four hundred and twelve
Ninety-nine
Two hundred
Ninety-six
Two hundred and twenty-four
Six hundred and seventy-one
Five hundred and fourteen

Enrichment Answers 22.1

Match the problems in block A with the answers in block B.

Blocks A	Blocks B
5 x 14 =	20
20 x 5 =	70
16 + 33 =	83
12 + 46 =	40
60 ÷ 3 =	138
10 x 7 =	49
40 x 1 =	70
27 + 111 =	58
44 + 39 =	100

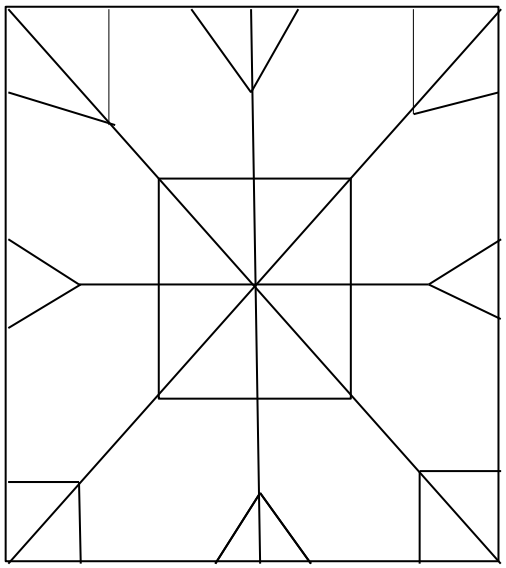
Enrichment Answers 22.2

Try to work out the sums in these blocks.

+	18	70	150
22	40	92	172
34	52	104	184
16	34	86	166
80	98	150	230
100	118	170	250

Enrichment Answers 22.3

How many △ do you see?



12 triangles ▭ 33 triangles ▭

46 triangles ▬ 26 triangles ▭

Enrichment Answers 22.4

Match the numbers with the number names.

Numbers	Number names
200	Four hundred and twelve
224	Ninety-nine
96	Two hundred
99	Ninety-six
412	Two hundred and twenty-four
514	Six hundred and seventy-one
671	Five hundred and fourteen

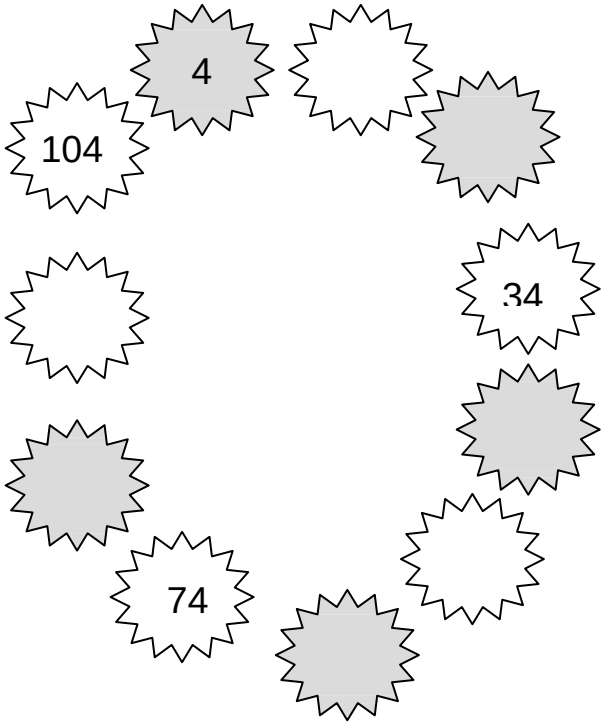
Enrichment Activity 23.1

Complete the table by working out the sums.

x	5	4	3
0			
8			
5			
4			
3			
6			
7			
2			
9			
1			

Enrichment Activity 23.2

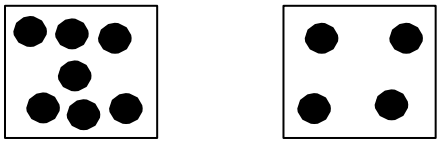
Complete the pattern:



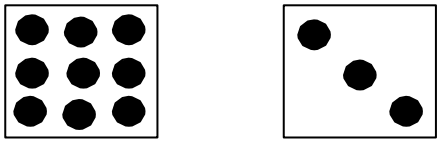
Enrichment Activity 23.3

Multiply the dots on the dominos and fill in the answers:

