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Mr Enver Surty, Deputy Minister of Basic Education

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These workbooks have been developed for the children of South Africa under the leadership of the Minister of Basic Education, Mrs Angie Motshekga, and the Deputy Minister of Basic Education, Mr Enver Surty.

The Rainbow Workbooks form part of the Department of Basic Education's range of interventions aimed at improving the performance of South African learners. As one of the priorities of the Government's Plan of Action, this project has been made possible by the generous funding of the National Treasury. This has enabled the Department to make these workbooks available at no cost.

We hope that teachers will find these workbooks useful in their everyday teaching and in ensuring that their learners cover the curriculum. We have taken care to guide the teacher through each of the activities by the inclusion of icons that indicate what it is that the learner should do.

We sincerely hope that children will enjoy working through the book as they grow and learn, and that you, the teacher, will share their pleasure.

We wish you and your learners every success in using these workbooks.

9 Rainbow WORKBOOKS

MATHEMATICS IN ENGLISH **GRADE 3 – BOOK 1 TERMS 1 & 2** ISBN 978-1-4315-0004-8 THIS BOOK MAY NOT BE SOLD.

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ENGLISH

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T	2	3	4	5	6	7	8	q	10
2	4	6	8	10	12	١Ļ	16	18	20
3	6	q	12	15	18	21	24	27	30
4	8	12	16	20	24	28	32	36	40
5	10	15	20	25	30	35	40	45	50
6	12	18	24	30	36	42	48	54	60
7	I4	21	28	35	42	49	56	63	70
8	16	24	32	40	48	56	64	72	80
q	18	27	36	45	54	63	72	81	90
10	20	30	40	50	60	70	80	90	100



HSIIDNE Book

This book belongs to:





your estimate and your count

Q

||(0)



Clever counting



Term

Counting the pumpkins

Find an easy way to count them.



Answer:

8

Q

Date:

<u>.</u> 2



Packing the pumpkins

Ten pumpkins go in one bag.



How many bags can you fill with the pumpkins?

How many pumpkins are left over?

2

How many more pumpkins are needed to fill one more bag?

4

5



Numbers on a hundred board



<u> Sa</u>

Term

Talking numbers

Count and say all the numbers from I to 100. Point as you go.

Ι	2	3	4	5	6		8	q	10	
II										1 PD
						27				000
			34						40	
41										
				55						
		63								
71										
					86					
			94						100	

Date:

- a. Write the missing number in each blue block.
- b. Write in the other numbers.
- c. What kind of numbers are the yellow numbers?

4

Write the numbers in words.

2

3

90	ninety	41	
77		56	
14		65	

6

5

8

q

()



Counting and colouring

Get ready to count a colour!

I 2 3 4 5 6 7 8 9 IO II I2 I3 I4 I5 I6 I7 I8 I9 20 2I 22 23 24 25 26 27 28 29 30 3I 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 5I 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 100 91 92 93 94 95 96 97 98 99 100 92 93	I 2 3 4 5 6 7 8 9 IO II I2 I3 I4 I5 I6 I7 I8 I9 20 2I 22 23 24 25 26 27 28 29 30 3I 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 5I 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	1 2 3 4 5 6 7 8 9 10 II 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 4.0 41 4.2 4.3 4.4 4.5 4.6 4.7 4.8 4.9 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100		
Count and colour the IOs.	Count and colour the 5s from 0 to 100.	Count and colour the 2s.		
Count in 10s from 10 to 100.	Count in 5s from 5 to 100.	Count in 2s from 2 to 100.		
Write the IOs from 10 to 100.	Write the 5s from 5 to 80.	Write the 2s from 2 to 100.		



leach Sign

Date

Term

<u>3</u>P

Numbers on a hundred board (continued)

1

Looking for patterns

CONV.

I	2	3	4	5	6	7	8	q	10	
II	12	13	14	15	16	17	18	19	20	
21	22	23	24	25	26	27	28	29	30	
31	32	33	34	35	36	37	38	39	40	
41	42	43	44	45	46	47	48	49	50	
51	52	53	55	55	56	57	58	59	6 0	
61	62	63	64	6 5	66	67	68	69	70	
71	72	73	74	75	76	77	78	79	80	
81	82	83	84	85	86	87	88	89	90	
qI	92	93	94	95	96	97	98	qq	100	

Tick (✓) all the IOs

2

3

4

5

6

7

Cross (X) the 5s

Circle (O) the 2s

8

q

 $\left| \left(0 \right) \right|$

Date:

Write the numbers that are in both the 2s and the 5s pattern.

Counting patterns Fill in the missing numbers. O; IO; 2O; ____; 5O; ___; 8O; __; IOO; __; ____; I3O; ____; ___; I6O; ____; ___; 200 O; 5; IO; ____; 25; __; 40; _; 50; 55; _; ____; 70; ____; ___; 85; ____; loo O; 2; 4; 6; ____; I2; ___; I8; ___; 22; 24; __; ____; 30; ____; 36; 38; ___; __; 46; ___; O; ____; 8; ____; 16; 2O; ____; 28; ___; 36; __; _; ; ; 52; ; ; 64; ; 72; ; 80 O; ____; IO; ____; 2O; ____; 3O; ____; 4O; ___; 55; 60; ____; 70; 75; ____; 85; ___; 100 O; 3; ____; 9; ____; 15; 18; ____; 24; ___; 33; ___; 39; Sign: ____; 45; ____; 54; 57; ____; 63; ___; 72; 75 Date



	Writing these numb	ers vone for you, Ve can also	
	IO + 9	ltep + qupits	nineteen
43			
69			
54			
35			
21			
73			
44			
32			
89			
17			
95			
56			
68			
67			



Write the first five numbers, in the table above, in order from smallest to biggest.

|| |2 |**3** |4 |**5 |6** |7 |8 |9 20

Addition and subtraction



Term

Lebo's stall

In the morning Lebo has 19 packets of apples. By lunchtime she has 13 packets left.

