Learning about the Constitution of the Republic of South Africa (1996)

The Constitution of South Africa (1996) is the highest law in the country. This law is higher than the President, higher than the courts and higher than the government.

It describes how the people of our country should treat each other, and what their rights and responsibilities are. The constitution of a country is there to protect all of us now, and our children in the future.

Be aware of our past.	Let us not repeat the mistakes of past.	Our Constitution helps us to imagine and build a better future for all.

We, the people of South Africa;

Recognise the injustices of our past;

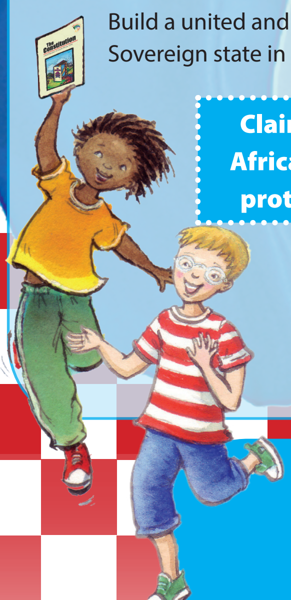
Honour those who suffered for justice and freedom in our land;

Respect those who have worked to build and develop our country; and

Believe that South Africa belongs to all who live in it, united in our diversity.

We therefore, through our freely elected representatives, adopt this Constitution as law of the Republic so as to—

- Heal the division of the past and establish a society based on democratic values, social justice and fundamental human rights;
- Lay the foundations for a democratic and open society in which government is based on the will of the people and every citizen is equally protected by law;
- Improve the quality of life of all citizens and free the potential of each person; and
- Build a united and democratic South Africa able to take its rightful place as a Sovereign state in the family of nations.



Claim your rights as a South African and be responsible to protect the rights of others.	Know your Bill of rights & Bill of Responsibilities.

May God protect our people.

Nkosi Sikelel' iAfrika. Morena boloka setjhaba sa heso.

God seën Suid-Afrika. God bless South Africa.

Mudzimu fhatutshedza Afurika. Hosi katekisa Afrika.

ISBN 978-1-4315-0147-2

9 781431 501472

Rainbow WORKBOOKS

MATHEMATICS IN ENGLISH
GRADE 3 – BOOK 2
TERMS 3 & 4
ISBN 978-1-4315-0147-2
8th Edition
THIS BOOK MAY NOT BE SOLD.

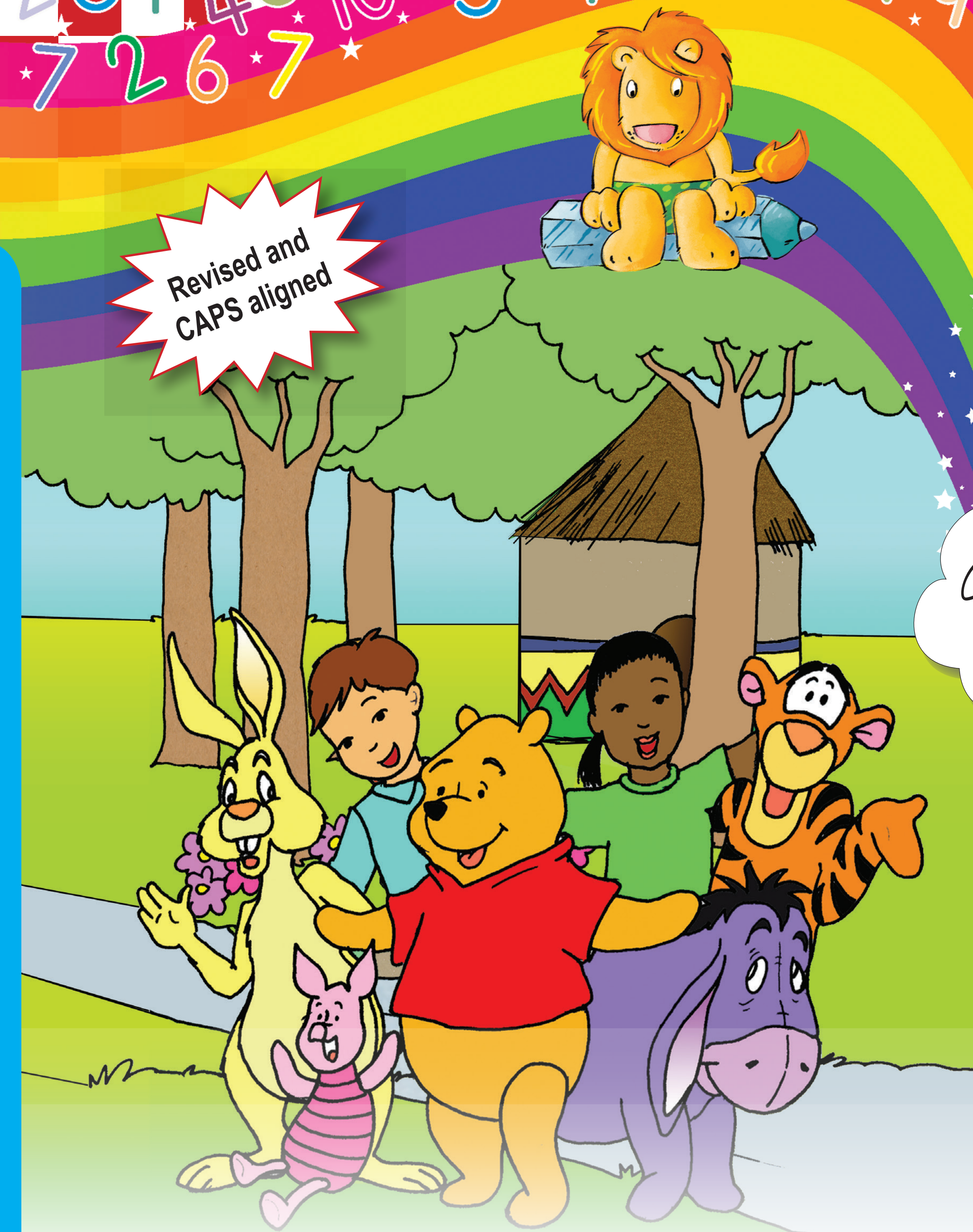
1 2 3 4

MATHEMATICS IN ENGLISH – Grade 3 Book 2

ISBN 978-1-4315-0147-2

Revised and CAPS aligned

Grade 3



MATHEMATICS IN ENGLISH

Book 2

Terms 3 & 4

Name: | Class:

basic education
Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

ENG MATHS G3 B2 COVER 9781431501472.indd 1

2014/06/20 8:20 AM

Contents

Mrs Angie Motshekga,
Minister of
Basic Education

Mr Enver Surty,
Deputy Minister of
Basic Education

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 in the first six grades. 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, in all the official languages, 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.

Published by the Department of Basic Education
222 Struben Street
Pretoria
South Africa

Eighth edition 2018

ISBN 978-1-4315-0147-2

Grade 3

Rainbow WORKBOOKS

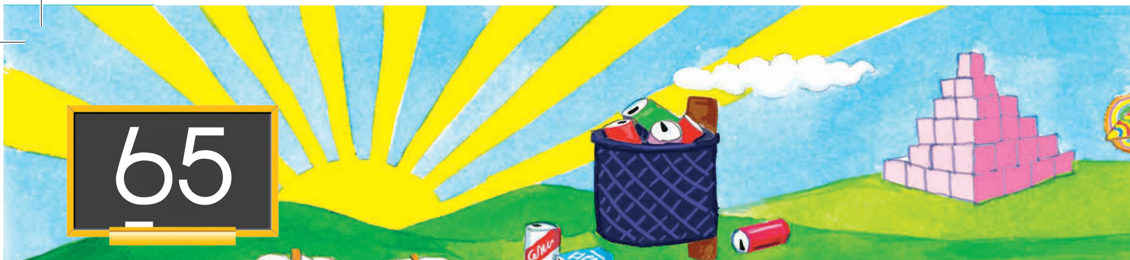
Mathematics

This book belongs to:

____

ENGLISH

Book 2



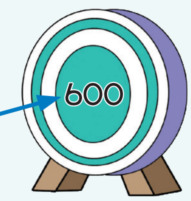
65

Date:

Numbers 500 to 600

Count and write.

a. Use the following chart to help you count from 500 to 600. Say the numbers out aloud as you count.



500

501			504						510
							518		
	522								
					536				
541								549	
							558		
		573							
							588		590
	592			595					600

b. Write the missing numbers in the grid above.

c. Write the 10 numbers that come after 500.

500; ____; ____; ____; ____; ____; ____; ____; ____; ____; ____

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

510; 512; ____; ____; ____; ____; ____; ____; ____; ____

e. Write all the numbers in the 2s pattern from 548 to 570.

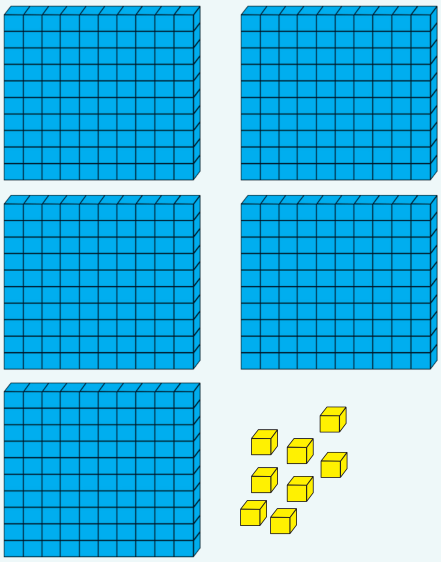
548; ____; ____; ____; ____; ____; ____; ____; ____; ____; ____; 570

f. Write the next 8 numbers in the 5s pattern.

515; 520; ____; ____; ____; ____; ____; ____; ____; ____

ENG MATHS G3 B2 9781431501472.indb 2 2014/06/20 7:53 AM

2 How many blocks can you count?



How did you count the blocks?

3 Complete the number lines.

540			543				547		549	

							597	598	599	

					597	598	599			

4 Complete the table.

	Write from smallest to biggest	Write from biggest to smallest
582, 586, 584, 581, 585		
566, 506, 560, 516, 506		

5 Write the following in words.

520	

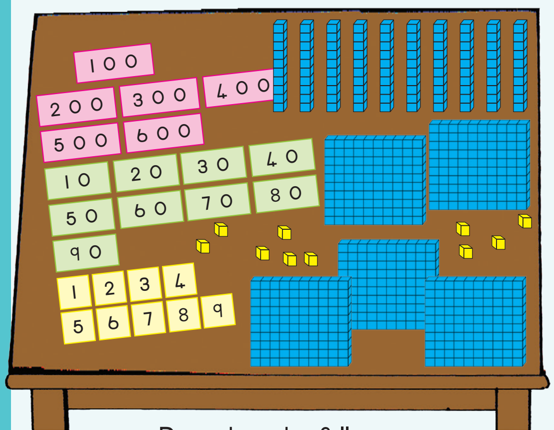
Teacher:
Sign:
Date:

66

Date:

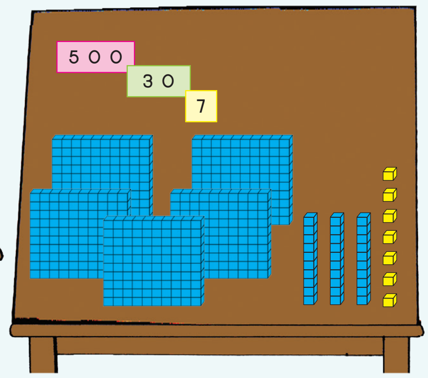
Term 3

More numbers 500 to 600

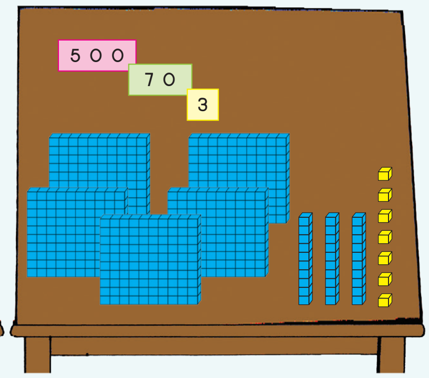


Peter has the following place value cards and base ten blocks.

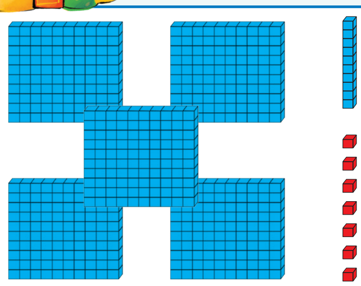
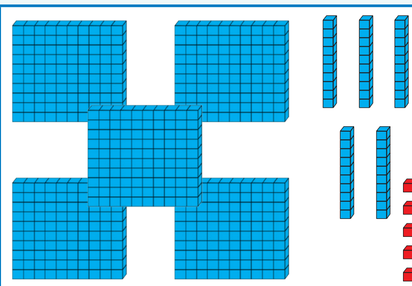
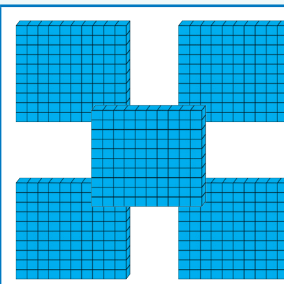
The teacher asks Peter to show 537 with his cards and blocks.



This is what Aakar showed. What did he do wrong?



Write a number sentence and then the answer.

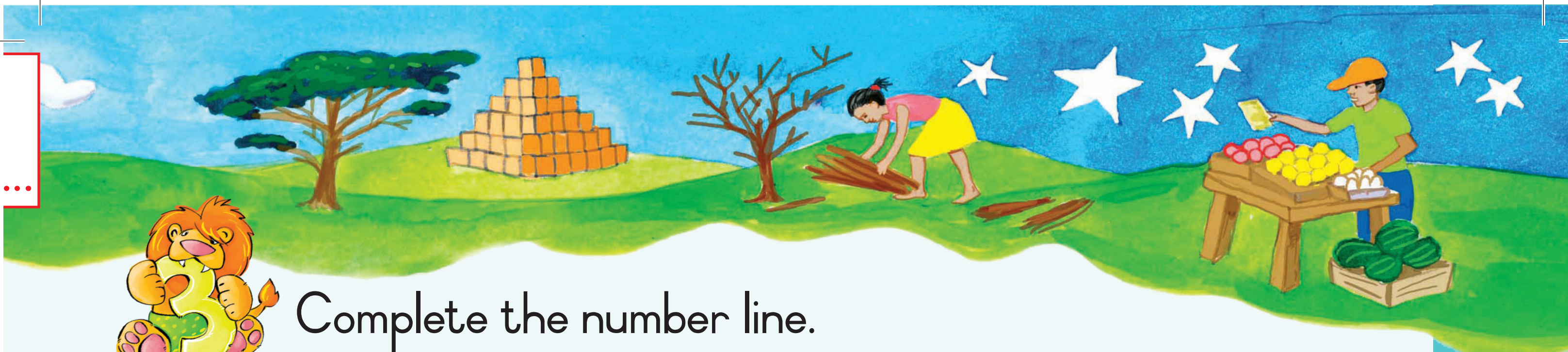
  

500 + 10 + 7 =	517				

Write a number sentence and then the answer.

500 70 3	500 90	90 1
500 + 70 + 3		
=		

1 2 3 4 5 6 7 8 9 10



3 Complete the number line.

550	551	552								560

Write all the numbers smaller than 556. ______________________

Write all the numbers bigger than 556. ______________________

4 Break up your number.

a. Build each number with your cards.

b. Write the value for each digit.

There are ten digits.
0 1 2 3 4 5 6 7 8 9
We put them together to make **numbers**.

495	
508	
594	
549	
602	

Example: 517

5	0	0
	1	0
		7
5	1	7

517	500 + 10 + 7

5 Write the number names.

221	
486	
369	
419	
491	

Teacher:
Sign:
Date:

11 12 13 14 15 16 17 18 19 20

67

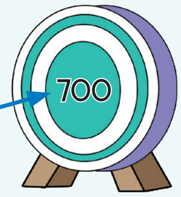
Date:

Numbers 600 to 700

Term 3

Count and write.

a. Use the following chart to help you count from 600 to 700. Say the numbers out aloud as you count.



600

601			604						610
							618		
	622								
					636				
641								649	
							658		
		673							
							688		690
	692			695					700

b. Write the missing numbers in the grid above.

c. Write the 10 numbers that come after 600.

600; ____; ____; ____; ____; ____; ____; ____; ____; ____; ____

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

622; 624; 626; ____; ____; ____; ____; ____; ____; ____; ____

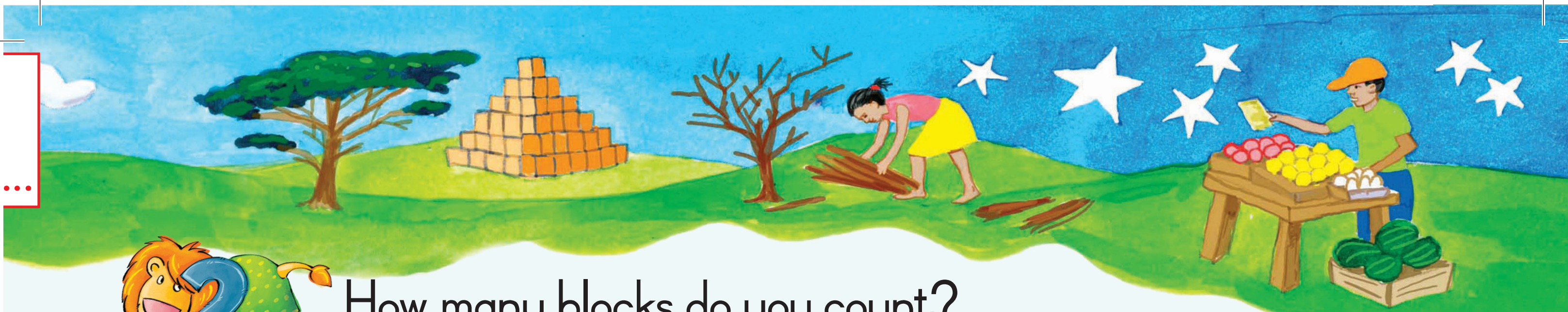
e. Write all the numbers in 2s pattern from 611 to 633.