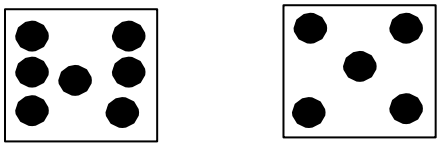
How much will it be? _____



How much will it be? _____

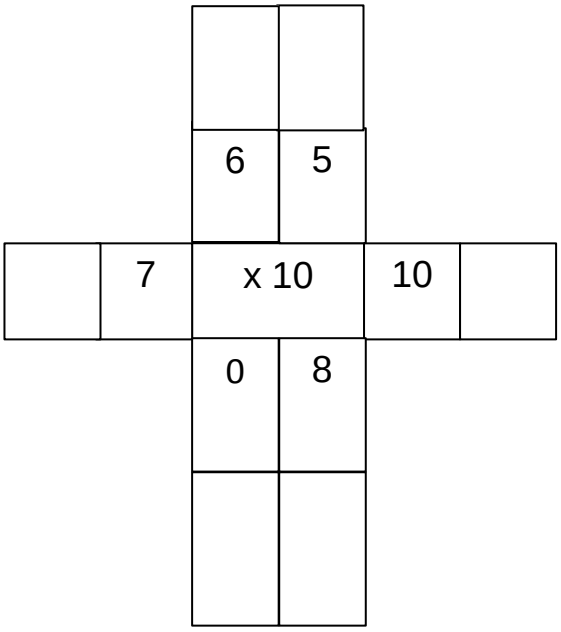


How much will it be? _____



Enrichment Activity 23.4

Multiply the middle number to other numbers.



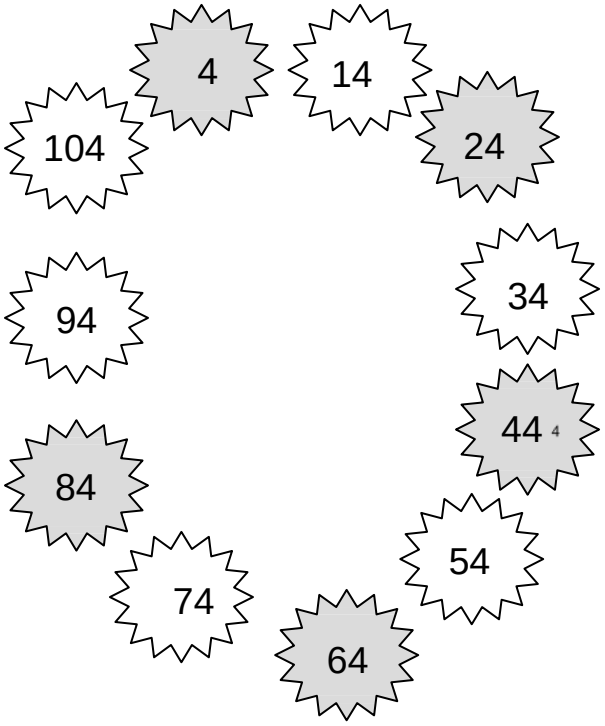
Enrichment Answers 23.1

Complete the table by working out the sums.

x	5	4	3
0	0	0	0
8	40	32	24
5	25	20	15
4	20	16	12
3	15	12	9
6	30	24	18
7	35	28	21
2	10	8	6
9	45	36	27
1	5	4	3

Enrichment Answers 23.2

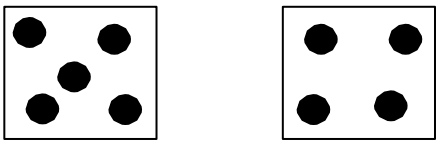
Complete the pattern:



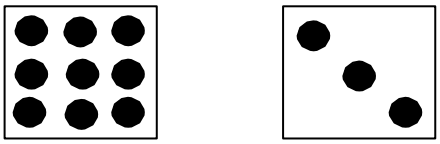
Enrichment Answers 23.3

Multiply the dots on the dominos and fill in the answers:

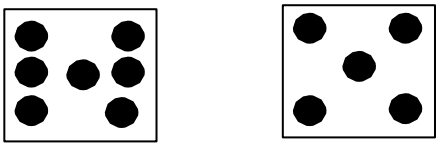
How much will it be? (28)



How much will it be? (27)

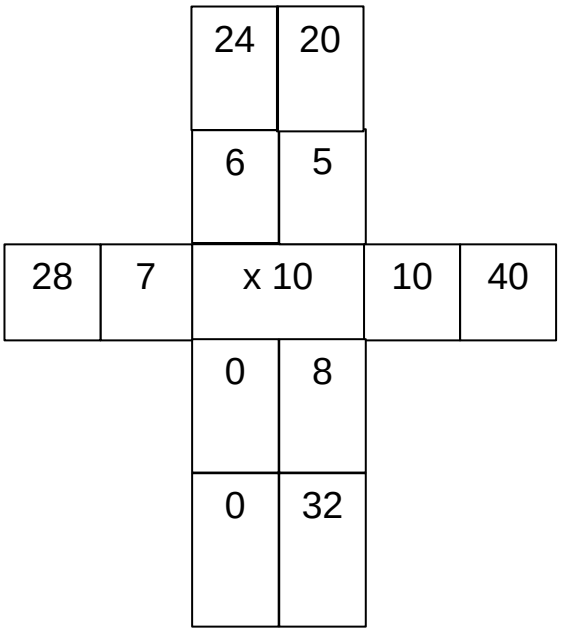


How much will it be? (36)