- a. How many packets does Lebo sell? _
- Write your answer as a number sentence. b.

and



Date:

1 2

Write five other numbers sentences to show the same answer. 15 - 9 = 6

Numl	per drill the answers.	1+2=3	Use + - =				
IO + 5 =	II + 6 =	I4-9=	14-8=				
II + 5 =	17 + 2 =	19-7=	14-5=				
l2 + 6 =	3 + 13 =	16-5=	16-13=				
17 + 2 =	4 + 15 =	15 - 10 =	I9-7=				
Number families 5 9 14							
Here are examples of th	nis number family.						
9 + 5 = 1/. $5 + 9 = 1/.$							

$q + 5 = \underline{l_4}$	$5 + 9 = \underline{14}$
<u>14</u> – 9 = 5	14 - 5 = 9

5

6

8

q

2

3

Can you find all the number families of 14?

I + I3 = I4	3 + = 4	I4 – I = I3	I4 – I3 = I
2 + I2 =			
3 + II =			
4 + IO =			
5 + 9 =			
6 + 8 =			
7 + 7 =			

12



+ = 2		
2 + 10 = 12		
3 + 9 = 12		
4 + 8 = I2		
5 + 7 = I2		Teo Sign:
b + b = 12		Date:

|| |2 |**3** |4 |**5 |6** |7 |8 |9 20





|4



Date:

<u>.</u> 2





2

3

4

Look at the shapes. Tick the shapes that show quarters.

Colour one quarter of each shape that is exactly divided into equal quarters.

6

8

q





Colour in a half of the shapes. What is a half of the number of the shapes?







Colour in a quarter of the shapes. What is a quarter of the number of the shapes?





Draw more shapes to make each half equal.

Draw more shapes to make each quarter equal.







I I2 I3 I4 I5 I6 I7 I8 I9 20





At the bank

Maria sorts the notes into piles of 5. She also has some notes left over. Write the totals for each row of pictures.





🦢 Challenge

A visit to the zoo

Some adults and children go to the zoo. They buy tickets for R90.

How many are children?

How many are adults?

Is there another answer?

12

Adults _____ Children _____

3 4 5

6

17

8



20

9

Teacher: Sign: Date:

Patterns

Date:



Q

Term

Use this 200 number board to answer the questions.

N

I	2	3	4	5	6	7	8	q	10
	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
qI	92	93	94	95	96	97	98	qq	100
101	102	103	104	105	106	107	108	109	IIO
	112	113	114	115	116	117	118	lld	120
121	122	123	124	125	126	127	128	129	130
131	132	133	134	135	136	137	138	139	140
141	142	143	144	145	146	147	148	149	150
151	152	153	154	155	156	157	158	159	160
161	162	163	164	165	166	167	168	169	170
171	172	173	174	175	176	177	178	179	180
181	182	183	184	185	186	187	188	189	190
 9	192	193	194	195	196	197	198	ldd	200



2

3

4

Use the 200 number board to complete the next four numbers in these number patterns. Then colour the pattern on the number board.

8

q

IO5, IIO, II5,,,,	87, 90, 93,,,,,
36, 40, 44,,,,	184, 186, 188,,,,
70, 65, 60,,,,	138, 135, 132,,,,
180, 176, 172,,,,	I4, I2, IO,,,

5

6



Write the numbers that come next in each pattern. Then colour in the pattern. What do you notice about the numbers shaded with the same colour?

Counting in **fives**.

		5			10

Counting in threes.

	3		6		

Counting in twos.

2	4			

Counting in tens.

					Ю



Extend the pattern.



12 13 14 15





6 17

8

9

20

Teacher: Sign: Date:

Balls, boxes and cylinders

0

Date:

1



2 3 4 5 6 7 8 9





14 15

Say if the can is behind, in front of, next to or on top of the box.

behind	in front of		behind	in front of	
next to	on top of		next to	on top of	
behind	in front of		behind	in front of	Teac Sign:
next to	on top of		next to	on top of	Date:





Draw, name and compare 2D shapes

Draw the shapes.



Circle	
Rectangle	

 \bigcirc



Counting the shapes.

Count how many shapes like this you can find in the picture.



2 3 4 5 6 7 8 9



Colour all the

big circles red, small circles green; big triangles blue, small triangles orange; big squares yellow, small squares purple; big rectangles brown, small rectangles pink.



How many sides?

2

3

|4

How many sides does each shape have? Write the number in the block. We have done one for you. Are the sides straight or curved? Colour in the correct answer.

15



6

17

8

20













Write the intervals on this measuring jug. We have shown interval 5.









Tick which containers you think hold I litre of liquid.