611; ____; ____; ____; ____; ____; ____; ____; ____; ____; ____; 633

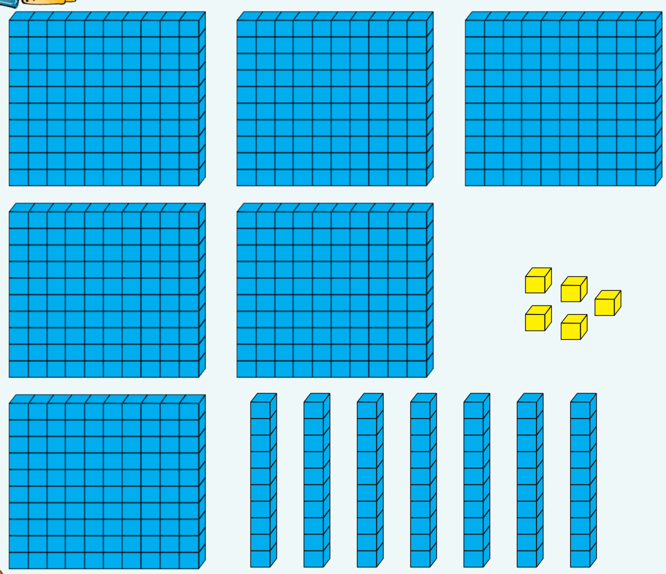
f. Write the next 8 numbers in the 5s pattern.

645; 650; 655; ____; ____; ____; ____; ____; ____; ____; ____

1 2 3 4 5 6 7 8 9 10



2 How many blocks do you count?



How did you count the blocks?

3 Complete the number lines.

640			643				647		649	
							687	688	689	
					602	604	606			

4 Complete the table.

	Write from smallest to biggest	Write from biggest to smallest
672, 676, 674, 671, 675		
656, 605, 650, 615, 605		

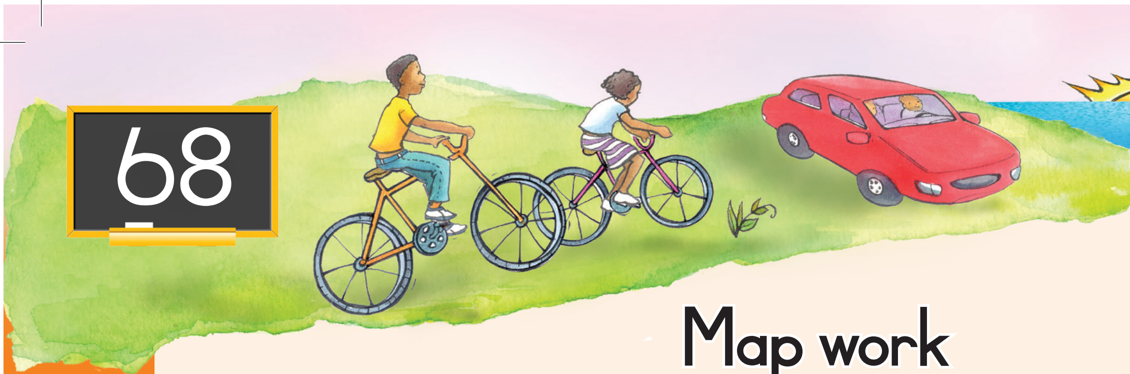
Teacher:
Sign:
Date:

5 Write the following in words.

631	

11 12 13 14 15 16 17 18 19 20

ENG MATHS G3 B2 9781431501472.indb 7 2014/06/20 7:53 AM



68

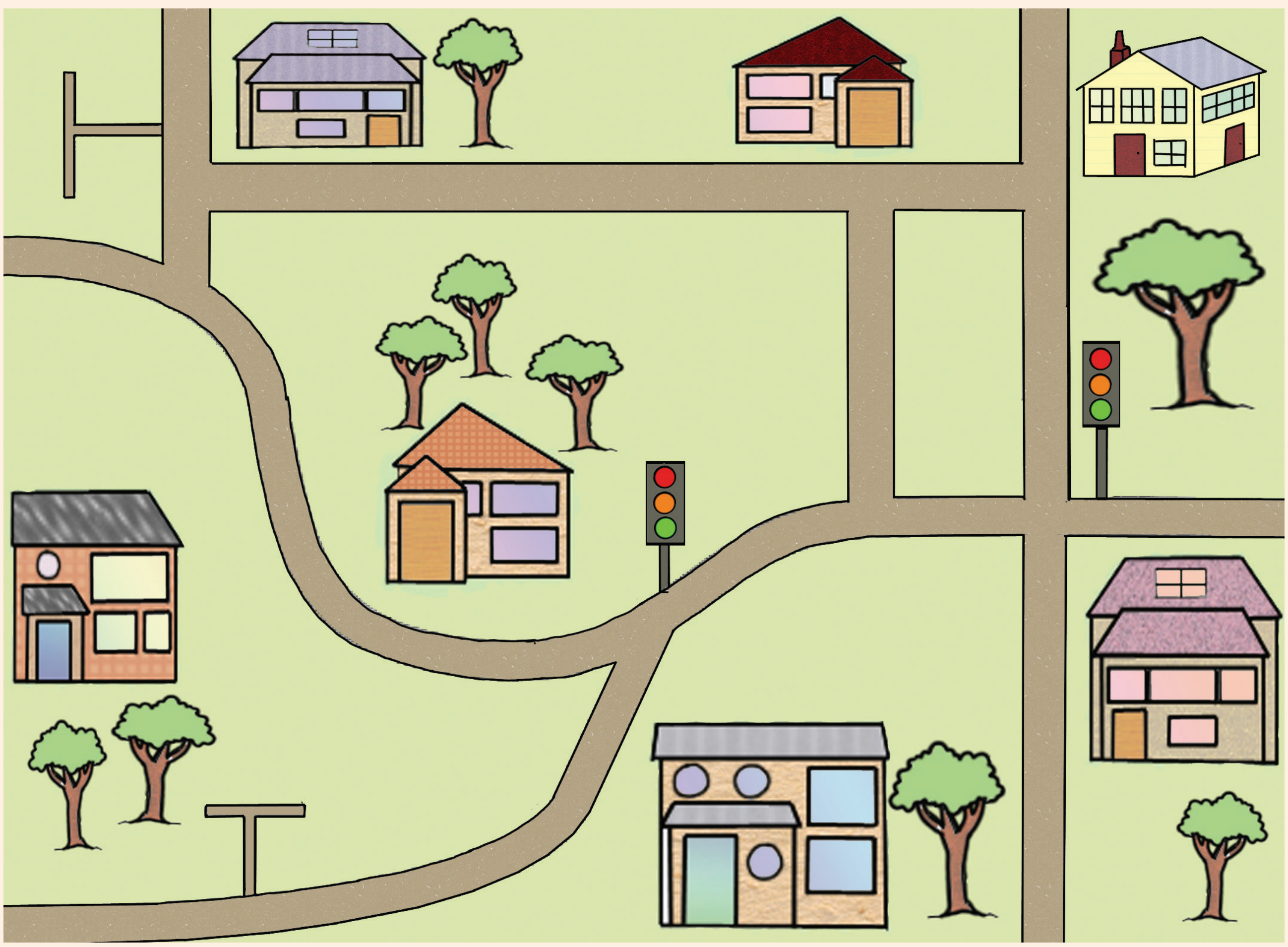
Date:

Term 3

Map work

Look at the picture.

- What is it?
- For what do we use it?
- What can we find on a map?



Draw the following on the map:

library, school, clinic, hospital, police station, shopping centre.
You can add some extra streets.

1 2 3 4 5 6 7 8 9 10

ENG MATHS G3 B2 9781431501472.indb 8 2014/06/20 7:53 AM

Use the map on the previous page to give your friends directions from:

a. the clinic to the police station.

b. the school to the clinic.

c. the school to the shopping centre.

d. the shopping centre to the library.

e. the library to the school.

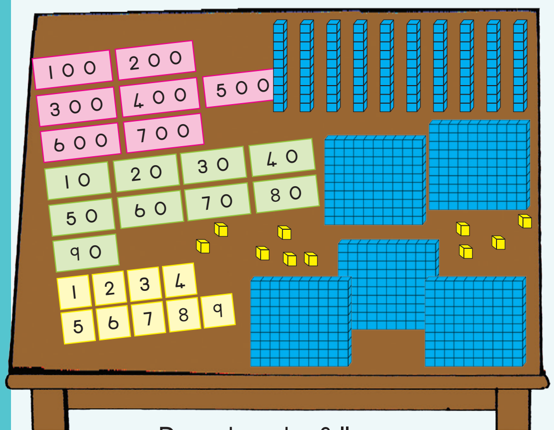
f. the hospital to the school.

Date:

69

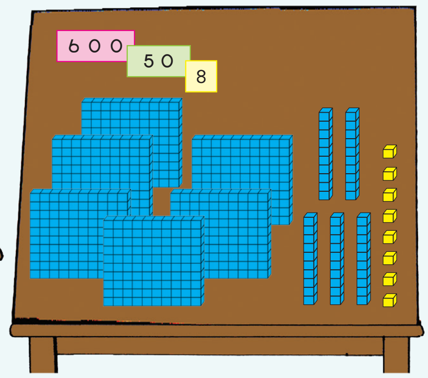
Term 3

More numbers 600 to 700

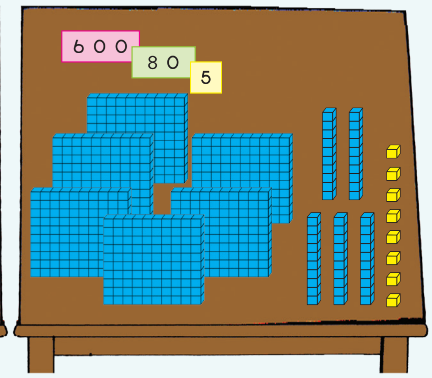


Peter has the following place value cards and base ten blocks.

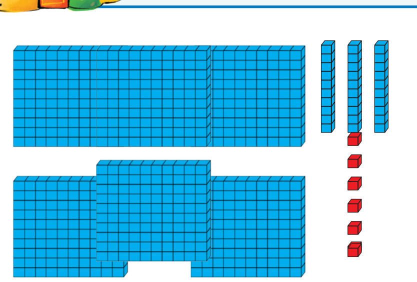
The teacher asks Peter to show 658 with his cards and blocks.



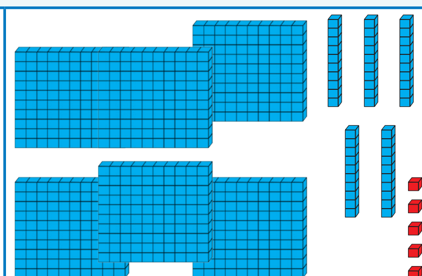
This is what Aakar showed. What did he do wrong?

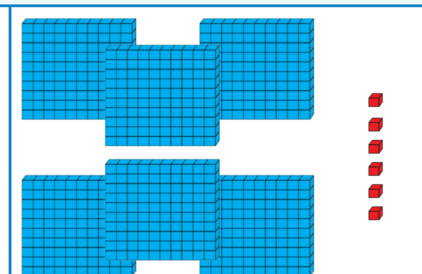


Write a number sentence and then the answer.



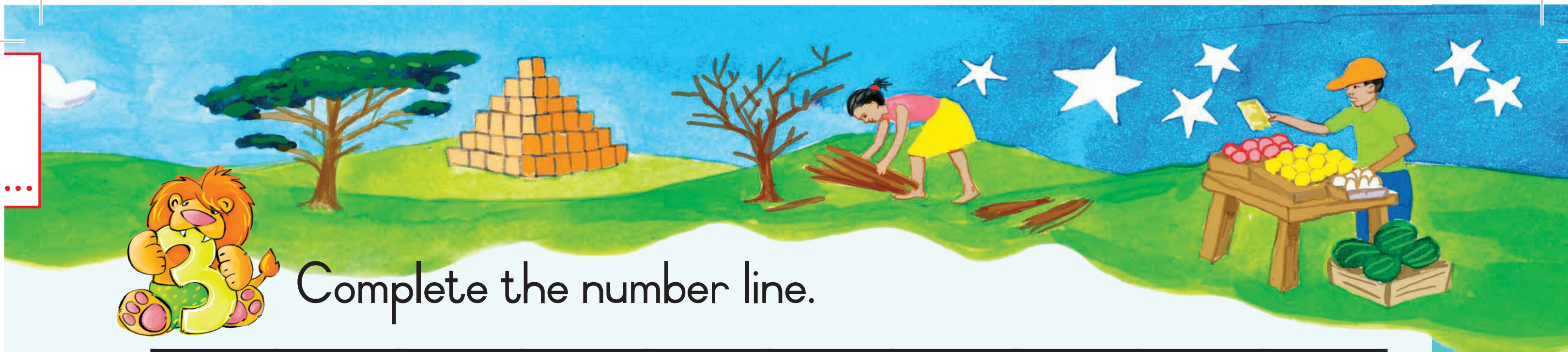
600 + 30 + 7 = 637





Write a number sentence and then the answer.

600 90 8	600 70	600 50 8
600 + 90 + 8		
=		



3 Complete the number line.

670	671	672								680

Write all the numbers smaller than 675. ______________________

Write all the numbers bigger than 675. ______________________

4 Fill in < or> or =

a. 670 ______ 607

b. 688 ______ 699

c. 600 + 50 + 5 ______ 655

5 Break up the number.

a. Build each number with your cards.

b. Write the value for each digit. Now do these: Break up your number.

686	
690	
699	
673	
665	

Example: 632

6	0	0
	3	0
		2
6	3	2

632	600 + 30 + 2

6 Write the number names.

672	
693	
607	
697	
660	

Teacher:
Sign:
Date:

70

Date: ....

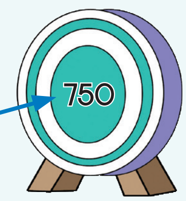
Term 3

Numbers 650 to 750

Count and write.

a. Use the following chart to help you count from 650 to 750. Say the numbers out aloud as you count.

650



						657			
661								669	
		683		685					
		703							
			714						
		723				727			
741		743						749	750

b. Write the missing numbers in the grid above.

c. Write the 10 numbers that come after 650.

650; ____; ____; ____; ____; ____; ____; ____; ____; ____; ____

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

705; 707; 709; ____; ____; ____; ____; ____; ____; ____; ____

e. Write all the numbers in 3s pattern from 719 to 749.

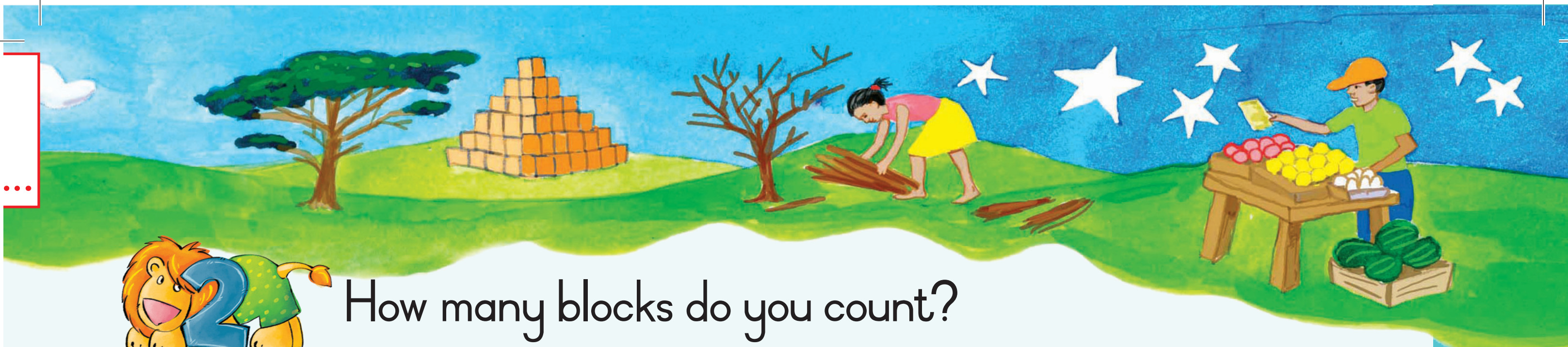
719; ____; ____; ____; ____; ____; ____; ____; ____; ____; 749

f. Write the next 8 numbers in the 5s pattern.

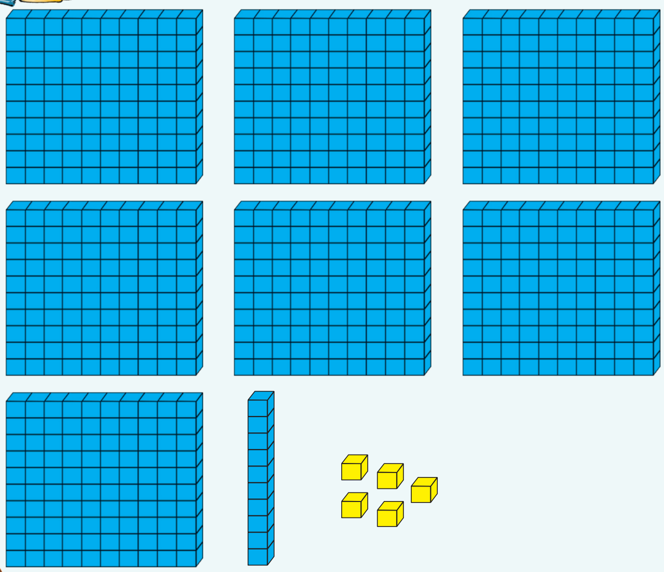
705; 710; 715; ____; ____; ____; ____; ____; ____; ____; ____

1 2 3 4 5 6 7 8 9 10

ENG MATHS G3 B2 9781431501472.indb 12 2014/06/20 7:54 AM



2 How many blocks do you count?



How did you count the blocks?

3 Complete the number lines.

700			703				707		709	

							746	747	748	

					706	711	716			

4 Complete the table.

	Write from smallest to biggest	Write from biggest to smallest
729, 720, 728, 721, 725		
659, 705, 607, 701, 706		

5 Write the following in words.

706	

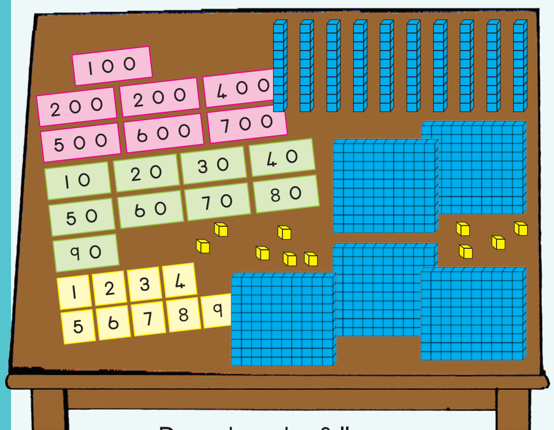
Teacher:
Sign:
Date:

71

Date: ....