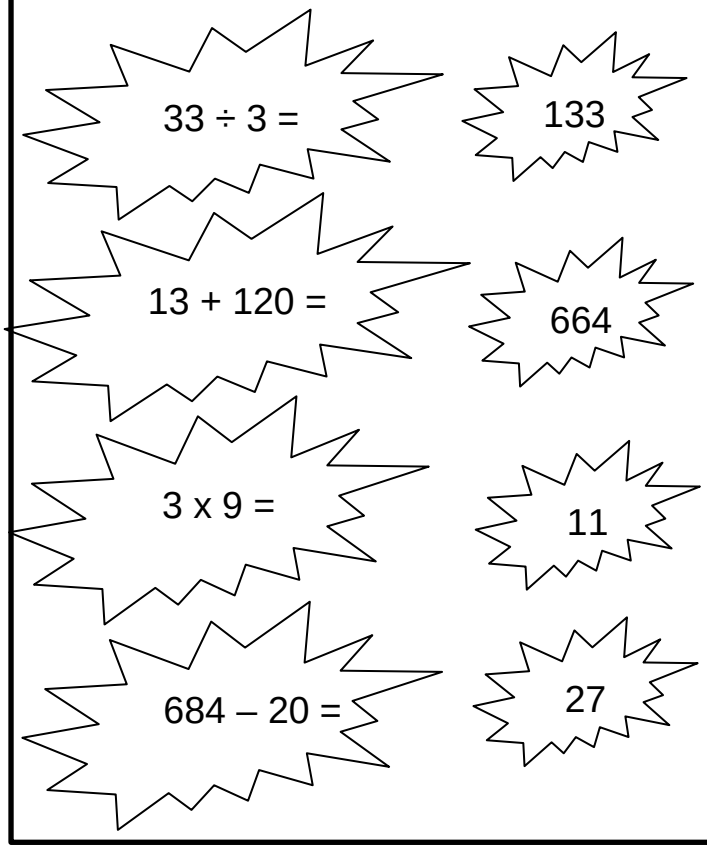
Enrichment Answers 23.4

Multiply the middle number to other numbers.



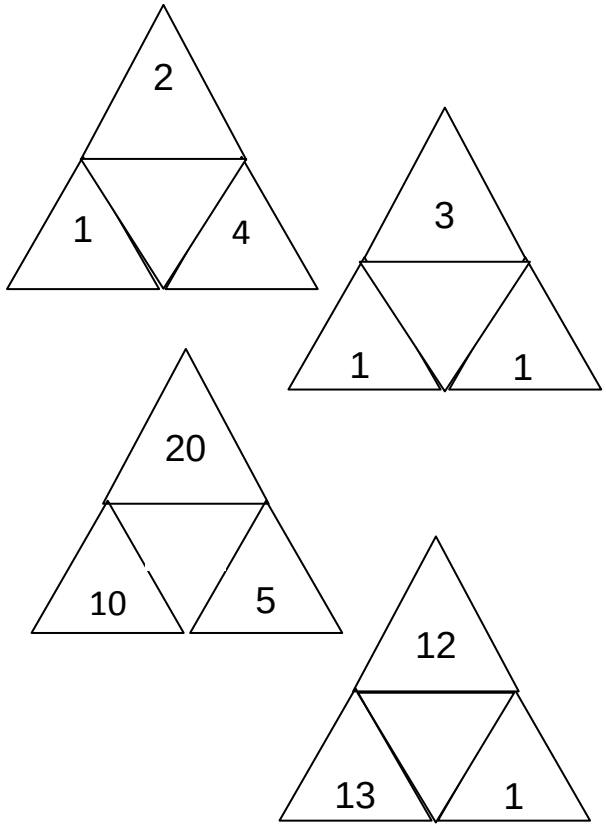
Enrichment Activity 24.1

Calculate the following:



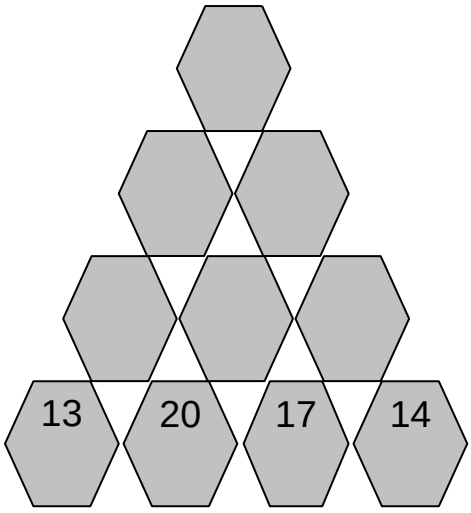
Enrichment Activity 24.2

Add the numbers to find the number in the middle.