We use a balance scale to measure mass.

4

5



2

8

Q

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On which scale is the green apple lighter than the red apple



Data handling



16

Shoes in the class

Read the story.

Thabo: Wow, Miss! Jack is a giant! He wears size 6 shoes!



8

q

(0)

Date:

Mrs Khoza: Well! Yes, Thabo, that is big for a nine year old! What size shoe do you wear Thabo? What sizes do the rest of the class wear? Let's do a survey!

The learners call out their sizes, one by one.

Mrs Khoza writes the sizes on the board.

Mrs Khoza: Count, then write how many of each size.

2	2	3		2	3		4	3	2	3
2	3	2	6	2	2	3	3	3	4	3
4	2	2	3	3	5	3	2	2	2	1
i	І	2	4	2	3	2	3	4.	2	4
4	З	2	2	3	I	2	2	1	4	3

Fill in the table below.

2

Shoe sizes in the class									
Size I	Size 2	Size 4	Size 5	Size 6					

5

6
				M/	
	Now draw a pi	ctograph		= one	e learner
Sizel	Size 2	Size 3	Size /	Size 5	Sizeb
	Jize Z		Jize 4		JIZE U



a. Most learners wear shoe size

b. The fewest number wear size

<u>|</u>4

15

6

17

8

children took part in this survey.

What about you?

Find out what shoe sizes you and your friends wear!

• Work in a group of 6 to 8.

c.

Collect your data.

 \mathbb{I}^2

Write the number of shoe sizes in a table.

13

Compare answers with other groups.



9

20

Teache Sign

Date

75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 9 What number is before 84? What number is after 84? What number 92 What number 92 What number 92 What number 92 What	78 qc
Compare and order numbers 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 9 What number is before 84? What number is after 84? What number is between 0.0000000000000000000000000000000000	78 qc
Compare and order numbers 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 9 What number is before 84? 84 85 86 87 88 89 90 91 92 93 94 95 96 97 9 What number is after 84? 90 91 92 93 94 95 96 97 9 What number is after 84? 90	98 qc
75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 9 What number is before 84? What number is after 84? What number is effore 84?	96 SF
75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 9 What number is before 84? What number is after 84? What number is	48 qc
What number is before 84? What number is after 84? What number is between 88 and 90?	
before 84? What number is after 84?	
after 84?	
Fill in the missing numbers.	
67	
71	
	00
lse the number board to answer the questions.	
	•••••
Which number is before 68?	
Which number is aller 00? Write down five numbers smaller than 71	
 Write down five numbers bigger than 71. 	
What numbers are between 79 and 84?	
• Write the numbers from the smallest to largest. 13, 52, 50, 59, 61	
• Write the numbers from the largest to smallest. 74, 96, 99, 91, 38	
~ 	

1 2 3 4 5 6 7 8 9 10

Date:

Term



Complete the table. Start with the given number.

	one more	one less	ten more	ten less
25				
39				
74				
56				
40				



Circle the biggest number.

78 87 17



Circle the smallest number.

99 19 9



18

>



If < means smaller than, and > means bigger than, complete:

23



57 98 89 57



Find 5 numbers in a newspaper between 50 and 99 and paste them in order from the smallest to the biggest.





8

q

()

Date:

You can show a number using tens and units.

Here is how to show 47.



4

a. Under the picture, write how many tens and how many units. Then write the number in symbols and words.



5

6

Term

2	0	6	



We can also use our number cards to show it. b.

Number	How many tens?	How many units?	Write the number in words
26	2	6	twenty-six
46			
qq			



What is the number?



lerm

Reading

Putting tens together when we add to 99

Date:

8

Q

<u>.</u> 2



Let's add 27 + 4. The blue blocks are the units we start with and the red units are the units we are adding to them.



2

3

4

5



Complete the pictures. Write the number sentences shown by the picture.



Add on a number line

Date:

8

0

<u>.</u> 2

Sit at your desk!

In our school each learner has their own desk. There are 46 learners in Grade 3A and 24 in Grade 3B.

How many desks do we need for both classes?

Working with a partner

2

4

5

6

Look at how these three learners used a number line to solve the problem. Complete the sums using the example.





Add on a number line (continued)

1

C.M.

Date:



6

7

8

Q

||(0)

65 + 29 =b.



Subtract on a number line

Date:

11 12 13 14 15 16 17 1F 19

8

Q

1 2

One learner! One ruler!

2la

lerm

The class needs 53 rulers. We have only 35.

How many more do we need? 53 - 35 =

2

4

5

6

Working with a partner

Read how the same three learners use a number line here. Complete the sums using the example.



a. 68 - 24 =74-38= b. 92-87 = c. Subtraction means to find -10 the difference between 53 and 35. 35 40 43 53 I'll start at 53 and count down to 35 to find the difference. If I count back by IO, I get to 4.3. I can count back 3 more to get to 4.0. Then I count down 5 $\,$ more to get to 35. 10 plus 3 plus five is 18. So we need 18 more rulers. a. 38 - 14 =

6 7

8

9

20

2

3

2lb 1 2 1 ane Subtract on a number line (continued) Term b. 65-43= 72 - 39 =c. d. 85-48= + 10+5 + 3I can start at 35 and see how many jumps it takes 35 50 53 me to count up to 53. 45 I can start at 35 and see how many jumps it takes me to count up to 53. Ten plus five plus three is 18. We need 18 more rulers. 84-32 = a. 2 3 4 5 6 7 8 Q

Date:

96 - 53 =b. 78 - 19 =c. 63-47= d. h 🦢 Going by taxi The journey by taxi to town is $65~{
m km}.$ So far the taxi has travelled $38 \ \mathrm{km}$.