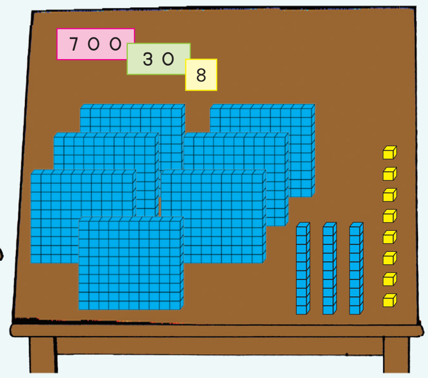
Numbers 700 to 750

Term 3

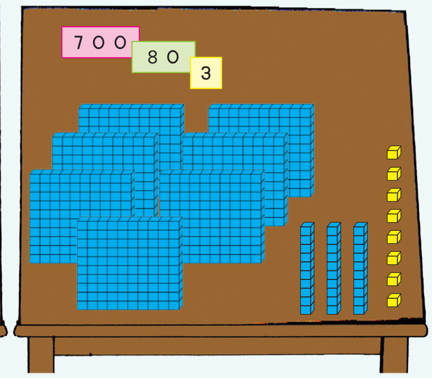


Peter has the following place value cards and base ten blocks.

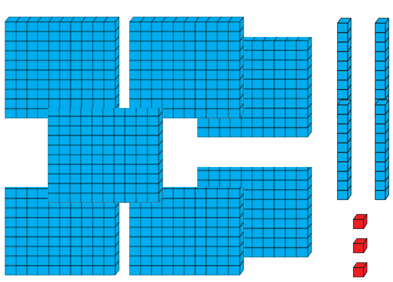
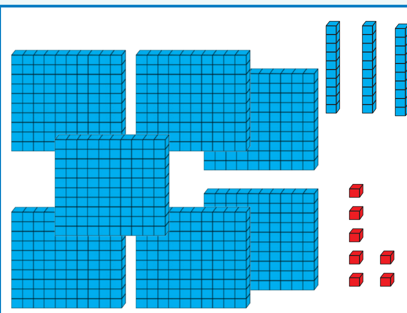
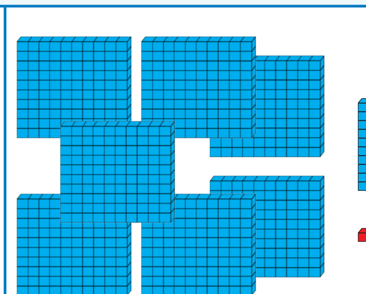
The teacher asks Peter to show 738 with his cards and blocks.



This is what Jabu showed. What did she do wrong?

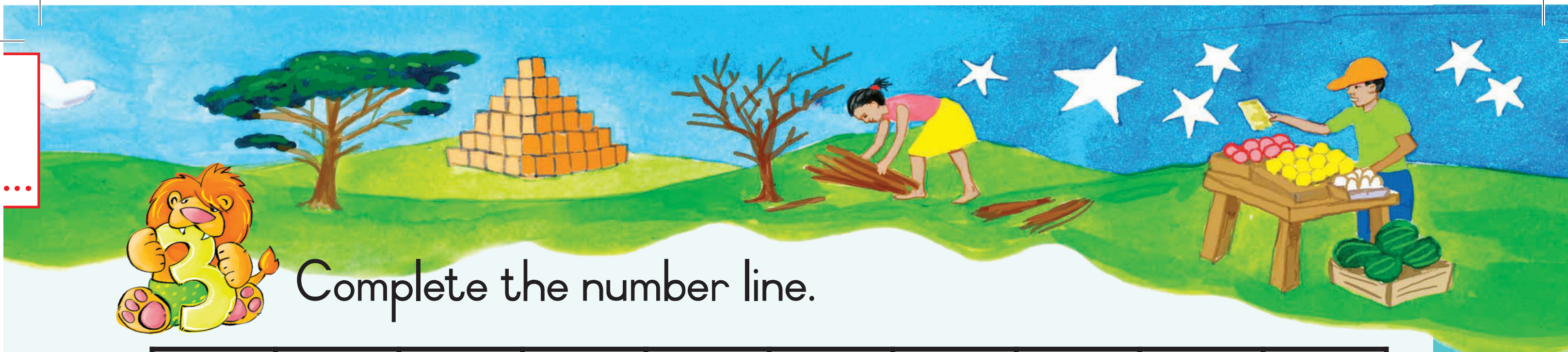


Write a number sentence and then the answer.

					
700 + 40 + 3 =	743				

Write a number sentence and then the answer.

7 0 0 / 4 0 / 5	7 0 0 / 3 0	7 0 0 / 9
700 + 40 + 5		
=		



3 Complete the number line.

699	700	701								709

Write all the numbers smaller than 704. ______________________________

Write all the numbers bigger than 704. ______________________________

4 Fill in <, > or =

a. 750 ______ 749 b. 732 ______ 723

c. 700 + 40 + 9 ______ 749

5 Break up your number.

a. Build each number with your cards.

b. Write the value for each digit. Now do these: Break up your number.

750	
728	
703	
730	
749	

Example: 747

7 0 0
4 0
7
7 4 7

747	700 + 40 + 7

6 Write the number names.

714	
750	
742	
738	
704	

Teacher:
Sign:
Date:

11 12 13 14 15 16 17 18 19 20

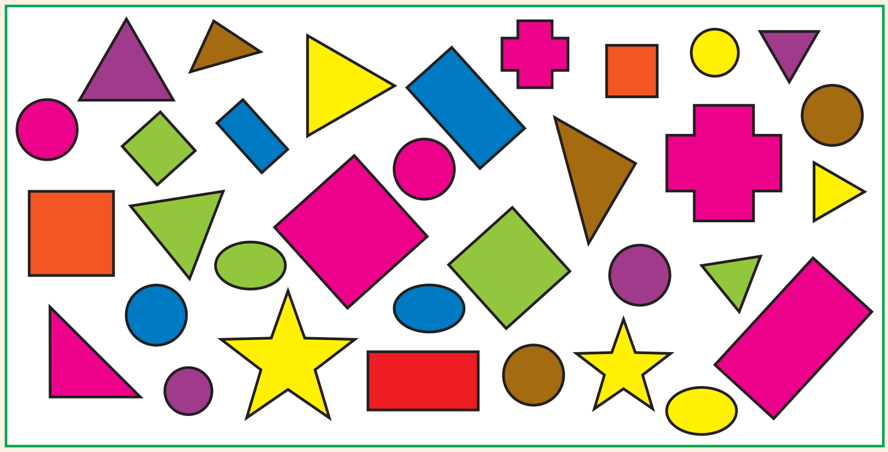
72

Date: ....

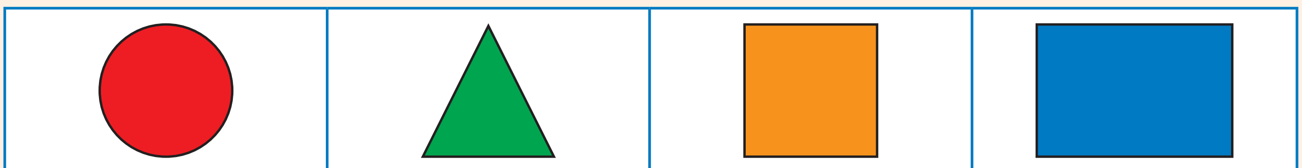
2-D shapes

Term 3

Say if the shape has a straight or a round edge.



Say if the shape has a straight or round edge.



How many shapes can you draw with straight edges.

Find pictures

Find shapes that have straight edges and paste them here.

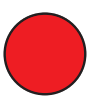
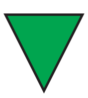
Find shapes that have round edges and paste them here.

ENG MATHS G3 B2 9781431501472.indb 16 2014/06/20 7:54 AM

Complete the following:

	Draw the shape in different positions.
triangle	
rectangle	
square	

Complete the table:

	Name the shape	Draw a shape that is smaller	Draw a shape that is bigger
			
			
			
			

Find squares, triangles, rectangles and circles of different sizes in magazines or newspapers.

Paste them here.

Teacher:
Sign:
Date:

11 12 13 14 15 16 17 18 19 20

ENG MATHS G3 B2 9781431501472.indb 17 2014/06/20 7:54 AM

Date: ....

Addition and subtraction to 800

1 What can I buy with R500?

Which of these items can I buy for exactly R500?

2 Add on from 600.

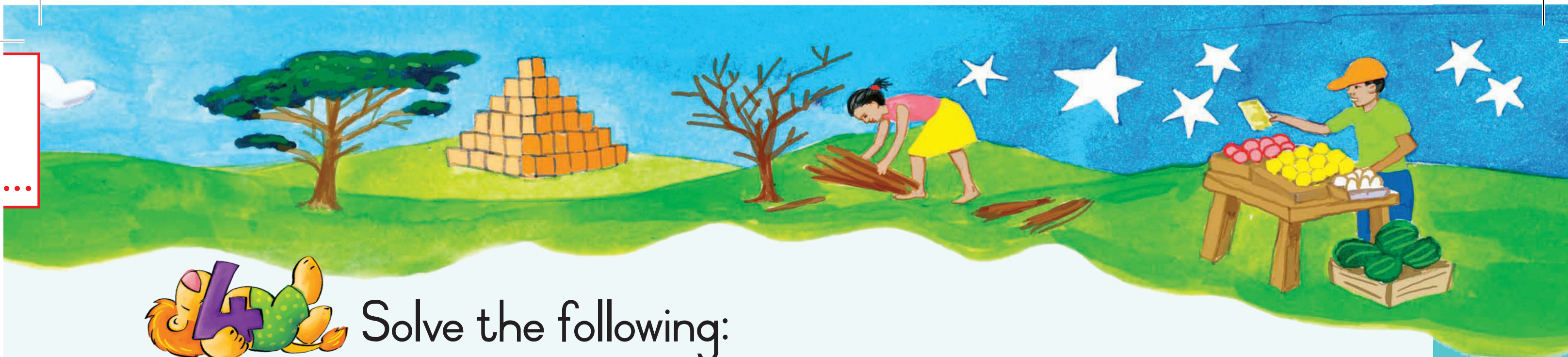
Write in the missing numbers.

Start	600	+20 →	620	+15 →		+15 →		
								+10 ↓
End		← +10		← +25		← +5		

3 Count back from 800.

Write the "change" each time.

Start	800	–	790	–	786	–	776
							– ↓
	715	← –	740	← –	760	← –	766
	– ↓						
	705	– →	690	– →	660	End	



4 Solve the following:

725 + 53 = ☐

664 + 87 = ☐

564 + 132 = ☐

75 + 717 = ☐

5 Solve the following:

James has collected 525 marbles.

If Sipho gave him another 205 marbles, James would have the same number as Sipho.

a. How many marbles would they both have?

b. How many marbles did Sipho have to begin with?

a.

b.

Teacher:
Sign:
Date:

11 12 13 14 15 16 17 18 19 20

ENG MATHS G3 B2 9781431501472.indb 19 2014/06/20 7:54 AM

74

Date:

Term 3

More addition and subtraction to 800

Number families

We can make families of numbers. Each family has two bigger numbers and one smaller number.

Take 4, 8 and 12 as an example.

4 + 8 = 12	8 + 4 = 12
12 − 8 = 4	12 − 4 = 8

Find the families.

Write 4 number sentences for each group of numbers.

6 8 14				
17 17 34				
25 45 70				
65 335 400				
240 260 500				

Look for links.

In this activity we are going to identify the pattern.

360 − 50 = ___	50 + ___ = 360	___ + 50 = 360
570 − 480 = ___	480 + ___ = 570	___ + 480 = 570
430 − 31 = ___	31 + ___ = 430	___ + 31 = 430
676 − 70 = ___	70 + ___ = 676	___ + 70 = 676
799 − 701 = ___	701 + ___ = 799	___ + 701 = 799

1 2 3 4 5 6 7 8 9 10

ENG MATHS G3 B2 9781431501472.indb 20 2014/06/20 7:54 AM

3 A long drive.

Mr Mkhize drives to visit his mother who lives 352 km away.
He makes a stop after 166 km. How much further must he travel?

Kumi does this:

352 – 166

+4 + 30 + 100 + 52

166 170 200 300 352

30 + 4 + 100 + 52

= 134 + 52 = 186 km

Pumla wrote this:

352 – 166
= 300 + 50 + 2
– 100 + 60 + 6
= 300 + 40 + 12
– 100 + 60 + 6
= 200 + 140 + 12
– 100 + 60 + 6
= 100 + 80 + 6
= 186 km

Mbali does this:

352 – 166
166 + 100 → 266 + 34 → 300 + 52
→ 352
100 + 34 + 52 = 134 + 52 = 186 km

Peter does this:

352 – 166
= 352 – 100 – 66
= 252 – 66
= 252 – 52 – 14
= 200 – 14
= 186 km

Veronica does this:

352 – 166
352 – 152 = 200
200 – 14 = 200 – 10 – 4
= 190 – 4
= 186 km

Lebo thinks doubles and halves:

Half of 352 is 176
But I must only take 166,
so I add back 10.
176 + 10 = 186 km

Talk about the different ways. Which way do you like best? Why?

4 Solve the following on an extra piece of paper:

Use any of the above methods.

746 – 328	800 – 499

Teacher:
Sign:
Date:

ENG MATHS G3 B2 9781431501472.indb 21 2014/06/20 7:54 AM

75

Date: ....

Term 3

Addition and subtraction to 800 again

Build your own number families.

A warm up activity.

5 12 17

8 9 17

Example: Make 17

$5 + 12 = 17$
$12 + 5 = 17$
$17 - 12 = 5$
$17 - 5 = 12$

$8 + 9 = 17$
$9 + 8 = 17$
$17 - 9 = 8$
$17 - 8 = 9$

Check! Compare! Correct!

For each number below, choose 2 more to make a family.
Write four number sentences (two + and two –) for each number family.

			+	+	–	–
16	7	9	$7 + 9 = 16$	$9 + 7 = 16$	$16 - 9 = 7$	$16 - 7 = 9$
20						
200						
75						
50						
500						
190						

Find the missing doubles or halves.

246: ____ ____

370: ____ ____

____: 265 ____

1 2 3 4 5 6 7 8 9 10

ENG MATHS G3 B2 9781431501472.indb 22 2014/06/20 7:54 AM

Halving to subtract.

If you know your halves and doubles, you can sometimes use them to add or subtract. Examples:

34 – 18 = 16 34 – 17 = 17 17 – 1 = 16	190 – 97 190 – 95 = 95 95 – 2 = 93	65 + 69 65 + 65 = 130 130 + 4 = 134	242 + 249 = 242 + 242 + 7 = 484 + 7 = 491

Now try these:

340 – 176	145 + 148	900 – 452

4 Study the ways.

256 children each get a Christmas present. Half get dolls and half get cars. How many get cars?

Way 1	Way 2
256 = 200 + 50 + 6 → Half of 200 is 100 → Half of 50 is 25 → Half of 6 is 3 100 + 25 + 3 = 128 → Half of 256 is 128 So 128 get cars.	→ Half of 250 = 125 → Half of 6 is 3 125 + 3 = 128 → Half of 256 is 128, So 128 get cars.

5 Solve the following on an extra piece of paper:

Use any of the above methods.

728 children each get a toy at the local restaurant. Half of them get building blocks. How many get building blocks?	642 children each get a muffin. Half of them get chocolate chip muffins. How many get chocolate chip muffins?

Teacher:
Sign:
Date:

11 12 13 14 15 16 17 18 19 20

ENG MATHS G3 B2 9781431501472.indb 23 2014/06/20 7:54 AM

76

Term 3

Date: ....

Number patterns: tens to 800

Look at the numbers in the orange shaded blocks. What pattern do you see?

Count in tens from 710 to 800. What comes after 720 when you count in tens?

Count backwards in tens from 800 to 710. What comes before 760 when you count backwards?

701	702	703	704	705	706	707	708	709	710
711	712	713	714	715	716	717	718	719	720
721	722	723	724	725	726	727	728	729	730
731	732	733	734	735	736	737	738	739	740
741	742	743	744	745	746	747	748	749	750
751	752	753	754	755	756	757	758	759	760
761	762	763	764	765	766	767	768	769	770
771	772	773	774	775	776	777	778	779	780
781	782	783	784	785	786	787	788	789	790
791	792	793	794	795	796	797	798	799	800

Complete the number sequences.

720; 730; 740; ____; ____; ____	800; 790; 780; ____; ____; ____

Add or subtract ten.

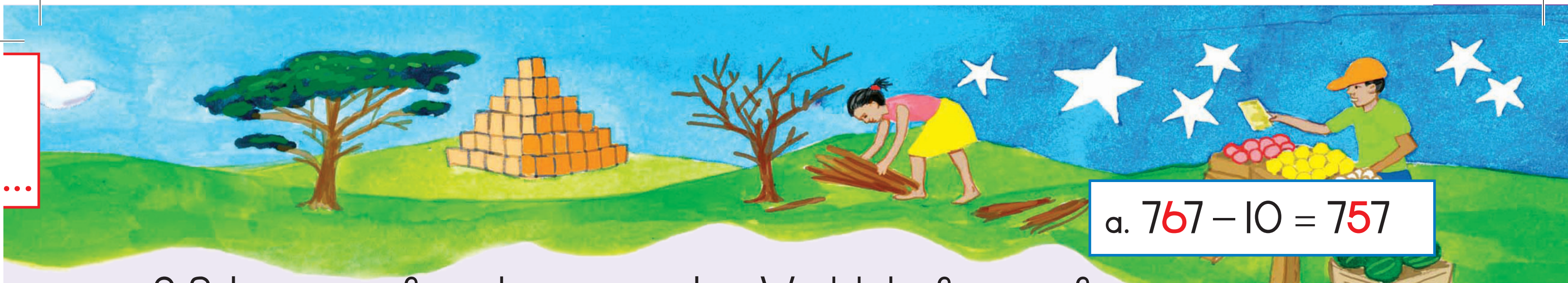
a. 767 + 10 = 777

1. Add ten to the given number. We did the first one for you.

b. 762 ____	c. 783 ____	d. 756 ____	e. 714 ____	f. 799 ____

1 2 3 4 5 6 7 8 9 10

ENG MATHS G3 B2 9781431501472.indb 24 2014/06/20 7:54 AM



a. 767 – 10 = 757

2. Subtract ten from the given number. We did the first one for you.

b. 762 ____	c. 783 ____	d. 756 ____	e. 714 ____	f. 799 ____

3. What happens when you add or subtract ten to the numbers above?

____

Look at the red circles on the number board.

a. What do you notice about these circled numbers? ____________

b. Extend the following number Sequences:

704; 714; 724; ____; ____; ____

782; 772; 762; ____; ____; ____

715; 725; 735; ____; ____; ____

737; 747; 757; ____; ____; ____

799; 789; 779; ____; ____; ____

Fill in the correct number in each circle on these number lines.

a.