Enrichment Activity 24.3

The number in each hexagon is made up by adding the numbers in the two Hexagons below it. Calculate the missing numbers.



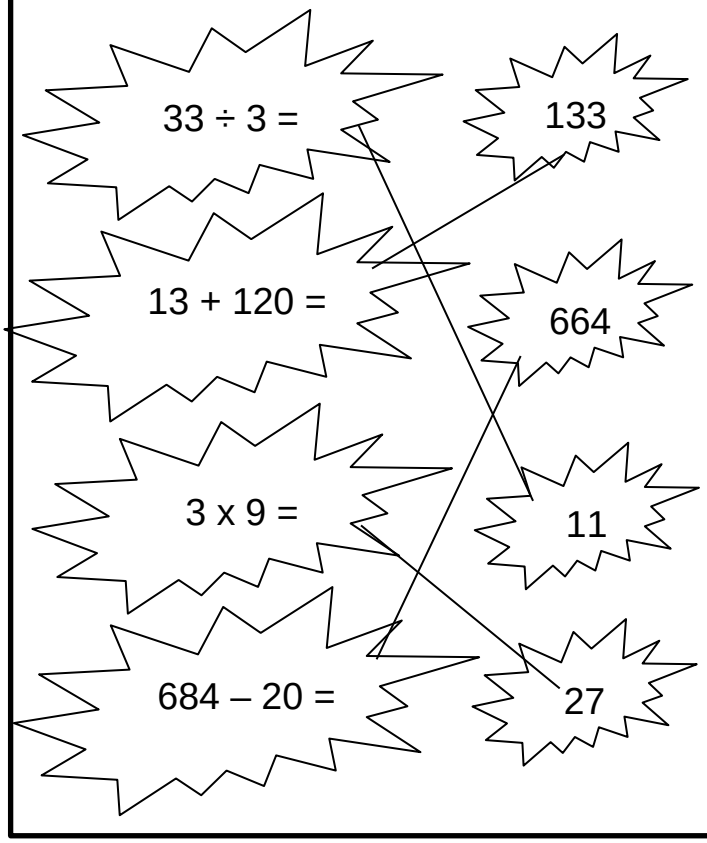
Enrichment Activity 24.4

Calculate each row of the puzzle. Fill in the answers. Calculate each column of the puzzle.

	+	12	=	
+		+		+
13	+	17	=	
=		=		=
	+		=	56

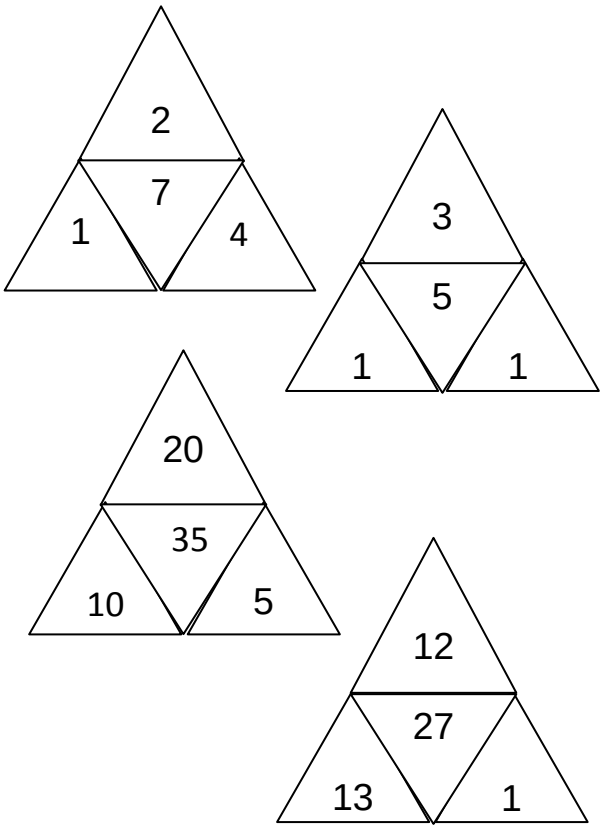
Enrichment Answers 24.1

Calculate the following:



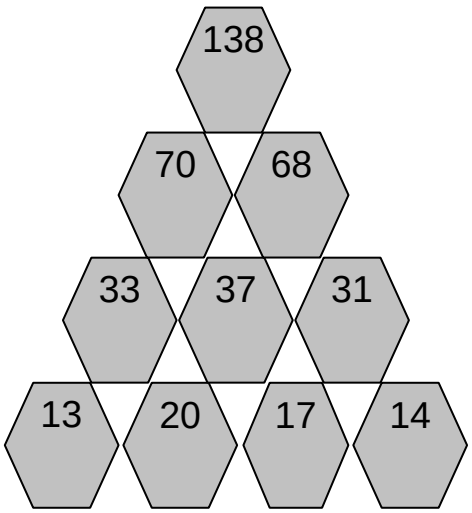
Enrichment Answers 24.2

Add the numbers to find the number in the middle.



Enrichment Answers 24.3

The number in each hexagon is made up by adding the numbers in the two Hexagons below it. Calculate the missing numbers.



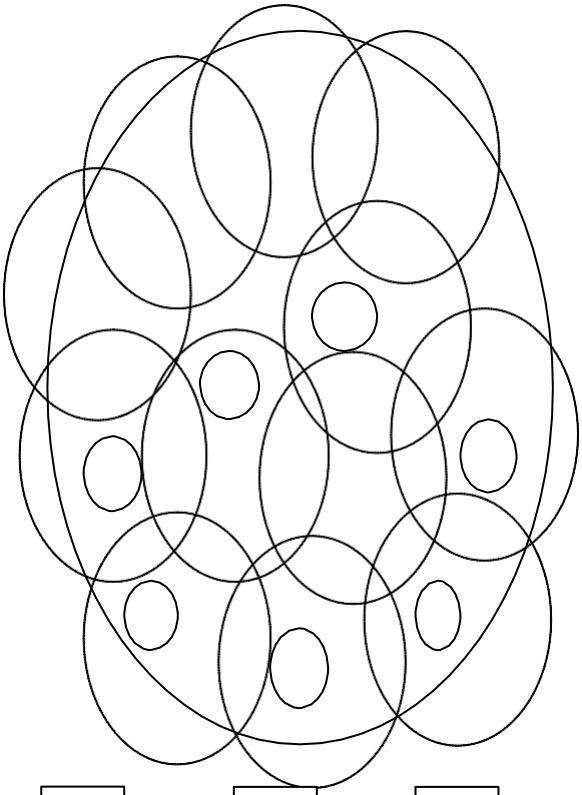
Enrichment Answers 24.4

Calculate each row of the puzzle. Fill in the answers. Calculate each column of the puzzle.

14	+	12	=	26
+		+		+
13	+	17	=	30
=		=		=
27	+	29	=	56

Enrichment Activity 25.1

How many ovals do you see?



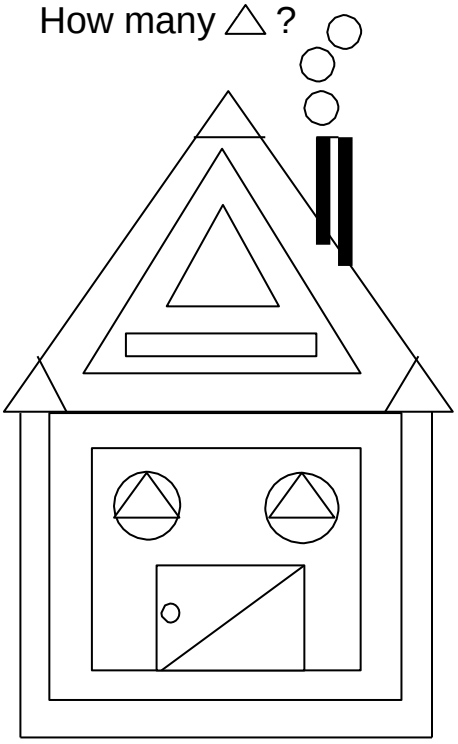
21 24 14

Enrichment Activity 25.2

How many ▭ ?

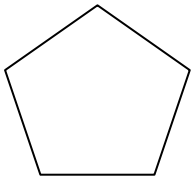
How many ⬭ ?

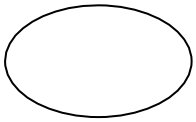
How many △ ?

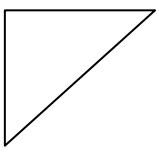


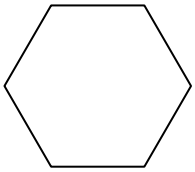
Enrichment Activity 25.3

Name the different shapes.