14 15 16 17

How much further to go? Use the number line to solve this problem.

12

3



8

9



It's party time



First plan!

Busi asks all of her friends to give her a picture of their favourite party food. This is what she has collected. Help to sort it.

Date:

8

q



Count, and write how many friends choose each kind of food.					
Kind of food	Development Lemonad Providenced software 20 million				
Number					

2

4

5



Complete the pictograph. Use your table to help you. Draw one face (ⓒ) for each child that chooses that kind of food or drink.

100

BBD

\odot			
\odot			
\odot			
\odot			
\odot			O
\odot			
\odot			
Research and Revenued soft of Revenued soft of Revenued soft of Revenued soft of	Ŷ		Teacher: Sign: Date:

|| |2 |**3 |4 |5 |6 |7 |8 |9 2**(



3 lots of 10 make 30 $3 \times 10 = 30$ or $10 \times 3 = 30$
5 lots of 10 make × = or ×=
2 lots of 10 make × = or ×=
5 Pairs of feet. How many toes altogether?
$0 + 10 + 10 + 10 = 50 \underline{5} \times \underline{10} =$
or $\underline{10} \times \underline{5} =$
Do these in the same way.
4 Pairs of feet. How many toes? = =
9 Pairs of feet. How many toes?
× = or × =
Count in IOs.
IO, 2O, 3O, 4O, 5O,,,,,,,









Counting pairs of socks

Write how many pairs of socks there are and say if there are any left over.

Socks	Number of pairs	Number of socks	Single socks left over



lerm

Count in 2s (continued)

Date:



Building pairs

Write down the even and odd numbers from I-60.

N

a. Write down the even numbers from I-60.

ane

2, 4, 6,

b. Write down the odd numbers from I-60.

3, 5, 7,



From pairs to socks	
Example:	
2 socks = 1 pair	20 socks = 10 pairs
$2 \times I = 2$	$2 \times 10 = 20$

a. Write how many socks.

	Think in 2	S	Number sentence
l pair	= 2 socks		$ \times 2 = 2$
2 pairs	=	socks	2 × 2 =
4 pairs	=	socks	
8 pairs	=	socks	
9 _{pairs}	=	socks	

b. Show the sum on the number line and complete.



Money then and now

Date:

8

q

1 2



The story of our money

In South Africa we use rands and cents as our money. We started to use rands and cents in 1961.

In those days the I cent coin had the lowest value, then the 2 cent coin and then the 5 cent coin.



2

4

5

6





Count the cents

Count the I cents. How many cents are there?

How many more cents do you need to make RI,00?

Draw them in the block.



How many cents?



RI,OO =	с	R2,00 =	с
R3,00 =	с	RI,50 =	с



2

How much fruit can I buy?

cost R4,00.

How many bananas for R20,00?

2

3

|4

15

6

17



How many apples for R9,00?

8

9

20

2	27	Date:
Term I	Co Wheels in 3s	ount in 3s
	I tricycle has_	wheels.
	5 tricycles have wheels.	3+3+3+3+3=5×3=
	2 tricycles have wheels.	3 + 3 = 2 × 3 =
	4 tricycles have wheels.	
	6 tricycles have wheels.	
	9 tricycles have wheels.	
	8 tricycles have wheels.	
	Number lines Follow the example. 0 3 6 9 12 a. $3+3+3+3=$ = $4 \times$	3 =
62	I 2 3 4	5 6 7 8 9 10



How many tricycles are there? _

|4

<u>2</u> 8				Date:				
What comes in 4s?								
	Four legs	So L	me 4 number facts + 4 = 8; 2 × 4 = 8	TARA				
V	What else comes in fours?							
Us	Cour e the facts you know al	nting the legs pout 4s to answer these 4 legs	questions.	Explain what you did.				
	3 cows	legs	4 cows	legs				
	5 cows	legs	6 cows	legs				
	7 cows	legs	8 cows	legs				
	9 cows	legs	10 cows	legs				

1 2 3 4 5 6 7 8 9 10



Complete the table below. Use the example to guide you.

3 cows havelegs.	$4 + 4 + 4 = 3 \times 4 = $ <u>12</u>
5 cows havelegs.	
4 cows havelegs.	
7 cows havelegs.	
8 cows havelegs.	



|4

Number lines

Show the multiplication sum on the number line and complete using jumps (hops).



Patterns in numbers

Date:

1 1



Grid patterns

Which number pattern do the circles in each IOO grid show?

COMP

Draw more circles to complete each pattern.

Write a name for each pattern.

2

3





6 7

8

q

()



Making your own patterns

a. In this number pattern all the numbers are even. What can the other numbers be? Write them in.



b. In this number pattern the numbers are all odd. What can the other numbers be? Write them in.



15

4

6

17

When she counts them in 3s, she has I left over. The possible numbers are: 61, _____, ___, 70, When she counts them in 5s, she has 4 left over. The possible numbers are: ____, ____. How many shells does Thembi have? ____.