701 702 703 704 705 706 707 708 709 ◯ 711 712 713 714 715 716 717 718 719 ◯

721 ◯ ◯

b.

741 ◯ 743 744 745 746 747 748 749 750 751 ◯ 753 754 755 756 757 758 759 760

761 ◯ ◯

I have a 3-digit number.

The first digit is 7, the next digit is one more than seven, and the last digit is one less than seven.

Count forward in tens from this number. What number do you get?

____

Teacher:
Sign:
Date:

11 12 13 14 15 16 17 18 19 20

Date: ....

Term 3

Rounding off to tens

All the numbers from 4 backwards will be rounded off to 0.

All the numbers from 5 upwards will be rounded off to 10.

0 1 2 3 4 | 5 6 7 8 9 10

Let us talk.

Look at 3 on the number line.

0 1 2 3 4 5 6 7 8 9 10

What will 3 be if it is rounded off?

0 1 2 3 4 5 6 7 8 9 10

3 rounded off to the nearest ten will be zero.

Do the same with:

What will 6 be, rounded off to the nearest 10?

0 1 2 3 4 5 6 7 8 9 10

The answer will be 10.

Round of to the nearest 10.

12 rounded off is? ________ 19 rounded off is? ________

10 11 12 13 14 15 16 17 18 19 20

53 rounded off is? ________ 58 rounded off is? ________

50 51 52 53 54 55 56 57 58 59 60

1 2 3 4 5 6 7 8 9 10

ENG MATHS G3 B2 9781431501472.indb 26 2014/06/20 7:54 AM

Round off to the nearest 10, using the number lines to help you.

a. 46 | 46 | 50

Between which two tens are 46?

40	41	42	43	44	45	46	47	48	49	50

b. 63

Between which two tens are 63?

c 37

Between which two tens are 37?

d. 99

Between which two tens are 99?

Tom has R48,00.

The pack of cards he collects cost R5,00.

How many packs of cards can he buy for R48,00? ____________________

Teacher:
Sign:
Date:

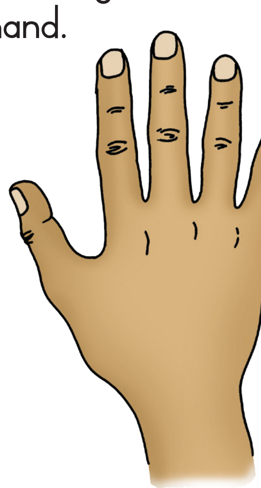
11 12 13 14 15 16 17 18 19 20

Date:

Term 3

Multiplication: fives up to 75

What comes in fives? The fingers on one hand.



How many fingers on:

2 hands?
3 hands?
4 hands?
5 hands?
6 hands?
7 hands?
8 hands?
9 hands?
10 hands?

Match the sum with the question on the left:

$9 \times 5 = 45$
$7 \times 5 = 35$
$2 \times 5 = 10$
$4 \times 5 = 20$
$3 \times 5 = 15$
$5 \times 5 = 25$
$10 \times 5 = 50$
$6 \times 5 = 30$
$8 \times 5 = 40$

1 Complete the table.

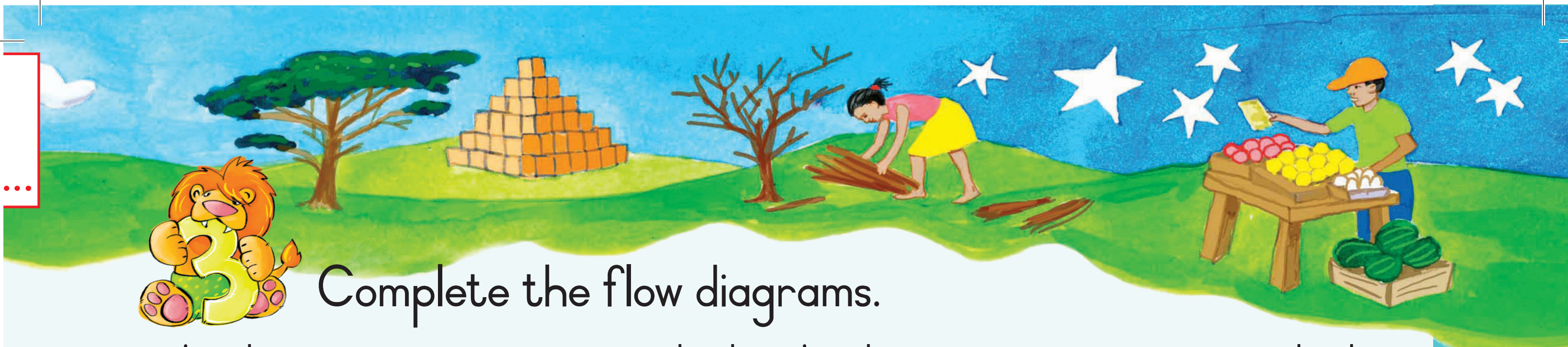
Grouping	Multiply	Sharing	Divide
2 groups of 5	$2 \times 5 = 10$	Share 10 between 5	$10 \div 5 = 2$
7 groups of 5		Share 35 between 5	
12 groups of 5		Share 60 between 5	
15 groups of 5		Share 75 between 5	

2 Complete the table.

Sharing	Divide
Share 12 between 5	$12 \div 5 = 2$ remainder 2
Share 64 between 5	
Share 39 between 5	
Share 73 between 5	

1 2 3 4 5 6 7 8 9 10

ENG MATHS G3 B2 9781431501472.indb 28 2014/06/20 7:54 AM



3 Complete the flow diagrams.

input	rule	output
11	$\times 5$	
12		
13		
14		
15		

input	rule	output
16	$\times 5$	
17		
18		
19		
20		

input	rule	output
5	$\div 5$	
10		
15		
25		
30		

input	rule	output
55	$\times 5$	
60		
65		
70		
75		

4 Complete the tables below:

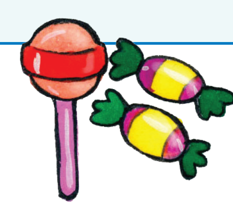
×	1	2	3	4	5	6	7	8	9	10
5										

×	11	12	13	14	15	16	17	18	19	20
5										

How did you work out the answers that should be written in the blue blocks?

5 Solve the following:

My mother bought sweets packets worth R70.
She paid R5 per packet.
How many packets of sweets did she buy?



Teacher:
Sign:
Date:

11 12 13 14 15 16 17 18 19 20

79

Date:

Term 3

Number patterns: fives to 800

What can you tell about the numbers in the orange shaded blocks?

Count in fives from 705 to 800. What comes after 720 when you count in fives?

Count backwards in fives from 800 to 705. What comes before 730 when you count backwards?

701	702	703	704	705	706	707	708	709	710
711	712	713	714	715	716	717	718	719	720
721	722	723	724	725	726	727	728	729	730
731	732	733	734	735	736	737	738	739	740
741	742	743	744	745	746	747	748	749	750
751	752	753	754	755	756	757	758	759	760
761	762	763	764	765	766	767	768	769	770
771	772	773	774	775	776	777	778	779	780
781	782	783	784	785	786	787	788	789	790
791	792	793	794	795	796	797	798	799	800

Complete the number sequences.

725; 730; 735; ____; ____; ____	800; 795; 790; ____; ____; ____

Add or subtract five.

1. Add five to the given number. We did the first one for you.

a. 760 + 5 = 765

b. 725 ____	c. 780 ____	d. 755 ____	e. 715 ____	f. 790 ____

1 2 3 4 5 6 7 8 9 10

ENG MATHS G3 B2 9781431501472.indb 30 2014/06/20 7:54 AM

a. 765 – 5 = 760

2. Subtract five from the given number. We did the first one for you.

b. 760 ____	c. 785 ____	d. 750 ____	e. 715 ____	f. 790 ____

3. What happens when you add or subtract five from the numbers above?

____

Look at the red circles on the number board.

a. What do you notice about these circles? ____________________

b. Extend the following number sequences:

703; 708; 713; ____; ____; ____
722; 727; 732; ____; ____; ____
753; 758; 763; ____; ____; ____
714; 719; 724; ____; ____; ____
701; 706; 711; ____; ____; ____

Fill in the correct number in each circle on these number lines.

a. 701 702 703 704 ◯ 706 707 708 709 ◯ 711 712 713 714 ◯ 716 717 718 719 ◯

721 ◯ ◯ ◯ ◯

b. 741 ◯ 743 744 745 746 ◯ 748 749 750 751 ◯ 753 754 755 756 ◯ 758 759 760

761 ◯ ◯ ◯ ◯

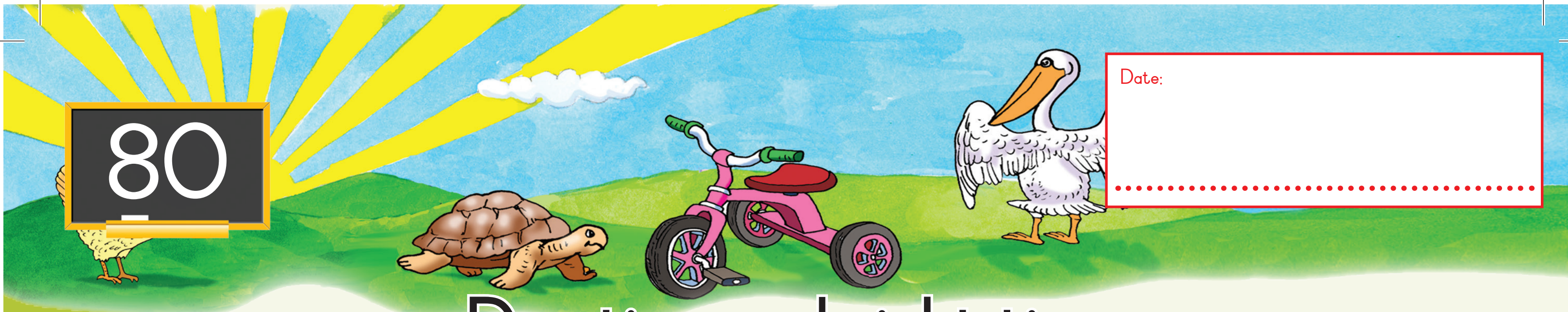
I have a 3-digit number.

The first digit is 7, the next digit is one more than seven, and the last digit is five less than seven.

Now count forward in fives from this number. What number do you get?

____

11 12 13 14 15 16 17 18 19 20

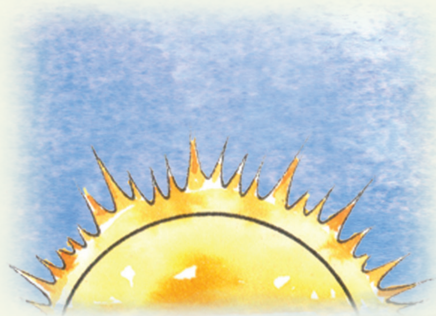


80

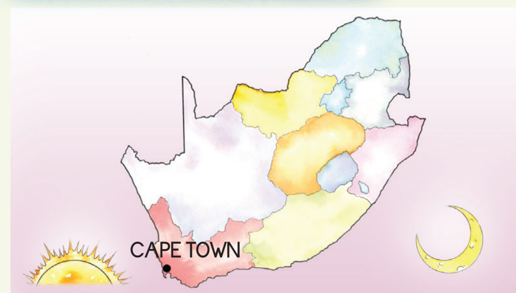
Date:

Term 3

Day time and night time



Cape Town



The table below shows when the sun rises and sets at different times of the year in Cape Town. Read the times in the table and then fill in the rest of the table before answering the questions below.

Cape Town	Sunrise	Sunset	Length of day	Length of night
March 23	6:53 am	6:53 pm		
June 21	7:51 am	5:44 pm		
September 19	6:41 am	6:41 pm		
December 22	5:32 am	7:58 pm		

a. In which months are the day and the night the same length? ______

b. Which month has the longest days? ______

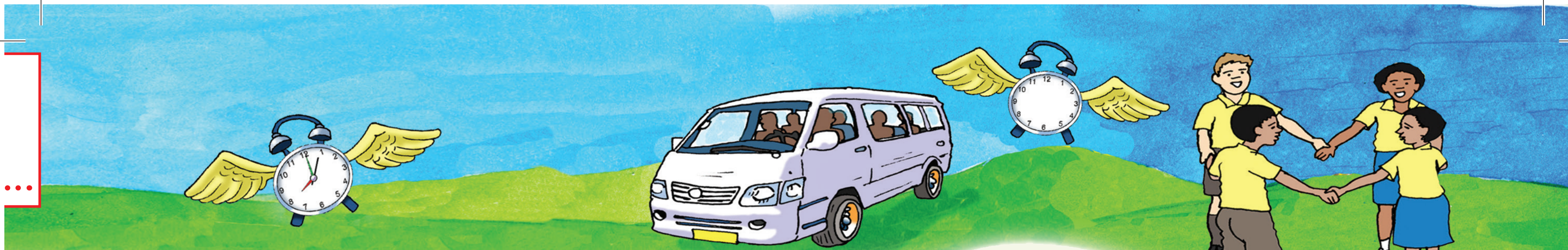
c. Which month has the shortest days? ______

d. Find the difference in hours and minutes between the longest day and the shortest day. ______

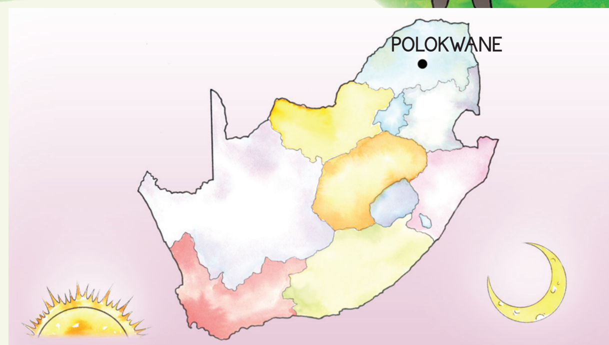
e. Find the length of day and night for each date in the table above.

______

1 2 3 4 5 6 7 8 9 10



In Polokwane



This table shows when the sun rises and sets at different times of the year in Polokwane. Read the times in the table and then fill in the rest of the table before answering the questions below.

Polokwane	Sunrise	Sunset	Length of day	Length of night
March 25	6:08 am	6:08 pm		
June 21	6:44 am	5:24 pm		
September 17	5:57 am	5:57 pm		
December 22	5:13 am	6:50 pm		

a. In which months are the day and the night the same length? ______________

____

b. In which of these months is the length of day the same in Cape Town and Polokwane?

____

c. In which months are they different? ______________

d. Find the difference in hours and minutes between the longest day and the shortest day.

____

e. Find the length of day and night for each date in the table above.

____

Ask someone to help you to find the sunrise and sunset times in your area. Write them down for one week. Are the days getting longer or shorter?

81

Term 3

Date:

Multiplication: twos up to 75

What comes in twos?
One pair of shoes.

How many shoes are

1 pair of shoes?
2 pairs of shoes?
3 pairs of shoes?
4 pairs of shoes?
5 pairs of shoes?
6 pairs of shoes?
7 pairs of shoes?
8 pairs of shoes?
9 pairs of shoes?
10 pairs of shoes?

Match the sum with the question on the left:

$1 \times 2 = 2$
$9 \times 2 = 18$
$7 \times 2 = 14$
$2 \times 2 = 4$
$4 \times 2 = 8$
$3 \times 2 = 6$
$5 \times 2 = 10$
$10 \times 2 = 20$
$6 \times 2 = 12$
$8 \times 2 = 16$

1 Complete the table.

Grouping	Multiply	Sharing	Divide
10 groups of 2	$10 \times 2 = 20$	Share 20 between 2	$20 \div 2 = 10$
15 groups of 2		Share 30 between 2	
20 groups of 2		Share 40 between 2	
35 groups of 2		Share 70 between 2	

2 Complete the table.

Sharing	Divide
Share 21 between 2	$21 \div 2 = 10$ remainder 1
Share 33 between 2	
Share 67 between 2	
Share 75 between 2	

1 2 3 4 5 6 7 8 9 10

ENG MATHS G3 B2 9781431501472.indb 34 2014/06/20 7:54 AM

Complete the flow diagrams.

input	rule	output
11	$\times 2$	
12		
15		
17		
20		

input	rule	output
22	$\times 2$	
26		
31		
30		
35		

input	rule	output
20	$\div 2$	
26		
32		
38		
44		

input	rule	output
50	$\times 2$	
60		
68		
72		
74		

Complete the tables below:

$\times$	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
2																				

$\times$	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
2																	

Solve the following:

I bought 36 lollipops for R2.

I paid with a R50, R20 and a R5 coin.

What was my change?

11 12 13 14 15 16 17 18 19 20

82

Date: ....

Term 3

Number patterns: twos up to 800

1. Look at the numbers in the orange shaded blocks. What pattern do you see?

Count in twos from 700 to 800. What comes after 700 when you count in twos?

Count backwards in fives from 800 to 710. What comes before 750 when you count backwards?