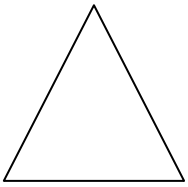


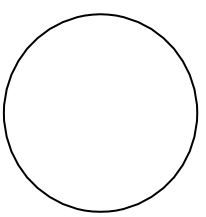




Enrichment Activity 25.4

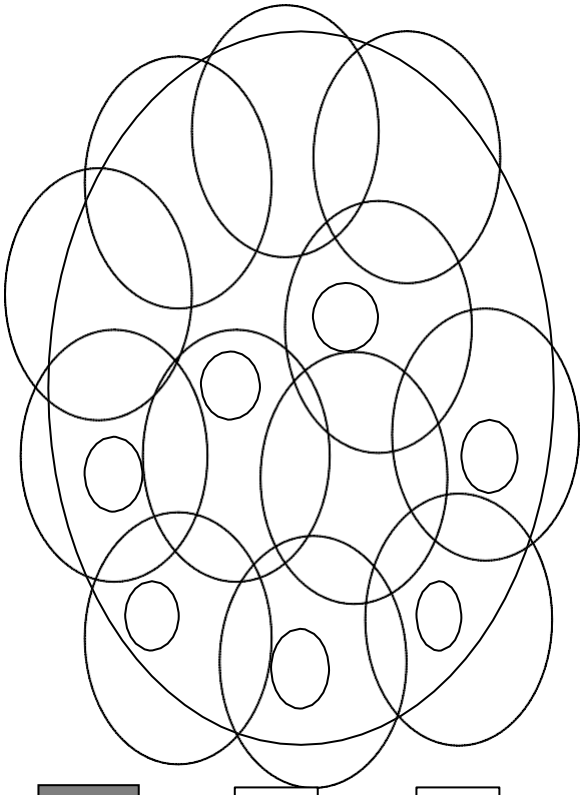
Match the object with the shape that will make up its base.





Enrichment Answers 25.1

How many ovals do you see?



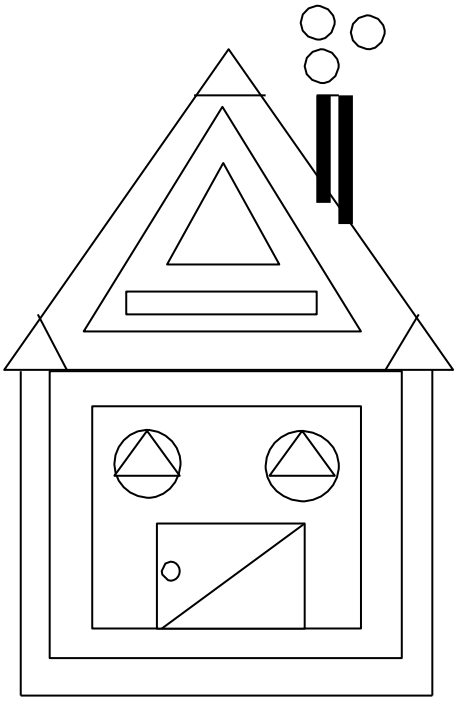
21 | 24 | 14

Enrichment Answers 25.2

How many ▭? (1)

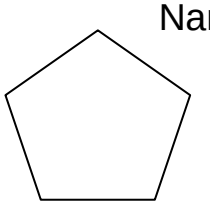
How many ⬭? (3)

How many △? (10)

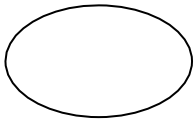


Enrichment Answers 25.3

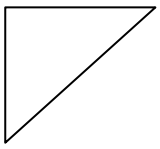
Name the different shapes.