3

2



8

9

20

Teach Sign:

Date



Division

Term

Share the sweets:



Share 30 sweets between 2 children. a.



We can write it as

 $30 \div 2 = 15$

•

8

=

q

Share the sweets among 3 children. b.



Divide the sweets between 5 children. c.

2

3



6

4





We can use number blocks to do division.



Now do these.





Division (continued)

ane

Date:

||(0)



Use the number lines to write a subtraction and division number sentence. Example: Ib-2-2-2-2-2-2-2=0 $16 \div 2 = 8$ a. q 2I -= • = b. Ο = 28-• = c. Ο = = • Q




Challenge Show all the ways you can divide 24 sweets equally between different groups of children.

Write a number sentence to show your answer.





 12
 13
 14
 15
 16
 17
 18
 19
 20







Share the sweets between the children.

14 15



• one quarter of the sweets = 3

- two quarters of the sweets = ____
- three quarters of the sweets = ____
- four quarters of the sweets = ____

12

3

- one third of the sweets = ____
- two thirds of the sweets = ____

6 7

• three thirds of the sweets = ____

8

20



It's about time



Clockwise

We can write the same time in different ways.

$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	7 11 12 1 12 1 12 1 10 2 1 10 2 1 10 2 1 10 2 1 10 2 1 10 10 10
2:15	5:30	9:45
quarter past two	half past five	quarter to ten

Write these times in 2 different ways.





	/ <u></u>
6250	





Counting the numbers

Count and say all the numbers from IOI to 200. Point as you go.



101	102							
121								
131								
							149	
			154					
				165				
		173						180
181					186			
						198		200

8

q

10

Date:



Writing the numbers

a. Write the missing number in each blue square.

3

4

b. Write in the rest of the numbers.

2

c. Write the next 10 numbers after 200.

6

5

Term 2



Working with groups of numbers

Date:

8

q

10



34

Term 2

Packing candles

Ma Nkosi works at a candle factory. When the candles are ready, she packs them out like this in boxes on racks.



6

How many boxes on each rack?

How many candles on each rack?

2

3 4 5



How many more boxes does she need to fill to have 200 candles?

b. How many candles in:

2 boxes?0	4 boxes? Ů
5 boxes?0	3 boxes?0
6 boxes?0	7 boxes?0

c. How many boxes does she need for:

40 0boxes	70 Å	boxes
50 d boxes	30 ₫	boxes



Term 2

Putting tens together and taking them apart

Date:

1 1

10



Putting tens together when we add.





2 3 4 5 6 7 8 9



a. 65 + 52



b. 76 + 63

c. 86 + 65

11

12

13

14 15



16

17

18

19

Siqn

Dat



Term 2

Putting tens together and taking them apart (continued)

Date:

1 2



Use your place value blocks.

alle

Use base ten blocks to	All together	Did you group tens or units?	Write the
make these two numbers.	how many tens?	Check the place value where	number.
	how many units?	you regrouped.	
23 + 99 =	tens units	tens + 12 units = 0 + 12	122
38 + 25 =	tens units		
77 + 3I =	tens units		
68 + 45 =	tens units		
83 + 47 =	tens units		



Taking tens apart when we subtract

When we subtract, we sometimes need to show

one ten as ten units, or one hundred as IO tens.

Let's subtract: 60 - 55 =

We start with six tens and no units. We want to subtract five tens and five units.

(The units we are taking away we coloured grey.)



Let us try.

a. 70 – 28



b. 90 – 46

c. 80-53







b. What can you see from the table?

Most of the children brush	a day.
There are	children in the group.

q





Term 2

Add and combine

Coluc

Date:

1 1





5

6

8

7

Q

10

4

2





14 15 16 17 18

c. 81 + 57

d. 69 + 71

11

12

13

Use Aakar's method to do this one.

19



Add and combine (continued)

0

Date:

.



Term 2

Now let's subtract.

COMP



b. 95–73

c. 86-62



d. 85-69





There are many ways to add units and tens together. Choose the way you know and like best to solve these problems. Show your work.

a. Peter first picks 34 peaches and then 67 peaches. How many peaches altogether?



b. The Malusi kids save R47 together. Their mother gives them another R58. How much do they have now?



c. The school bus travels 88 km in the morning and 73 km in the afternoon. How many km altogether?



12

13

14

15 16

17

18

19

20





q

Musa

Musa sells tickets. He had 92 tickets to begin with. He has 67 left. How many tickets has Musa sold so far?



Count and calculate

0

COMP

Date:



Term 2

92

1

2 3 4 5 6 7 8 9 10



Measuring in centimetres

Date:



Term 2

How big is a centimetre?

I.	2	3	4	5	6	7	8	q	

The numbers on the ruler stand for centimetres. We use the abbreviation or symbol cm. When you use a ruler, you must start to measure from O. Some rulers do not show the O like the one on this page. Find zero cm on the ruler. Write O on the ruler. Where is IO cm on this ruler? Write IO there.



2

1

3

Estimate, then measure accurately with your ruler, the length in cm of the line making each shape.

a.	b.	C.	

a. Estimate	cm	b. Estimate	cm	c. Estimate	cm
Measure	cm	Measure	cm	Measure	cm

6

8

Q

10

5





How long is each line?