701	702	703	704	705	706	707	708	709	710
711	712	713	714	715	716	717	718	719	720
721	722	723	724	725	726	727	728	729	730
731	732	733	734	735	736	737	738	739	740
741	742	743	744	745	746	747	748	749	750
751	752	753	754	755	756	757	758	759	760
761	762	763	764	765	766	767	768	769	770
771	772	773	774	775	776	777	778	779	780
781	782	783	784	785	786	787	788	789	790
791	792	793	794	795	796	797	798	799	800

2. Complete the number sequences.

720; 722; 724; _____; _____; _____	800; 798; 796; _____; _____; _____

3. Add or subtract two.

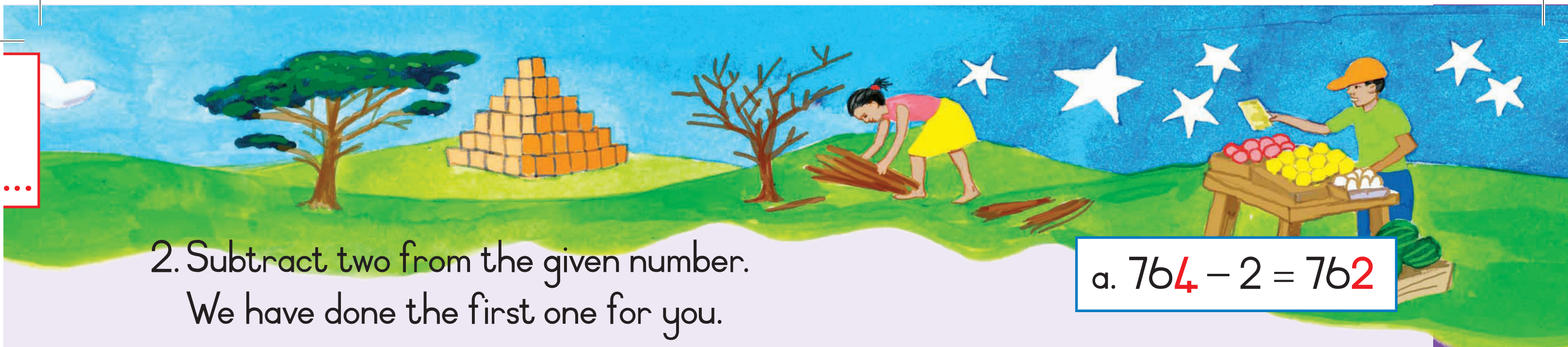
1. Add two to the given number. We did the first one for you.

a. 764 + 2 = 766

b. 762 _____	c. 783 _____	d. 756 _____	e. 714 _____	f. 799 _____

1 2 3 4 5 6 7 8 9 10

ENG MATHS G3 B2 9781431501472.indb 36 2014/06/20 7:54 AM



2. Subtract two from the given number.
   We have done the first one for you.

a. 764 – 2 = 762

b. 762 ____	c. 783 ____	d. 756 ____	e. 714 ____	f. 799 ____

3. What happens when you add or subtract two to or from the numbers above?

____

Look at the blue circles on the number board.

a. What do you notice about these circles? ____________

b. Extend the following number sequences:

701; 703; 705; ____; ____; ____

725; 727; 729; ____; ____; ____

799; 797; 795; ____; ____; ____

783; 785; 787; ____; ____; ____

779; 781; 783; ____; ____; ____

Fill in the correct number in each circle on these number lines.

a.
701 ◯ 703 ◯ 705 ◯ 707 ◯ 709 ◯ 711 ◯ 713 ◯ 715 ◯ 717 ◯ 719 ◯

721 ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯

b.
741 ◯ 743 744 745 ◯ 747 748 749 750 751 ◯ 753 754 755 ◯ 757 758 759 760

761 ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯

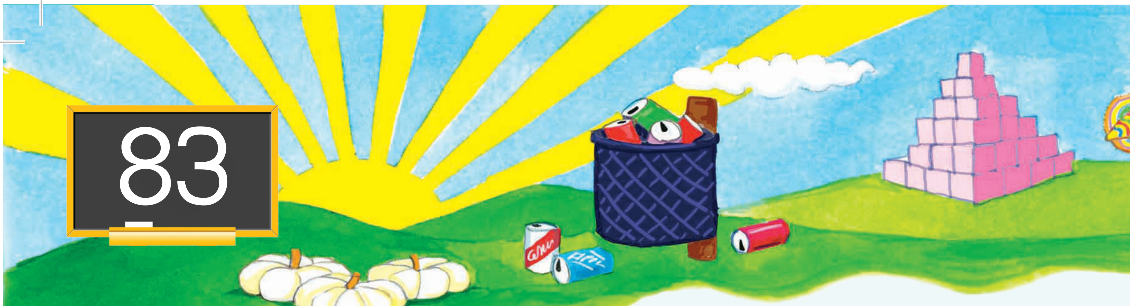
I have a 3-digit number.

The first digit is 7, the next digit is two more than seven, and the last digit is four less than seven.

Now count forward by two from this number. What number do you get?

____

11 12 13 14 15 16 17 18 19 20



Date:

Multiplication: 2s and 5s up to 75

How fast can you answer the following?

1 × 2 = _____	2 × 5 = _____	10 × 2 = _____	7 × 2 = _____
8 × 2 = _____	5 × 2 = _____	8 × 5 = _____	4 × 5 = _____
5 × 5 = _____	6 × 5 = _____	3 × 2 = _____	7 × 5 = _____
6 × 2 = _____	9 × 5 = _____	3 × 5 = _____	4 × 2 = _____
10 × 5 = _____	5 × 2 = _____	1 × 5 = _____	9 × 5 = _____

Look at what my friend did.

Discuss it.

4 × 2 = 8

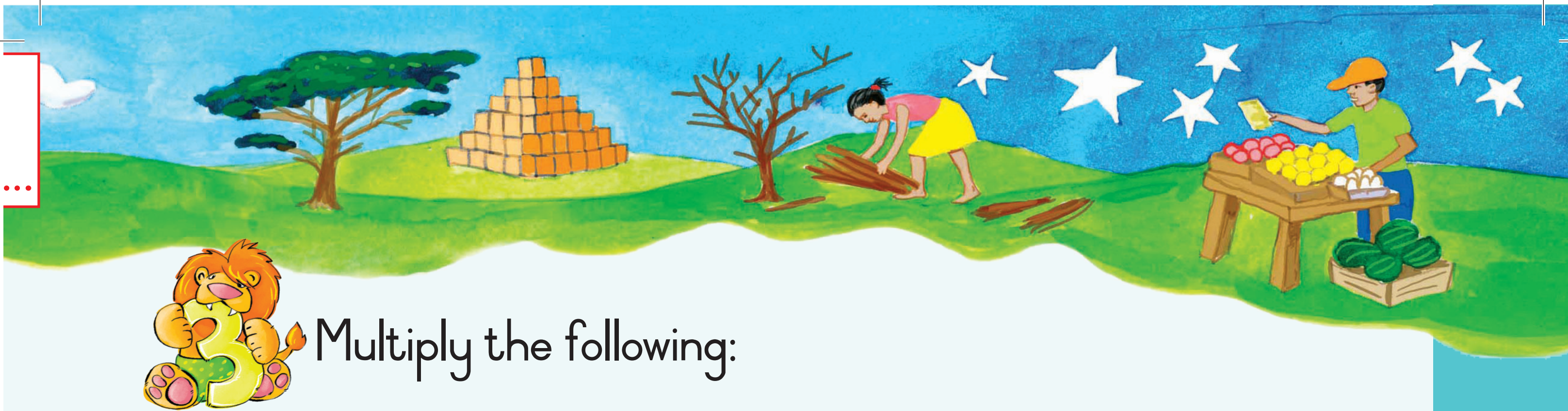
My friend showed 4 × 2 as follows:

Skip counting	Equal groups	Repeated addition	Arrays	Facts
2, 4, 6, 8	●●●● ●●●●	2 + 2 + 2 + 2	xx xx xx xx	2 × 4 = 8 4 × 2 = 8 8 ÷ 4 = 2 8 ÷ 2 = 4

Now do the same with 4 × 5 = 20.

Skip counting	Equal groups	Repeated addition	Arrays	Facts

ENG MATHS G3 B2 9781431501472.indb 38 2014/06/20 7:54 AM



Multiply the following:

24×3 $= (20 + 4) \times 3$ $= (20 \times 3) + (4 \times 3)$ $= 60 + 12$ $= 72$	a. 13×3	b. 18×3
c. 12×5	d. 21×3	e. 14×3
f. 25×3	g. 12×3	h. 15×5

Solve the following:

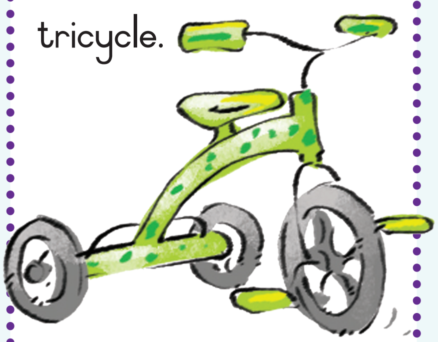
I bought 14 sweets for R3 each.
My friend bought 12 sweets for R5 each.
How much did we pay altogether for the sweets?

11 12 13 14 15 16 17 18 19 20

Date: ....

Multiplication: threes up to 75

What comes in threes?
The wheels of a tricycle.



How many wheels are on
1 tricycle?
2 tricycles?
3 tricycles?
4 tricycles?
5 tricycles?
6 tricycles?
7 tricycles?
8 tricycles?
9 tricycles?
10 tricycles?

Match the sum with the question on the left:
9 × 3 = 27
7 × 3 = 21
2 × 3 = 6
4 × 3 = 12
3 × 3 = 9
5 × 3 = 15
1 × 3 = 3
10 × 3 = 30
6 × 3 = 18
8 × 3 = 24

1. Complete the table.

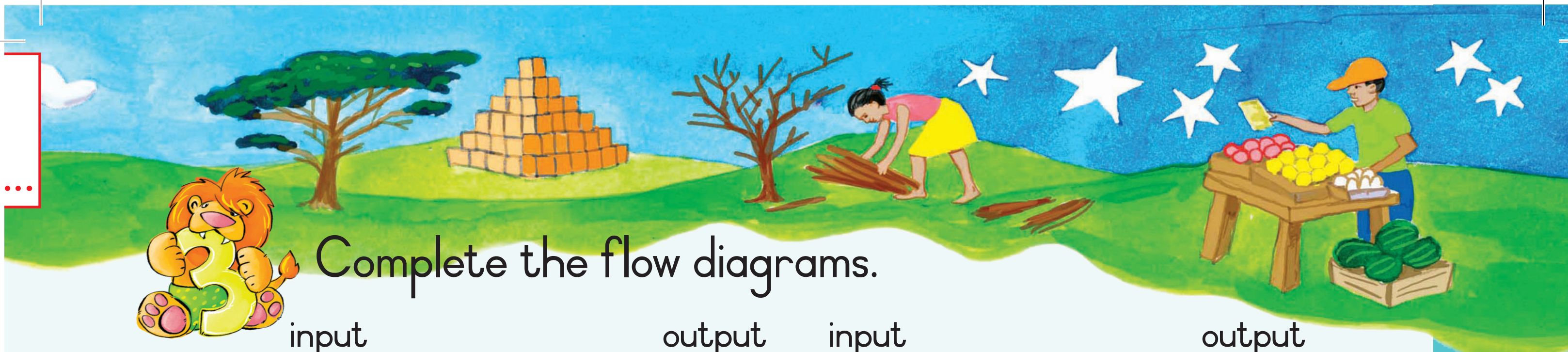
Grouping	Multiply	Sharing	Divide
11 groups of 3	11 × 3 = 33	Share 33 between 3	33 ÷ 3 = 11
15 groups of 3		Share 45 between 3	
25 groups of 3		Share 60 between 3	
12 groups of 3		Share 36 between 3	

2. Complete the table.

Sharing	Divide
Share 37 between 3	37 ÷ 3 = 12 remainder 1
Share 74 between 3	
Share 49 between 3	
Share 68 between 3	

1 2 3 4 5 6 7 8 9 10

ENG MATHS G3 B2 9781431501472.indb 40 2014/06/20 7:54 AM



3 Complete the flow diagrams.

input	rule	output
10	× 3	
12		
14		
16		
22		

input	rule	output
11	× 3	
13		
15		
23		
25		

input	rule	output
18	÷ 3	
30		
36		
42		
75		

input	rule	output
12	÷ 3	
63		
66		
69		
75		

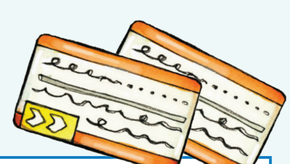
4 Complete the tables below:

×	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
4	3	6													

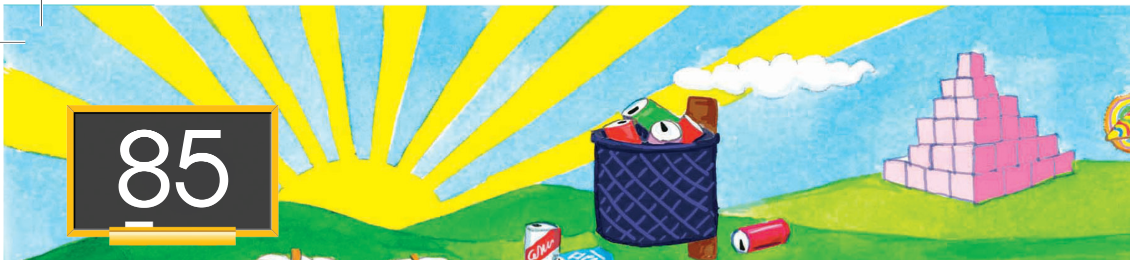
×	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
4															

How did you work out the answers where the blocks are coloured blue?

5 Solve the following:



The entry fee was R3 for each child and 23 children entered the park.
How much did they pay altogether?



85

Date: ....

Term 3

Multiplication: 2s, 3s and 4s up to 75

1 How fast can you answer the following?

1 × 2 = ____	5 × 4 = ____	5 × 2 = ____	2 × 2 = ____
6 × 3 = ____	4 × 2 = ____	2 × 4 = ____	7 × 3 = ____
8 × 4 = ____	2 × 3 = ____	7 × 2 = ____	9 × 4 = ____
3 × 2 = ____	4 × 4 = ____	10 × 3 = ____	1 × 3 = ____
3 × 3 = ____	9 × 2 = ____	6 × 4 = ____	10 × 3 = ____

2 Look at what my friend did.

Discuss it. **5 × 2 = 10**

I started to show 5 × 2 as follows:

Skip counting	Equal groups	Repeated addition	Arrays	Facts
2, 4, _ _ _	● ● _ _ _ _	2 + _ _ _ _	__ rows of 2 xx	2 x _ = _ 4 x _ = _ _ ÷ _ = _ _ ÷ _ = _

Now do the same with 8 × 3 = 24.

Skip counting	Equal groups	Repeated addition	Arrays	Facts

6 × 4 = 24

Skip counting	Equal groups	Repeated addition	Arrays	Facts

1 2 3 4 5 6 7 8 9 10

Divide and test your answer.

$63 \div 3$ $= (60 + 3) \div 3$ $= (60 \div 3) + (3 \div 3)$ $= 20 + 1$ $= 21$	21×3 $= (20 + 1) \times 3$ $= (20 \times 3) + (1 \times 3)$ $= 60 + 3$ $= 63$
a. $48 \div 5$	
b. $64 \div 5$	

Solve the following:

My friends and I have R63 altogether.
We want to share it equally between the three of us.
How much will each of us get?

11 12 13 14 15 16 17 18 19 20

ENG MATHS G3 B2 9781431501472.indb 43
2014/06/20 7:54 AM

86

Date: ....

Number patterns: threes to 800

Look at the numbers in the orange shaded blocks. What pattern do you see?

Count in threes from 703 to 799. What comes after 745 when you count in threes?

Count backwards in fives from 799 to 903. What comes before 766 when you count backwards?

701	702	703	704	705	706	707	708	709	710
711	712	713	714	715	716	717	718	719	720
721	722	723	724	725	726	727	728	729	730
731	732	733	734	735	736	737	738	739	740
741	742	743	744	745	746	747	748	749	750
751	752	753	754	755	756	757	758	759	760
761	762	763	764	765	766	767	768	769	770
771	772	773	774	775	776	777	778	779	780
781	782	783	784	785	786	787	788	789	790
791	792	793	794	795	796	797	798	799	800

Complete the number sequences.

703; 706; 709; ____; ____; ____	799; 796; 793; ____; ____; ____

Add or subtract three.

a. 766 + 3 = 769

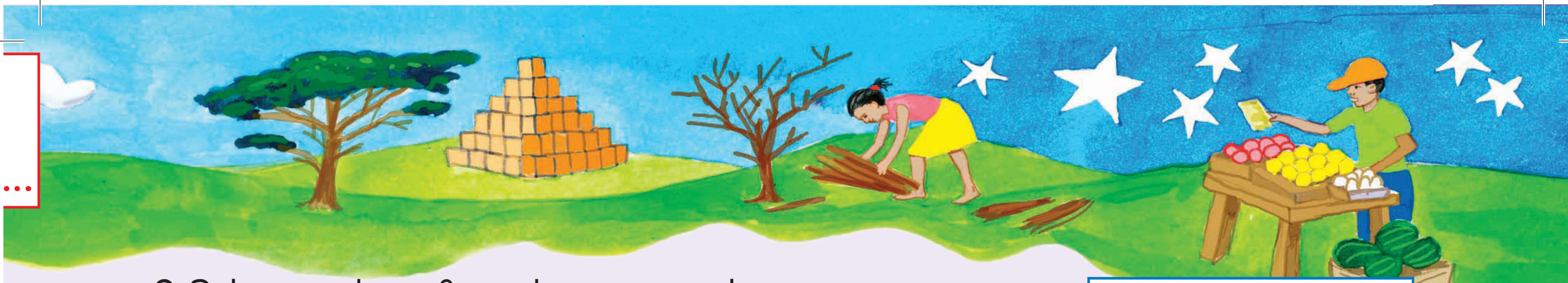
1. Add three to the given number. We did the first one for you.

b. 766 ____	c. 783 ____	d. 756 ____	e. 713 ____	f. 790 ____

Term 3

1 2 3 4 5 6 7 8 9 10

ENG MATHS G3 B2 9781431501472.indb 44 2014/06/20 7:54 AM



2. Subtract three from the given number.
We have done the first one for you.

a. 766 – 3 = 763

b. 763 ____	c. 789 ____	d. 756 ____	e. 713 ____	f. 799 ____

3. What happens when you add or subtract three to or from the numbers above?

____

Look at the blue circles on the number board.

a. What do you notice about these circles? ____________________

b. Extend the following number sequences:

704; 707; 710; ____; ____; ____

773; 776; 779; ____; ____; ____

779; 776; 773; ____; ____; ____

782; 785; 788; ____; ____; ____

779; 782; 785; ____; ____; ____

Fill in the correct number in each circle on these number lines.

a. 701 702 ◯ 704 705 ◯ 707 708 ◯ 710 711 ◯ 713 714 ◯ 716 717 ◯ 719 720

721 ◯ ◯ ◯ ◯ ◯ ◯

b. 741 ◯ 743 744 ◯ 746 747 ◯ 749 750 ◯ 752 753 ◯ 755 756 ◯ 758 759 ◯

761 ◯ ◯ ◯ ◯ ◯ ◯ ◯

I have a 3-digit number:

The first digit is 7, the next digit is two more than seven, and the last digit is seven less than seven.