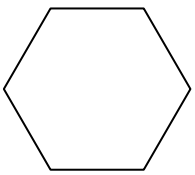
Pentagon



Oval



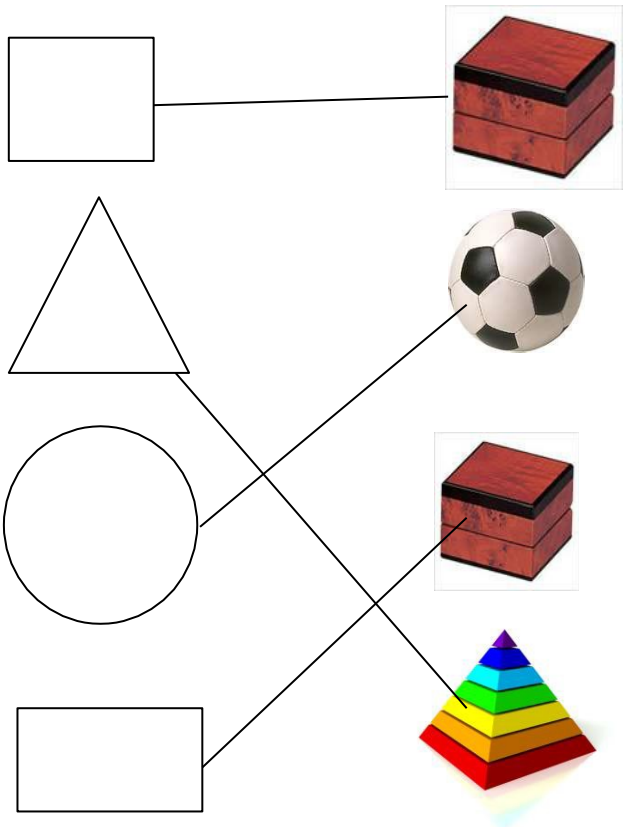
Triangle



Hexagon

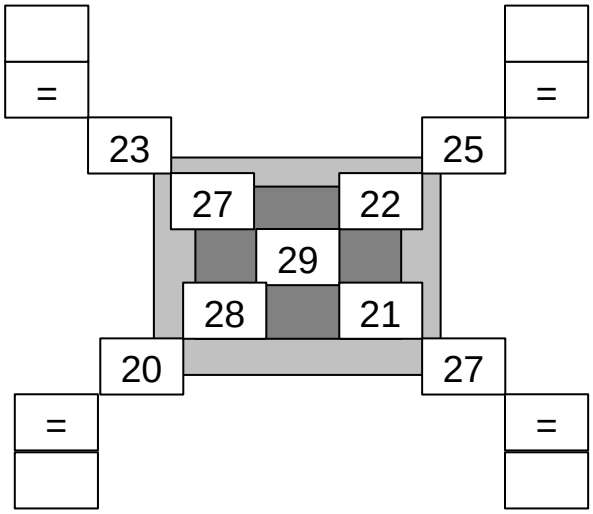
Enrichment Answers 25.4

Match the object with the shape that will make up its base.



Enrichment Activity 26.1

Add each diagonal of numbers to get an answer.



Enrichment Activity 26.2

Can you work this out?

A farmer has14 m of fence.
He wants to enclose a plot of land for his chickens.

What is the greatest area that can been closed? Should it be a square or a rectangle?

Enrichment Activity 26.3

Solve these problems:

Neo spends a quarter of her money on sweets, half of his money on a present for Margaret, and one eighth of her money on stickers. She has R13 left. How much did she have to begin with?

_____

This is how the 45 children in our class get to school.

Two fifths of the children in our class walk to school. One fifth take the bus. How many children come by car?

Enrichment Activity26.4

Can you work this out?

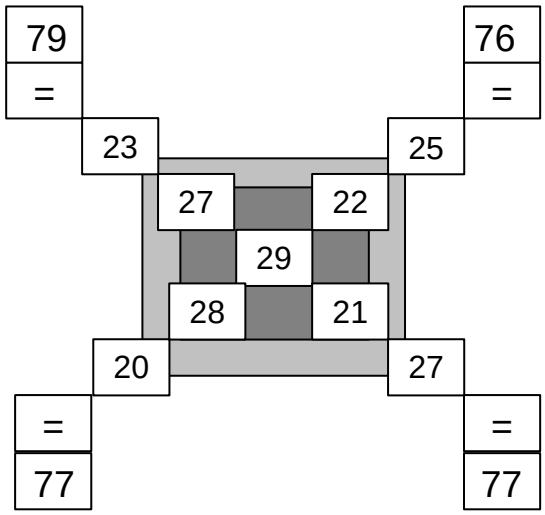
If John and his dad add their ages they would get 48 years.

John was born when his dad was 24 years old.

How old are John and his dad now?

Enrichment Answers 26.1

Add each row of numbers to get an answer.



Enrichment Answers 26.2

Which plot will have the biggest area?

A square with 3m sides uses 12m of fence and has a 9 square metre area.

A rectangle with 2m and 4m sides uses 12 m of fencing and has a smaller area (8 sq m).

The square is best. Biggest area for the same amount of fence.

Enrichment Answers 26.3

Solve these problems

Neo spends a quarter of her money on sweets, half of his money on a present for Margaret, and one eighth of her money on stickers. She has R13 left. How much did she have to begin with?

R104

This is how the 45 children in our class get to school.

Two fifths of the children in our class walk to school. One fifth takes the bus. How many children come by car?

18 children

Enrichment Answers 26.4

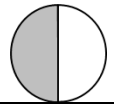
Can you work this out?

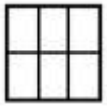
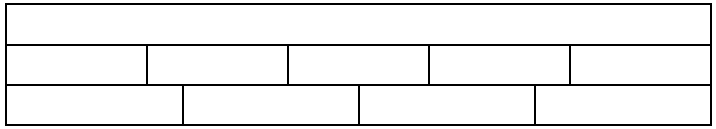
If John and his dad add their ages they would get 48 years. John was born when his dad was 24 years old. How old are John and his dad now?