How many cm long is each line?

a cm	d. cm
b cm	e cm
c cm	f cm

Are you sure?

Which is longer, the red line or the green line?

How can you check?





12

13

11

14

15

16

17

18

19

20

This is what is called an optical illusion. This happens when your eyes are tricked into seeing something that is not really there. The two lines are the same length. The black lines extending outward make the red line look longer and the black lines going inwards make the green line look shorter.





Target 300



Counting and writing the 200s

Count from 201 to 300.

Point as you go.

Then fill in the blue numbers first.

Write in the rest of the numbers.

201					207			210
211								
221								
231								
							249	
		254						
			265					
	273							280
281				286				
						298		300



Date:

1 2

300

Write the next 10 numbers after 300.

2

1

3

4

300; ____; ____; ____; ____; ____; ____; ____; ____; ____; ____; ____;

5

6

7

8

q















Counting and writing the 400s

Count on from 300 to 400.

Say the numbers as you go.

Write the missing numbers on the grid.



1 2

Date:





Write the next 9 numbers after 400.

2

3

1

400; ; ;

5

6

7

8

q

10







Combine their mass

Steps

- Use your rounded off amounts to estimate.
- Estimate the mass of the animals in each row.
- Calculate the totals using the actual mass.
- Compare the two totals and write the difference.

	I estimate	I calculate	The difference
+			

I may not be as heavy as you, old Tortoise, but I sure am faster!

Vusi adds his own mass to the mass of and see.

Vusi's mass

Check. Compare. Correct.

Their total mass is 239 kg. How much does Vusi weigh? Show you answer.



11

12

What's my weight?

Play in a group. Take turns ...

13

14

Add your mass to the mass of some of the animals. Work out the total. Tell the answer to the group. Don't show them your work! They must then try and work out your mass.

15

16

17

18

19



Term 2

20				Ta	irget	500	C			
21	y c	Counting and writing								
401				405					410	\succ
411									420	
	422					427				
			434							
					446					
							458			
	462								470	
		473				477				
481									490	
								499	500	
1. Cou b. Wri 5. Wri	unt on fr te the m te the n	om 400 nissing nu ext 9 nu). Say tł umbers ir umbers a	ne numbe n the gri fter 50	ərs as yo d. O.	u go.				

-

ane

Date:

1

d. Count in 2s. Write the next 8 numbers in the 2s pattern.

400; 402; ____; ___; ___; ___; ___; ___;

2

1

e. Count in 5s. Write the next 8 numbers in the 5s pattern.

4

3

5

6

8

q



a. Add forward from 400.



Find the totals. Use your number cards to show each total.

405 + IO	415	400 + I0 + 5	398 + IO		
446 + IO			424 + IO		Teach Sign:
455 + IO			460 + 20		Date:

More adding and subtracting

0

an

Date:



You are going to use Busi's and Dumi's methods again to add.



c. 265 + 148

1

46

Term 2

2 3 4 5 6 7

8

q


Sharpen your skills

0

Date:

.



Secret mountain

C.M.

What's the name of the highest mountain in Gauteng? Use the code to find out. Match each answer in the table to a letter in the code.

А	В	С	D	EFGHI,						K	L	М
I	2	3	4	5	6	7	8	q	10		12	13
Ν	0	Р	Q	R	S	Т	U	V	W	Х	Y	Ζ
14	15	16	17	18	q	20	21	22	23	24	25	26
Number clues Answer												iter
Exam	Example: $2 \times 3 \times 3 \times 1 = \Box$ 18 R											R
50 -	$50 + 50 + 50 + 100 - 200 - 45 = \Box$											
I + 2	$I + 2 + 7 + IO + 7 + I - I_4 = \Box$											
60 -	$60 - 30 + 50 + 20 - 50 - 15 - 20 = \Box$											
3+	2 + 7	+ +	2 + I	+ 3 =	=							
5+	3 + 3	0 = 4	. + 2	+ 12 +	-							
100	-5-7	70 = 2	20 +									
36 +	- 44 -	60-	2 = [
IO +	$IO + I5 = I_{4} + \Box$											
2+	$2 + 1 + 14 + 9 + 14 = 25 + \Box$											
$I \times 2$	2×2	$\times 2 \times$	2 =									
The mou	untain's	name is										

4

2

3

4

5

6

7

8

q







Draw shapes to make the picture symmetrical. We have done the first one for you.







15

16

17

18

19

14





Create your own symmetrical carpet using shapes.

11

12

13

111

Sign:



Complete and multiply

l basket holds	_apples.	$I \times IO = IO$
3 baskets hold	_apples.	$3 \times 10 =$
5 baskets hold	_apples.	
4 baskets hold	apples.	
2 baskets hold	_apples.	
l crate holds 100 apples.		2 crates hold apples.
3 crates hold	_apples.	4 crates hold apples.
5 crates hold	_apples.	2 half crates hold apples.

q



Multiplication and division (IO)



Counting the apples.

Fill in the table.

How many baskets hold the apples?



Date:

Apples 🍎	Ю	20	30	40	50
Baskets	I	2			
÷ sum					50 ÷ 10 = 5
× sum					$5 \times 10 = 50$



Divide the apples between the children. Make a drawing.