Now count forward in threes from this number. What number do you get?

____

Date:

Multiplication: fours up to 75

What comes in fours?
The wheels of a car.

How many wheels are on

1 car?
2 cars?
3 cars?
4 cars?
5 cars?
6 cars?
7 cars?
8 cars?
9 cars?
10 cars?

Match the sum with the question on the left:

$9 \times 4 = 36$
$7 \times 4 = 28$
$2 \times 4 = 8$
$4 \times 4 = 16$
$3 \times 4 = 12$
$5 \times 4 = 20$
$1 \times 4 = 4$
$10 \times 4 = 40$
$6 \times 4 = 24$
$8 \times 4 = 32$

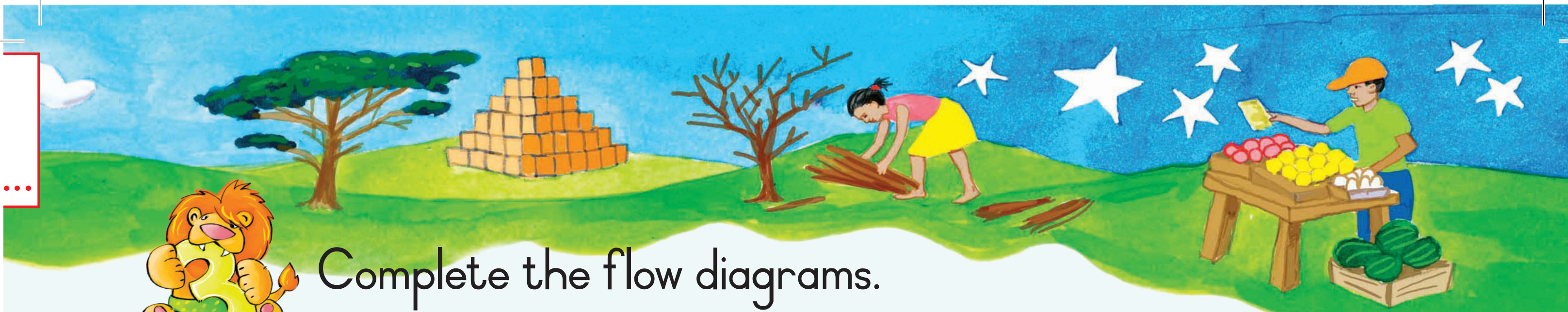
1. Complete the table.

Grouping	Multiply	Sharing	Divide
12 groups of 4	$12 \times 4 = 48$	Share 48 between 4	$48 \div 4 = 12$
16 groups of 4		Share 64 between 4	
18 groups of 4		Share 72 between 4	
15 groups of 4		Share 60 between 4	

2. Complete the table.

Sharing	Divide
Share 35 between 4	$35 \div 4 = 8$ remainder 3
Share 55 between 4	
Share 70 between 4	
Share 75 between 4	

1 2 3 4 5 6 7 8 9 10



3 Complete the flow diagrams.

input	rule	output
10	× 4	
11		
13		
14		
15		

input	rule	output
9	× 4	
12		
16		
17		
18		

input	rule	output
16	÷ 4	
32		
44		
60		
72		

input	rule	output
40	÷ 4	
52		
56		
64		
68		

4 Complete the tables below:

×	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
4															

×	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
4															

How did you work out the answers where the blocks are coloured blue?

5 Solve the following:

I have R75.
How many small party gifts at R4 each can I buy?

Teacher:
Sign:
Date:

11 12 13 14 15 16 17 18 19 20

88

Date: ....

Number patterns: fours up to 800

Look at the numbers in the orange shaded blocks.
What pattern do you see?

Count in fours from 704 to 800. What comes after 736 when you count in fours?

Count backwards in fours from 800 to 704. What comes before 776 when you count backwards?

701	702	703	704	705	706	707	708	709	710
711	712	713	714	715	716	717	718	719	720
721	722	723	724	725	726	727	728	729	730
731	732	733	734	735	736	737	738	739	740
741	742	743	744	745	746	747	748	749	750
751	752	753	754	755	756	757	758	759	760
761	762	763	764	765	766	767	768	769	770
771	772	773	774	775	776	777	778	779	780
781	782	783	784	785	786	787	788	789	790
791	792	793	794	795	796	797	798	799	800

Complete the number sequences.

704; 708; 712; ____; ____; ____	724; 728; 732; ____; ____; ____

Add or subtract four

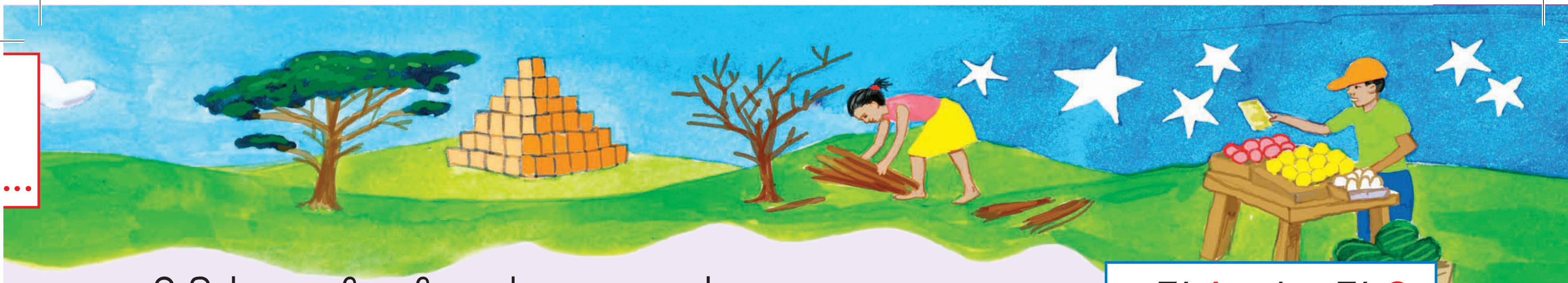
a. 764 + 4 = 768

1. Add four to the given number. We have done the first one for you.

b. 764 ____	c. 788 ____	d. 754 ____	e. 718 ____	f. 794 ____

1 2 3 4 5 6 7 8 9 10

ENG MATHS G3 B2 9781431501472.indb 48 2014/06/20 7:54 AM



2. Subtract four from the given number.
We have done the first one for you.

a. 764 – 4 = 760

b. 768 ____	c. 784 ____	d. 752 ____	e. 714 ____	f. 798 ____

3. What happens when you add or subtract four to or from the numbers above?

____

Look at the blue circles on the number board.

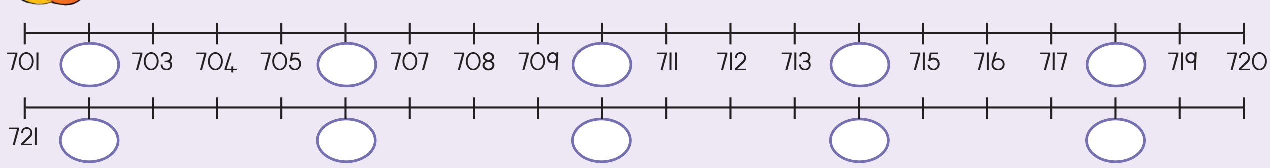
a. What do you notice about these circles? ____________________

b. Extend the following number sequences:

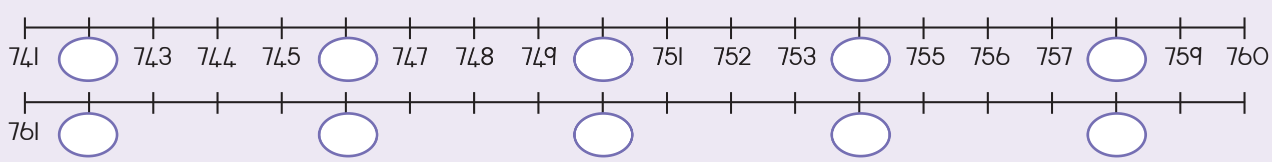
703; 707; 711; ____; ____; ____
773; 777; 781; ____; ____; ____
711; 715; 719; ____; ____; ____
783; 779; 775; ____; ____; ____
799; 795; 791; ____; ____; ____

Fill in the correct number in each circle on these number lines.

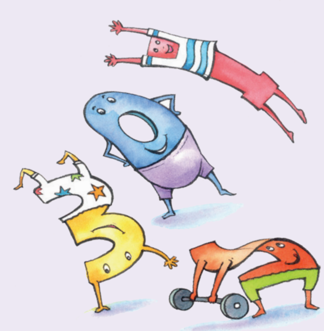
a.



b.



I have a 3-digit number.



The first digit is 7, the next digit is one more than seven, and the last digit is three less than seven.

Now count forward in fours from this number. What number do you get?

____

11 12 13 14 15 16 17 18 19 20

Date: ....

Multiplication and division: 2s, 3s, 4s and 5s up to 75

Term 3

1 How fast can you answer the following?

1 × 2 = ____	5 × 3 = ____	4 × 2 = ____	10 × 2 = ____
4 × 3 = ____	3 × 2 = ____	2 × 2 = ____	3 × 3 = ____
6 × 4 = ____	4 × 3 = ____	5 × 3 = ____	9 × 4 = ____
6 × 5 = ____	8 × 3 = ____	9 × 4 = ____	8 × 5 = ____
7 × 3 = ____	8 × 5 = ____	2 × 5 = ____	7 × 5 = ____

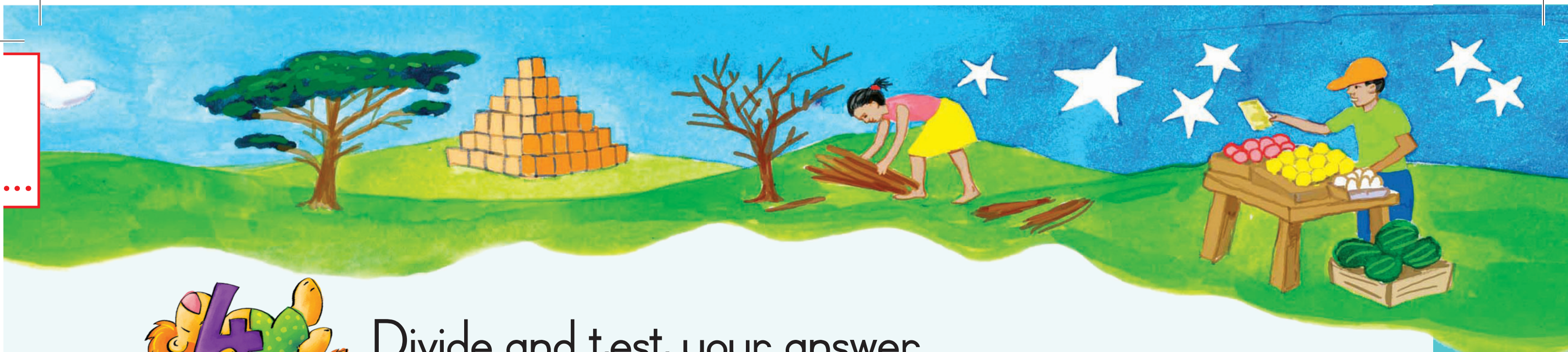
2 Colour the blocks where the sum gives you a remainder.

12 ÷ 2 = 6	13 ÷ 3 = 4 rem 1	15 ÷ 5 = ____	18 ÷ 5 = ____
20 ÷ 4 = ____	23 ÷ 4 = ____	16 ÷ 3 = ____	18 ÷ 3 = ____
25 ÷ 2 = ____	24 ÷ 2 = ____	30 ÷ 2 = ____	29 ÷ 2 = ____
19 ÷ 3 = ____	17 ÷ 3 = ____	31 ÷ 5 = ____	30 ÷ 5 = ____
55 ÷ 5 = ____	52 ÷ 5 = ____	57 ÷ 3 = ____	60 ÷ 3 = ____

3 How do you know that a number can be divided by:

- 3? If you add the digits of a number (e.g. 72 has the digits 7 + 2 = 9) and you can divide that new number by 3 (e.g. 9 is divisible by 3).
- 2? ______________________________
- 5? ______________________________

1 2 3 4 5 6 7 8 9 10



4 Divide and test your answer.

$65 \div 3$ $= (60 + 5) \div 3$ $= (60 \div 3) + (5 \div 3)$ $= 20 + 1 \text{ rem } 2$ $= 21 \text{ rem } 2$	$21 \times 3 + 2$ $= (20 + 1) \times 3 + 2$ $= (20 \times 3) + (1 \times 3) + 2$ $= 60 + 3 + 2$ $= 65$
a. $49 \div 5$	
b. $65 \div 5$	

5 Solve the following:

You need to go and do some research.
How do you know if a number is divisible by 4?

Teacher:
Sign:
Date:

11 12 13 14 15 16 17 18 19 20

ENG MATHS G3 B2 9781431501472.indb 51 2014/06/20 7:54 AM

90

Date:

Term 3

Properties of 3-D objects

Look at the pictures.

Talk about the surfaces of the objects using words such as flat and curved.

Balls	Boxes	Cylinders	Pyramids	Cones
				

Look at the pictures and complete the sentences and questions.

a. The ball

________________.

b. Why doesn't the ball slide?

____

c. The cylinder

________________.

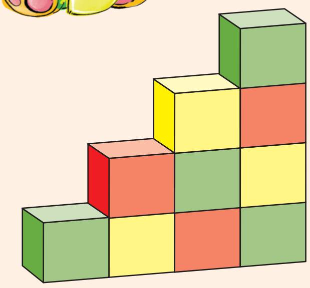
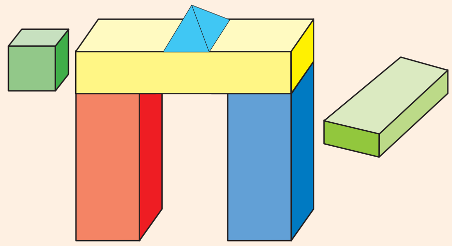
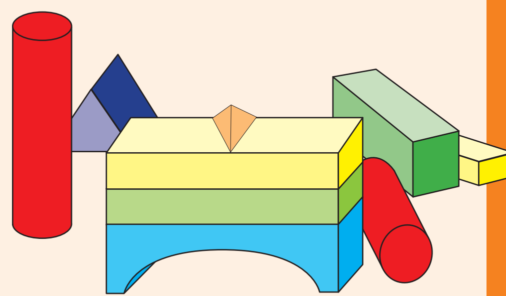
d. Can the cylinder also slide?

____

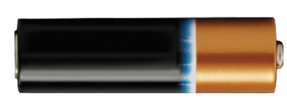
ENG MATHS G3 B2 9781431501472.indb 52 2014/06/20 7:55 AM

3 Name the objects used in each picture.

You only have to name each object once. Say if the object can roll or slide.

4 Say if the 3-D objects have flat or curved surfaces.

5 Draw the following:

A box balancing on a cylinder.	A ball balancing on a cylinder.	A cylinder balancing on a box.

Teacher:
Sign:
Date:

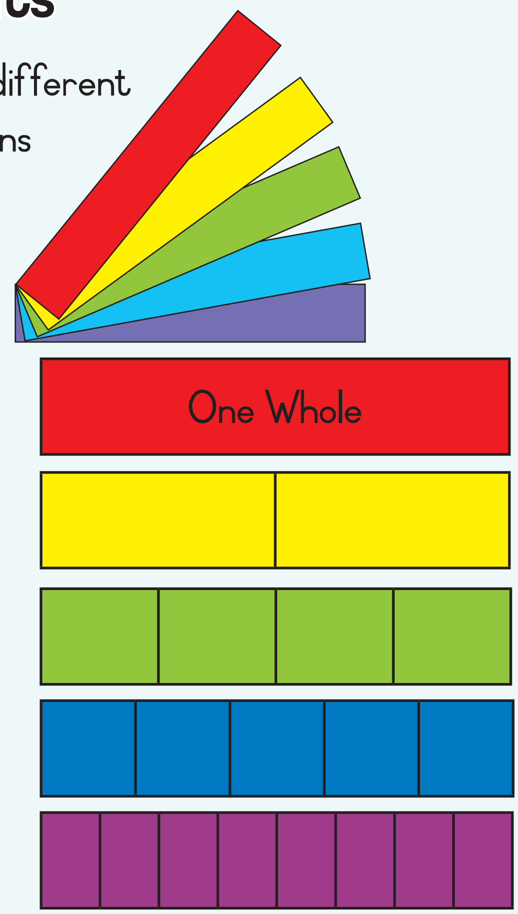
11 12 13 14 15 16 17 18 19 20

Date:

Fraction strip kits

Materials: 5 strips of paper in different colours, Scissors, Pencils/Crayons

1 Make the kit
Cut-out 5



On one strip write the words: "One Whole"

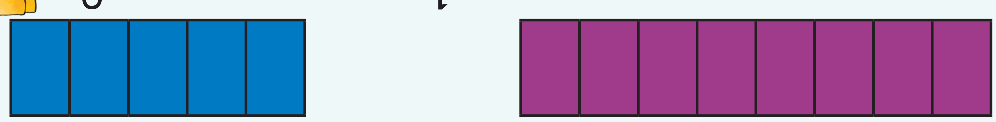
Take another strip and carefully fold it in half. Then open it up. How many equal parts do you have?

Write $\frac{1}{2}$ on each half and cut along the folds.

Take a third strip and fold it in half, then fold it in half again. Open it. How many equal parts do you have? Write $\frac{1}{4}$ on each fourth, and then cut along the folds.

Now try and make two more strips, one showing fifths and the other eighths.