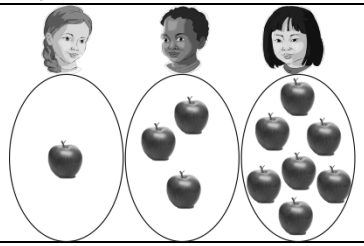
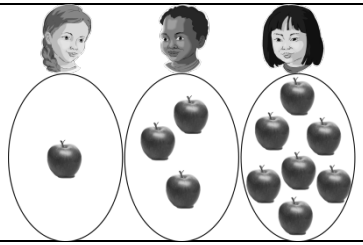
John is 12 years old

Dad is 36 years old

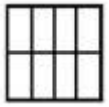
Lesson Vocabulary
Grade 3 Term 4

Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)
area	The amount of surface athat covers a shape.		
combination	Things which are put together to make something. E.g. te combination of 10 and 5 makes the number 15.		
Difference in time	The amount of time between two give times		
Distributive property	When a number which is broken down is multiplied/divided by another number you must multiply/divide both parts of the broken down number. This is applying the distributive property. E.g. (30 + 4) ÷ 3 = (30 ÷ 3) + (4 ÷ 3) = 10 + 1 rem 1 = 11 rem 1		
dozen	12		
Expanded notation	When you write out a number by breaking it down you write it using expanded notation. E.g. 197 in expanded notation is 100+90+7		
formal unit	An accepted standard unit used when you measure. E.g. a kilogram is a formal unit for measuring mass and a metre is a standard unit for measuring length.		
fraction circles	Circles which have been divided up into fraction parts. E.g.  This circle has been divided into halves.		
Fraction squares	Squares which have been divided up into fraction parts. E.g.		

Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)
	 This square has been divided into sixths.		
fraction table	A table that has been drawn to illustrate fraction parts. e.g. A fraction table showing a whole, quarters and fifths. 		
geometric object/shape	A **geometric shape** is a geometric figure that can be described with mathematics and that is used in geometry.		
Geometric solid	A 3-D geometric shape. E.g. a cube made of wood is a geometric solid.		
Informal unit	The same as non-standard. E.g. a non-standard unit for measuring length is the width of you hand.		
Information	A meaningful collection of facts or data.		
Inverse operation	An operation at undoes what another operation does. E.g. addition and subtraction are inverse operation. 30 + 55 = 85 and 85 – 55 = 30		
investigate	Find out about something by looking around for information.		

Maths word	Diagram/explanation		LoLT translation	Diagram/explanation (LoLT)
least	Smallest number. E.g. The first child has the least apples.			
Line of symmetry	See symmetry			
Length of time	An amount of time that has passed. E.g. the length of your maths lesson is 90 minutes.			
Measuring tape	Alength of tape that has been marked in units that can be used to measure length.			
method	See technique			
most	The highest number. E.g. the third child has the most apples.			
Nearest ten	When you round off numbers you see what number they are near to. When you round off to the nearest ten, you look for the ten that the given number is closest to. E.g. 59 is closer to 60 than to 50. 60 is the nearest ten to 59.			
non-geometric shape	A shape which is irregular and is not described by geometric properties. E.g. a leaf is a non-geometric shape.			
non-standard measure	The same as informal measure. E.g. a non-standard unit for measuring length is the width of you hand.			

Maths word	Diagram/explanation	LoLT translation	Diagram/explanation (LoLT)
	E.g. If you find out how wide your school desk is by using your hand. 		
Number problem	A maths question that has been set using numbers for which you need to find the solution.		
o'clock	When you write the time from an analogue clock, you use the word "o'clock". E.g. It is 8 o'clock. 		
One-to-one correspondence	Whne one thing can be matched to another thing. E.g. if there are three children and 3 sweets there is a one-to-one correspondence between children and sweets.		
pattern	Something which has a regular form or deisgn that you culd repeat.		
plus	add		
problem solving	When you solve maths problems by thinking through the given information. You could use drawings or models to help you.		
Represent (data)	Make a drawing to show the data that you have colledted. E.g. A graph such as a pictograph is used to represent data.		
solve	Find the answer or solution to a problem.		

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.  		
Standard cup	A cup which has an expected capacity of 250 ml.		
teaspoon	A measuring instrument for small quantities. A teaspoon has a capacity of 5 ml.		
techniques	Ways of doing things. E.g. there are techniques for adding, such as breaking down and building up.		
tiling	Cover a surface with tiles. Do not leave gaps or overlap the tiles. e.g. this surface has been tiled with rectangles. 		
Times tables	The basic multiplication facts. The multiples of all of the single digit numbers.		