Write a division and multiplication sum to check your answer.

a.
Image: Check you answers
Image: Check you answers
Image: Check you answers

Image: Check you answers
Image: Check you answers
Image: Check you answers

Image: Check you answers
Image: Check you answers
Image: Check you answers

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Image: Chec





Q



How many gloves?

Write in the tables.

a.	Pair of gloves	I	IO	5	50	4	40	3	3 0	100
	Number of gloves	2								

b.	Single gloves	20	21	70	73
	Pairs that can be made				
	Single gloves left over				



Count in twos

a. Which number comes in between?

264,, 268	391,, 395	414, <u> </u>
-----------	-----------	---------------

b. Write the next two numbers.

373, 375, <u>377</u>, <u>379</u> 480, 482, ____, ___ 262, 264, ____,

c. Write the next two numbers.

12

11

13

14

15

346, 348,,	415, 417,,	297, 299,,	Date:

16

17

18



Now it's your turn!

Shade blocks to show how you can arrange 8 and 9 square tiles.

8 squares	q _{squares}			

Q

Write number sentences for each drawing.



Arrange 12 tiles

Thabo has 12 square tiles to pave next to the house. Help him find all the ways he can do this.

Write a number sentence for each way.

Example:	$I \times I2 = I2$ $I2 \times I = I2$
Arrange 2/, tiles	



- Use the grid in Cut out sheet 2.
- Shade 24 blocks in different ways.

• Write number sentences to match each drawing.





	Co	ounting	forward	s and b	ackwar	ds in	5s		-		
a. 85;; 70;; 55;;											
b. 240;; 255; ; ; ; ; ; ; 280											
c. 405	;	_; 395;		_;	; 38	0;	;	;	365;		
The childr We have a	Collecti en collec ione the	ng R5 c t R5 coir first two	oins s. How mo for you.	any R5 d	coins do t	chey n	eed to colle	ect to ho	ave R'	?	
= l c	oin	= 2	÷ NO coins	RI5?			R20?		R25?		
R30?		R35′	?	RД	R40?		R45?		R50?		
2 imesR5	$\dot{o} = R$			$4 \times R5 = R$					Do you see patter	∍ the n?	
3 × R5	6 = R					6 ×	R5 = R	•••••		200	
Multiplying by 5sExample: $I \times 5 = 5$; $II \times 5 = 55$; $2I \times 5 = 105$ Think smart! Build on facts you know!											
	I	2	3	4	5	6	7	8	q	IO	
	5	IO									
	II	12	13	14	15	16	17	18	19	20	
	55										



Q

Time problems Solve each problem. Us	Check. Compare. Correct.
a. Queenie visits her Dad at the c She leaves at 17:15. How long does she visit for?	linic at 15:45.
b. Musa goes to the park at 10:45 He comes home at 12:30. How long is he away for?	5.
c. Tumi starts to study at 13:15. She finishes at 14:45. How long does Tumi study for?	

11 12 **13** 14 **15 16** 17 **18** 19 20





l able legs	 	 	

- a. How many tables in a row?
- b. How many legs in a row? _
- c. How many rows of tables?
- d. How many legs altogether? Show how you work it out.



At the factory

A carpenter makes tables. He first makes the leqs.

He has made 48 so far. How many tables can he make?

How many more legs does he need for one more table?





11

12

Complete the grid by filling in the answers

14

3

15

		2	3	4	5	8	Ю	II	12
2	×3	6							
	×4	8							

1 6 17

18

19



Count in 50s

0

Date:

.



Term 2

One child, one blanket!

How many children? Estimate, then count.



All the children in the picture get a blanket. How many children are there?								
Estimate	Count	Compare						
How many are (boys? How many are	© girls?						

5

6

8

q

2

3



Fractions: halves and quarters

Date:

1 2



Term 2

Divide the balls equally between the boxes.



Look at the pictures and answer the questions.



2

3

4

5

6

8

Q



Colour in $\frac{1}{2}$ of each shape. Colour in $\frac{1}{4}$ of each shape.

Colour in $\frac{2}{4}$ of each shape.

Colour in $\frac{3}{4}$ of each shape.



Look at the fraction strips.

	l wł	nole	
Ī	<u>1</u> 2	Ī	<u> </u>
<u> </u> 4	<u> </u> 4	<u> </u> <u>4</u>	<u> </u> <u>4</u>

a. How many halves $(\frac{1}{2})$ make one whole? How many quarters $(\frac{1}{4})$ make one whole? How many quarters $(\frac{1}{4})$ make one half?

12

13

11

18

19

b. Look at the diagrams and write a fraction for the shaded part.

14



15

16



Date:

Q



15 16 17 18 22 23 24 25 12 13 14 19 20 21 22 21 26 27 28 10 Ш 2**9**

- Show one half of the length the ruler. This equals to _____ cm •
- Show one third of the length on the ruler. This equals to _____ cm •
- Show one sixth of the length on the ruler. This equals to _____ cm •



11

12

13

Look at the fraction strips. Complete the sentences. I whole $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{6}$ $\frac{1}{6}$ $\frac{1}{6}$ | 6 $\frac{1}{6}$ 6 There are halves in a whole. There are thirds in a whole. sixths in a whole. There are There are sixths in a half. There are sixths in a third. • Write a fraction for the shaded part. Circle the bigger fraction. $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{6}$ b. $\frac{1}{2}$ a. <u>2</u> 6 $\frac{1}{2}$ c.