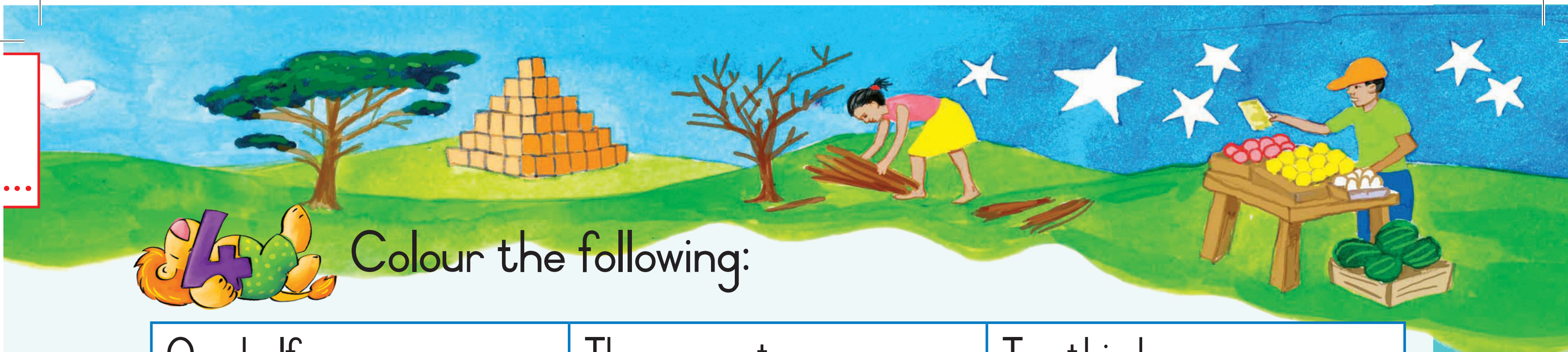
2 Use the fraction kit pieces to help you answer these questions.



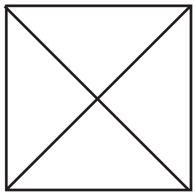
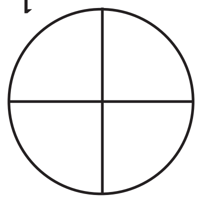
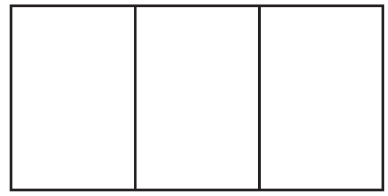
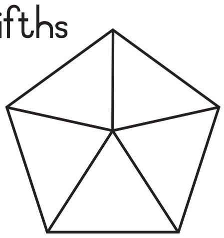
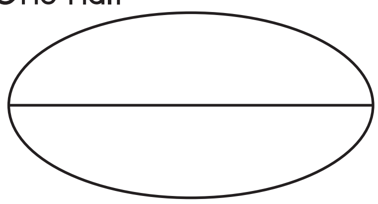
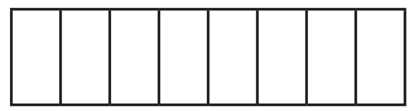
How many fifths equal one whole? ☐ How many eighths equal one half? ☐

3 Fractions on a number line.

This strip shows one whole. One Whole	This circle shows one whole. One Whole
Divide the strip into thirds. Colour one third.	Divide the circle into thirds. Colour one third.



4 Colour the following:

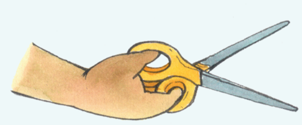
One half 	Three quarters 	Two thirds 
Four fifths 	One half 	Five eighths 

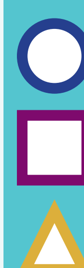
5 Draw the following:

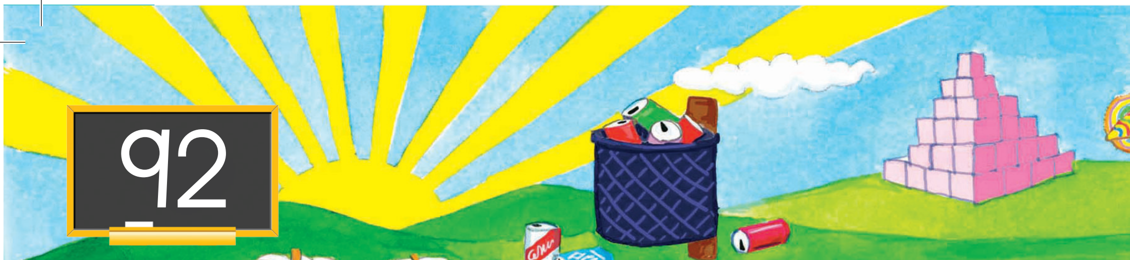
Three quarters using a square.	One half using a circle.	Two thirds using a triangle.
Four fifths using a circle.	Four eighths using a square.	Two thirds using a rectangle.

6 Prepare your kit

- Cut out each of the 6 circles in Cut-out 6.
- Cut five of the circles into pieces along the lines.
- Label each piece:
  - o On one side write the fraction of the whole hour.
  - o On the other side write the number of minutes in that fraction.





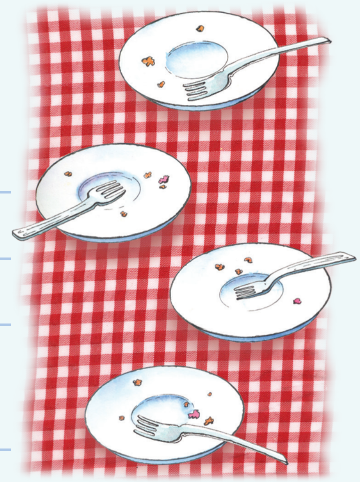


92

Date: ....

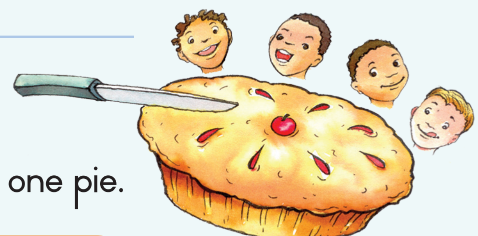
More fractions

Write Yes or No



- A half is half of one whole ____________
- A half of a half is one quarter ____________
- A quarter is half of a half ____________
- A half and two quarters make a whole ____________
- A half and a quarter make three quarters ____________

Share a pie



Sipho, Gugu, Andile and Lisa share one pie.

a. I am hungry! I want half!

Sipho

Draw Sipho's share.

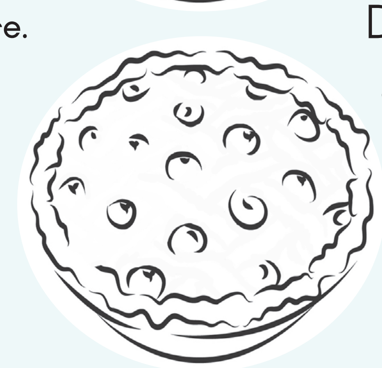
b. Okay! I'll have a quarter.

Gugu

Draw Sipho and Gugu's shares.

c. I will have half of what is left.

Andile



Draw Sipho, Gugu and Andile's share.

d. How much of the pie is left for me?

Lisa

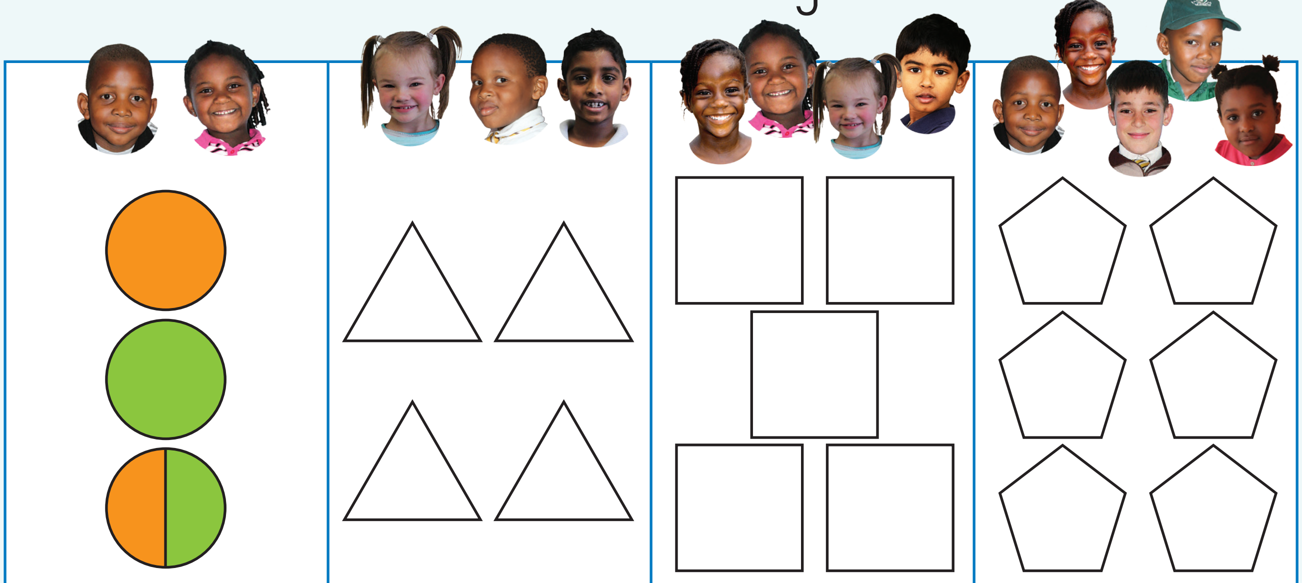
Draw all their shares of the pie.

1 2 3 4 5 6 7 8 9 10

ENG MATHS G3 B2 9781431501472.indb 56 2014/06/20 7:55 AM

3

Share the shapes amongst the children.
Use a different colour or pattern for each child.
We have done the first one for you.



4

Four friends share 5 liquorice sticks equally.	Six friends share 9 liquorice sticks equally.
How much will each one get?	How much will each one get?
What is the question?	What is the question?
What are the numbers?	What are the numbers?
Draw a picture.	Draw a picture.

Teacher:
Sign:
Date:

11 12 13 14 15 16 17 18 19 20

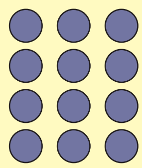
ENG MATHS G3 B2 9781431501472.indb 57 2014/06/20 7:55 AM

93

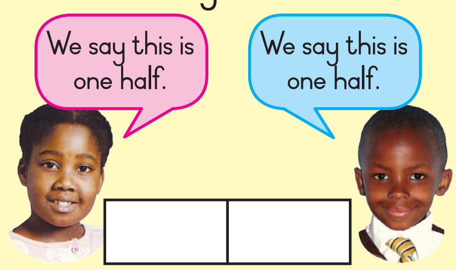
Sharing leading to fractions

Term 3

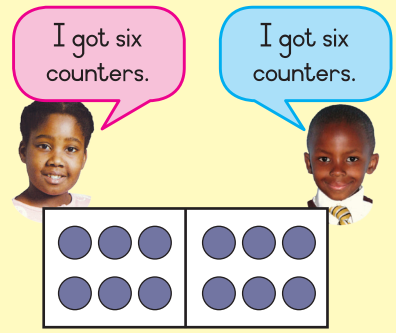
Here are 12 counters



We are two friends. We have only one container divided exactly in half.

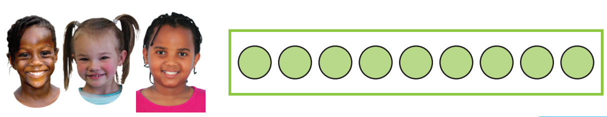


We share the twelve counters between the two of us.



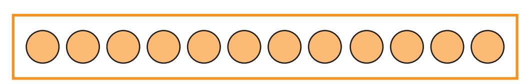
Make a drawing of the following and answer the question.

Nine balls divided between three friends.



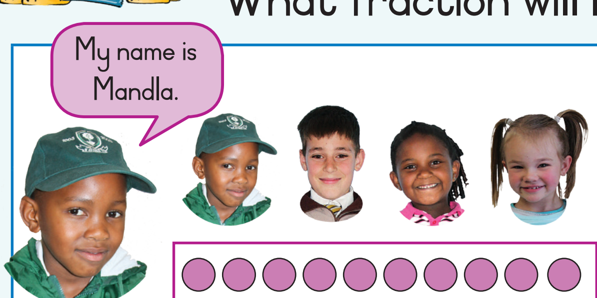
- How many balls will each girl get? ☐
- What is the fraction each girl will get? ☐

Twelve balls divided between four friends. Three of the friends are boys.

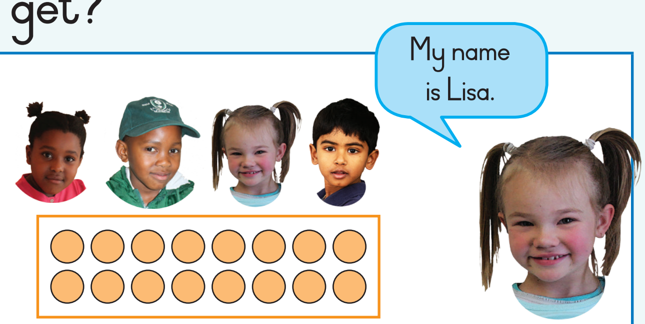


- How many balls will each girl get? ☐
- What is the fraction each boy will get? ☐

What fraction will Mandla get?
What fraction will Lisa get?



- How many balls will Mandla and Lisa get?



- How many balls will Mandla and Lisa get?

ENG MATHS G3 B2 9781431501472.indb 58 2014/06/20 7:55 AM

3 Sharing sweets.

Some friends share some sweets. They each get $\frac{1}{2}$ (half) of a packet.

a. How many packets do they need to share between:

4 friends? ________ 6 friends? ________ 9 friends? ________

b. How many friends can share:

4 packets? ________ 10 packets? ________ $3\frac{1}{2}$ packets? ________

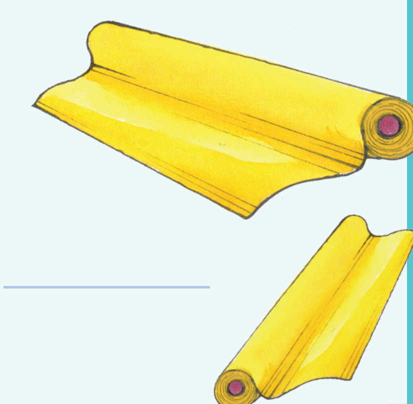
4 Dancing skirts.

The mothers and grannies make dancing skirts.
For 1 skirt they need $2\frac{1}{2}$ metres (m) of fabric.
The fabric costs R6 a metre.

a. How many skirts can they make from?

5 m ________ 10 m ________

20 m ________ 25 m ________



b. How much fabric do they need to make?

2 skirts ________ 3 skirts ________ 4 skirts ________

c. How much does the fabric cost to make?

1 skirt ________ 2 skirts ________ 3 skirts ________

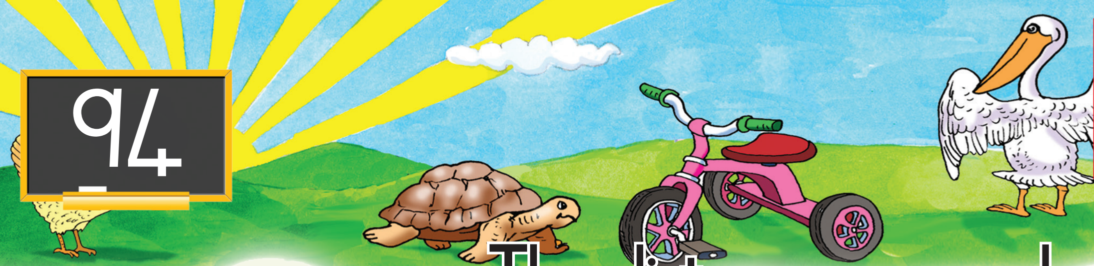
d. How many skirts can they make for:

R450 ________ R825 ________ R180 ________.

Teacher:
Sign:
Date:

11 12 13 14 15 16 17 18 19 20

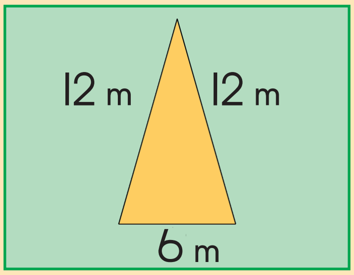
ENG MATHS G3 B2 9781431501472.indb 59 2014/06/20 7:55 AM



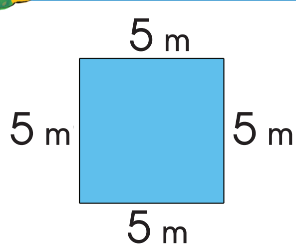
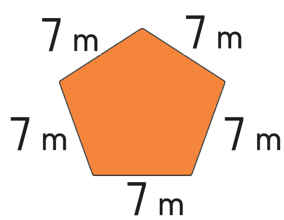
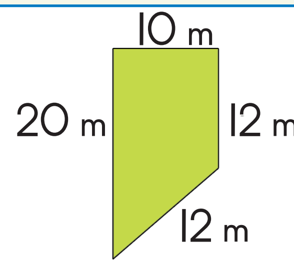
Date: ....

The distance around

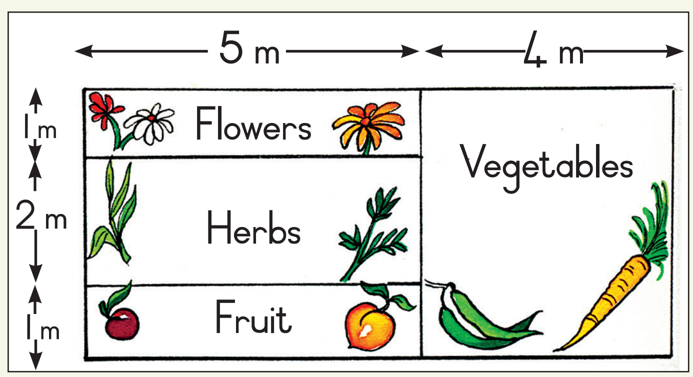
The word perimeter means the length or distance around an object.

	A farmer has a triangular plot of ground. We can find the perimeter of the plot by adding up the lengths of the sides. Perimeter = 12 m + 12 m + 6 m = 30 m

1 Find these perimeters.

2 Veronica's garden.



Veronica draws a diagram of the garden she wants to plant.