18

17

19

20

15

1

6

Fractions: fifths Divide the cans into the 5 boxes. In one fifth of the boxes are 6 • cans. In two fifths of the boxes are • cans. In three fifths of the boxes are cans. In four fifths of the boxes are cans. In five fifths of the boxes are cans. Look at the picture and answer the questions. How many chocolates are in the box? • one fifth $(\frac{1}{5})$ of the chocolates equal to two fifths $(\frac{2}{5})$ of the chocolates equal to • three fifths $(\frac{3}{5})$ of the chocolates equal to • four fifths $\left(\frac{4}{5}\right)$ of the chocolates equal to • five fifths $\left(\frac{5}{5}\right)$ of the chocolates equal to • • On day I I ate $\frac{1}{5}$ of the chocolates. How many chocolates are left?

Date:

8

Q

10

• On day two I ate another $rac{1}{5}$. How many chocolates are left?

4

5

lerm 2



Colour $\frac{1}{5}$ of the measurement of the ruler.





Look at the fraction strips and answer the questions.

				l wł	nole				
	7	<u> </u> 2					$\frac{1}{2}$		
	<u> </u> 3			3	<u> </u> 3				$\frac{1}{3}$
$\frac{1}{4}$			<u> </u> 4			$\frac{1}{4}$			<u> </u> 4
$\frac{1}{5}$ $\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		<u> </u> 5			
<u> </u> 6	Ē	<u> </u> b		<u> </u> 6	<u> </u> 6		<u> </u> 6		<u> </u> 6

Circle bigger or smaller

- a. $\frac{1}{2}$ is bigger/smaller than $\frac{1}{4}$.
- b. $\frac{1}{3}$ is bigger/smaller than $\frac{1}{2}$.
- c. $\frac{1}{5}$ is bigger/smaller than $\frac{1}{6}$.
- d. $\frac{1}{6}$ is bigger/smaller than $\frac{1}{3}$.
- e. $\frac{3}{6}$ is bigger/smaller than $\frac{2}{6}$.

14

15

18

19

17

16

12

13

11

.







q

10

Date:

1 2



These are all boxes.

Use Cut-out sheets 3 and 4 to make them.





Each flat surface is called a **face**. Stick or draw one smiley on each face of the boxes.

How many faces did you stick on:

2

3

4

5





Use your objects to build the following.

Describe the position of the cylinder using the words.





-

Columber 1

Date:

.

Do you remember?	2 is half of 4	4 is double 2		
	20 is half of 40	40 is double 20		
	200 is half of 400	400 is double 200		

Remember! We can show this in a drawing \ldots

6

Term 2



				Y.					
)ouble th	e numbe	r using a	number	line. The	first exc	ample is c	iven to u	jou.
Example Double 40	40		+		40	=	80		,
↓ ↓↓ ↓<	20	30	1 40	50	60	 70	80	90	
a. Double 60)	+		_ =					
0 20	40	60	80	100	120	140	160	180	200
b. Double 150	C	+							
0 50	100	150	200	250	300	350	400	450	500
c. Double 20			+			=			
0 50	100	150	200	250	300	350	400	450	500
	Comp	lete the	following	1		Comple	ete the f	ollowing	Ē
	a. Doubl b. Doubl c. Doubl d. Doubl	e 100 e 150 e 120 e 200	200			a. Half b. Half c. Half d. Half	220 180 260		Teacl
	e. Doubl	e 170				e. Half	320		Date:

19 20

62 1 COMP. More doubling and halving Finding the doubles or halves b. a. c. 148 73 73 96 96 f. d. e. 134 166 **8**9 89 Saving for a bicycle Sale R450 Half price: was R900 Aakar saves R25 a week to buy this bicycle.

Date:

For how many weeks must he save?

Answer:

weeks



1

2

3

On sale

All the items are on sale for half the price. Write the sale price next to each item.

4



5

6

8

q

10

Term 2



Group and combine

Date:

8

q

10

<u>.</u> 2



Term 2

Grouping the children

Mrs Ndaba wants to divide the class into equal-sized groups for outdoor games. First she puts them into groups of 4.



2

3

4

5

6

a.

b.

c.

Ho	w many outfits?	S	S		
Phindi has 5 coloured How manu different (l shirts and 5 coloure putfits can she make	ed shorts. using different com	binations of the colo	urs?]
For example: Blue s Write the first letter	hirt/blue shorts. Blu of each colour. Sho	ue shirt/orange short w all the other possil	s. ble outfits.		
Predict: What if Phir How many outfits car	idi has 6 different co n she make?	plours of shirts and s	horts?	ck. Compare. Correct.	Teac Sign: Date:
11 10	10 1/				



Maths fun



Look for a rule

Use the rule to find the missing numbers.

Now do these:







Build to 20 in 3 different ways.

2

3

4







8

q

()



5

6


Finding the numbers

a. Rule: The numbers in each row must add up to 16.

2	5	3	6
			2
		2	

b. Rule: The 3 numbers, across the rows and down the columns, add up to the same total.



23	28	21
12		26
	Ю	

c. Rule: Write in any 5 numbers that add up to the middle number inside the star.

14 15