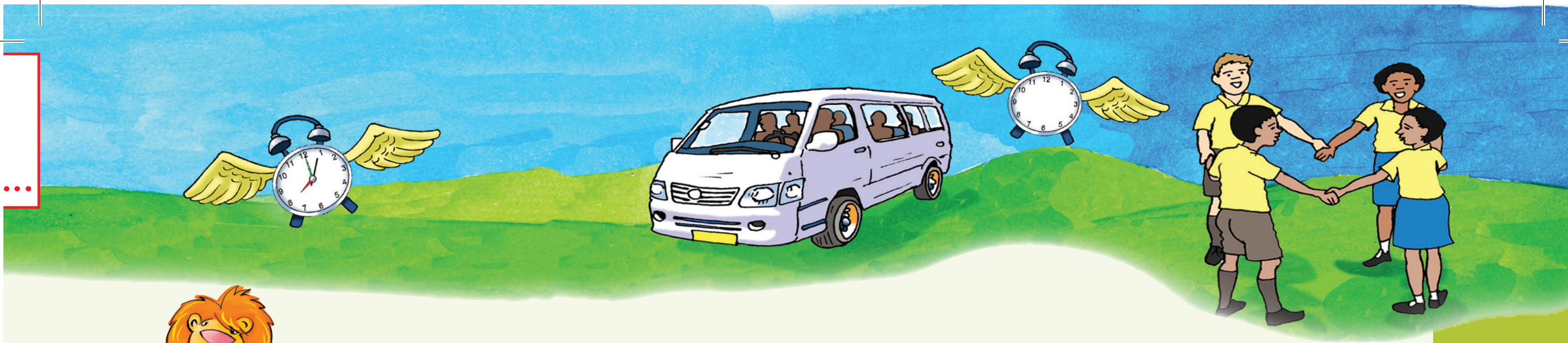
a. What is the perimeter of the area where she plants her herbs? ____________

b. Which two sections have the same perimeter? What is their perimeter?

____________ and ____________ have a perimeter of ____________ m.

c. She needs a fence around the whole garden. The fencing costs R50 per meter. How much will the fence cost? ____________

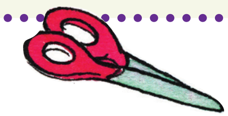
1 2 3 4 5 6 7 8 9 10



Plan your own garden.

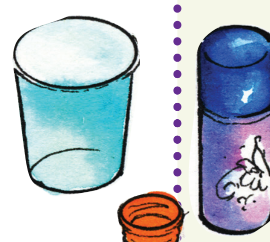
Use grid paper from Cut-out 7 to plan your own garden. Show all the measurements and the crops you would like to grow.

Measuring circles.

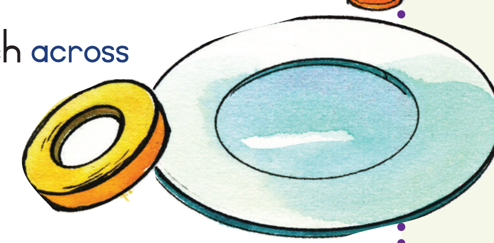


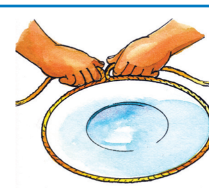
Work with a partner.

Materials: 10 circular objects of different sizes like a plate, a glass, sticky tape , a bottle cap, string and scissors



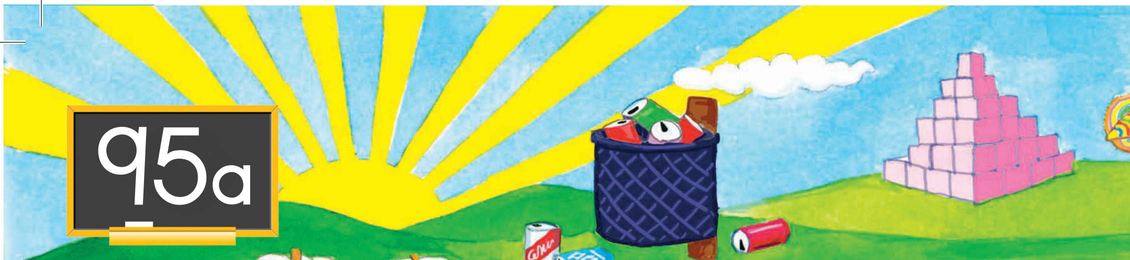
1. Choose one of the round objects to measure with the string.
2. Cut a piece of string the exact length that just fits around the object.
3. Now take the same string and stretch it to reach across the circle. Count how many times it fits across.
4. Do the same with other circular objects.
5. Write what you notice.



The distance around a circle is called the **circumference**.	
The distance across a circle is called the **diameter**.	

11 12 13 14 15 16 17 18 19 20

ENG MATHS G3 B2 9781431501472.indb 61 2014/06/20 7:55 AM



95a

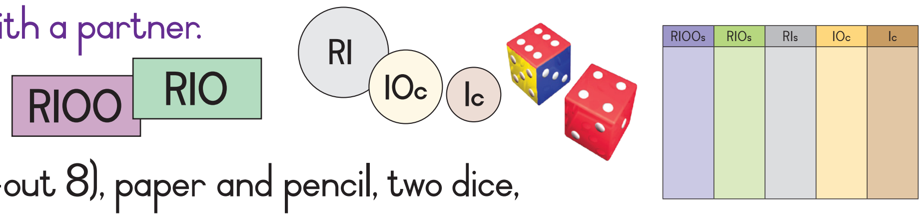
Trading money

Date: ....

Term 3

Play these games with a partner.

Materials:



Money Board (Cut-out 8), paper and pencil, two dice, play money (from Cut-out 9): R100 and R10 notes; R1, 10c and 1c coins.

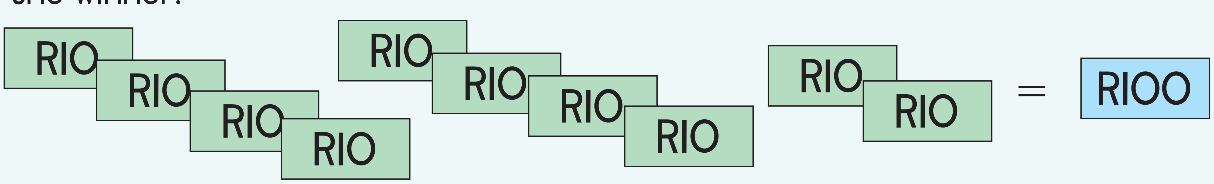
Place the Money Board on the table.

The board has 5 sections which are, from left to right, R100, R10, R1, 10 cents, and 1 cent. For this game we are using the first 3 columns.

Add up to 100 Rand.

1. Each player takes a turn to roll the dice. Add the two numbers together.
2. Take that number of R1 coins and place them in the R1 section of your board.
3. As soon as you have ten R1 coins you must trade them for a R10 note.

4. The first one to collect ten R10 notes and trade them for a R100 note is the winner.



5. Penalties: If a player finishes the turn and forgets to trade ten R1 coins for one R10 note, and the other player catches the mistake, the penalty is R1. If a player forgets to trade ten R10 notes for one R100 note, he or she must pay R10 to the other player.

1 2 3 4 5 6 7 8 9 10

ENG MATHS G3 B2 9781431501472.indb 62 2014/06/20 7:55 AM

Subtract from R100 to R0.

Play the same game, except start with ten R10 notes, and subtract the sum of the numbers on the dice. The player who gets to R0 first is the winner.

R100s	R10s	R1s	10c	1c

Addition and Subtraction to R1 000.

Add the sum of the dice on each turn, and take that number of R10 notes. The first one to reach R1 000 is the winner. Or, start with R1 000, and on each turn subtract. The first player to reach R0 wins.

Adding up to R1.

Play the same as the first game, except this time when you roll the dice and find the sum, take the sum of the dice in 1 cent coins. When you have ten 1c coins, change them for a 10c coin. The first one who can change ten 10c coins for a R1 coin is the winner.

Subtract cents.

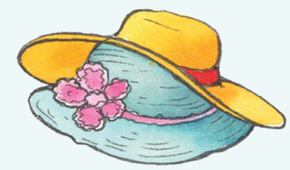
Start with R1, and subtract on each play. The first to get to 0 cents is the winner.

ENG MATHS G3 B2 9781431501472.indb 63 2014/06/20 7:55 AM

Let's go shopping!

Hats for sale.

The shop sells hats at 5 different prices.



							Totals
Hat a R20	R20	R20	R20	R20	R20	R20	R120
Hat b R25	R25	R25	R25	R25	R25	R25	
Hat c R50	R50	R50	R50	R50	R50	R50	
Hat d R75	R75	R75	R75	R75	R75	R75	
Hat e R100	R100	R100	R100	R100	R100	R100	

a. Find the value of the hats in each row.

b. MaZondo buys 1 of each kind of hat.

How much does she pay altogether? ____________

c. Buti spends R450 altogether. He buys 1 hat for R100.

What other hats does he buy? Show 2 possible answers.

Check!
Compare!
Correct!

Answer 1	Answer 2

ENG MATHS G3 B2 9781431501472.indb 64 2014/06/20 7:55 AM

At the bakery.

Musa uses this recipe to make a sponge cake.

Sponge cake recipe

For the cake: 40 g of self-raising flour; 3 eggs; 50 g of icing sugar

For the filling: 140 ml cream

a. Work out how much Musa needs, to bake up to 6 cakes.

Cake	Flour	Eggs	Icing sugar	Cream
1	40 g	3	50 g	140 ml
2				
3				
4				
5				
6				

b. Tick (✓) the correct answer.

1 litre of cream can fill about: 10 cakes; 7 cakes; 8 cakes

Check!
Compare!
Correct!

Quick sums

$10 \times 7 =$	$10 \times 70 =$	$5 \times 7 =$	$5 \times 70 =$	$70 \times 2 =$
$12 \times 4 =$	$12 \times 8 =$	$6 \times 16 =$	$5 \times 9 =$	$50 \times 9 =$
$15 \times 3 =$	$15 \times 6 =$	$10 \times 4 =$	$8 \times 4 =$	$18 \times 4 =$

11 12 13 14 15 16 17 18 19 20

Term 3

More about data

At the police station.

Five policemen do different jobs. Where are they now?

	At the desk	On patrol	In court
Serufe			×
Maria	×		
Sam	×		
Amos		×	
Dudu			×

Write the names of who is:

At the desk? ______________________

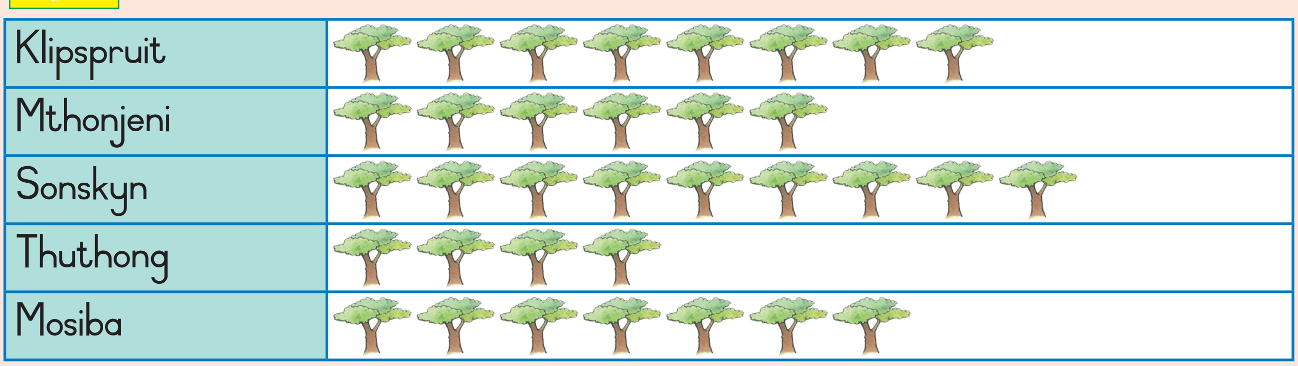
On patrol? ______________________

In court? ______________________

Tree day 

Five schools compete to see who can plant the most trees on Arbor Day.

 = 10 trees



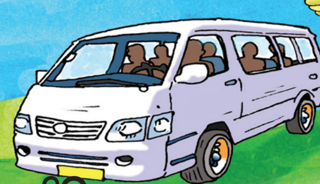
How many trees does each school plant?

Klipspruit	Mthonjeni	Sonskyn	Thuthong	Mosiba

How many trees did the schools plant altogether? ______________________

1 2 3 4 5 6 7 8 9 10

ENG MATHS G3 B2 9781431501472.indb 66 2014/06/20 7:55 AM

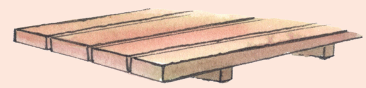


What kind of roof?

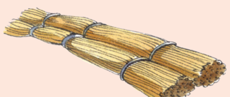
The Grade 3 class do a survey in their village.

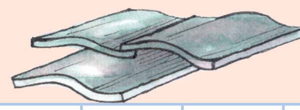
They want to find out about the kinds of roofs on different houses.

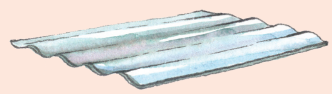
They show their results in this block graph.



They draw 1 tick (✓) for each house they see.







Tiles	✓	✓	✓	✓	✓	✓					
Thatch	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wood	✓	✓	✓	✓	✓	✓	✓	✓			
Iron	✓	✓	✓	✓	✓	✓	✓	✓	✓		

How many of each kind of roof do they see?

Tiles ________ Thatch ________ Wood ________ Iron ________

Which is the most popular kind of roof? ________________

How many roofs do they count altogether? ________________

Hat sizes

The boys at Juma school wear school caps.

The caps come in sizes 2, 3 and 4.

2	2	3	2	3	4	4	3	2	3	2	3
4	2	2	3	3	3	2	2	2	3	4	4
2	3	2	3	4	2	4	4	3	4	2	2
2	2	3	3	3	4	2	2	2	3	3	4
4	2	2	2	3	4	2	4	4	3	2	

Count how many learners wear each size of cap.

2 ________ 3 ________ 4 ________

Which is the most common size? ________

Check! Compare! Correct!

Teacher:
Sign:
Date:

11 12 13 14 15 16 17 18 19 20

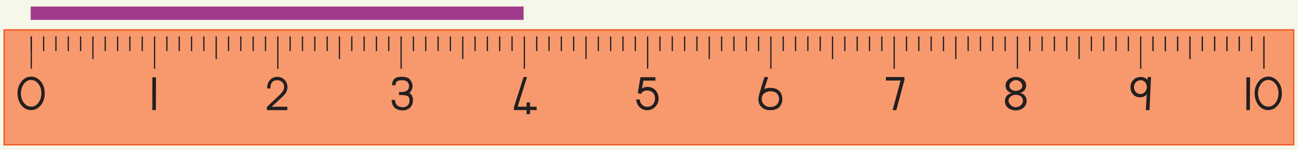
ENG MATHS G3 B2 9781431501472.indb 67 2014/06/20 7:55 AM

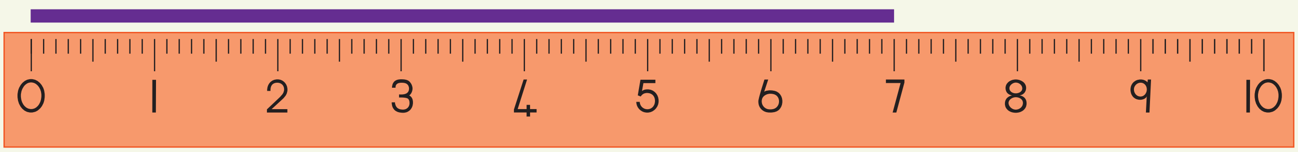
Date:

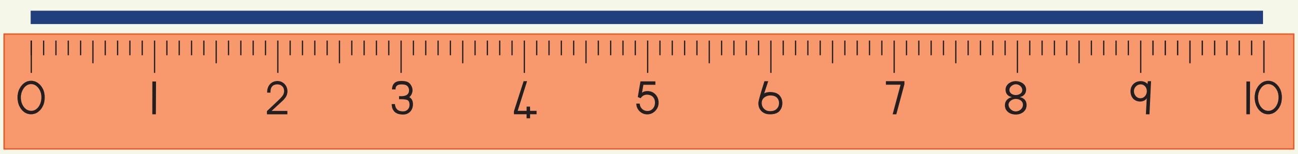
Working in centimetres

Term 4

1 How long is the coloured line?

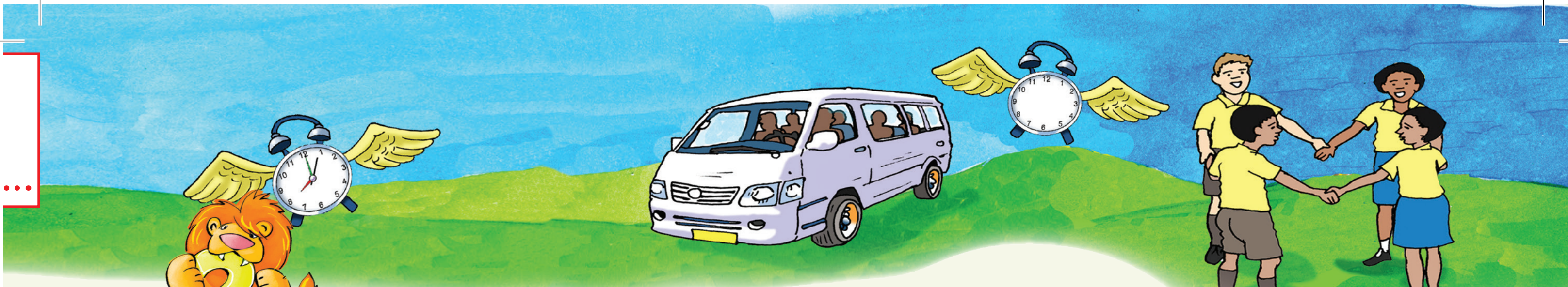






2 First estimate and then measure the lines. Complete the table.

Line	Estimation	Measurement	Difference between estimation and measurement



3 Use a ruler to draw the following lines.

a. 10 cm

b. 7 cm

c. 15 cm

4 Say if you will measure the following in metres or centimetres.

a. The length of a book ________

b. The height of a door ________

c. The length of a pencil ________

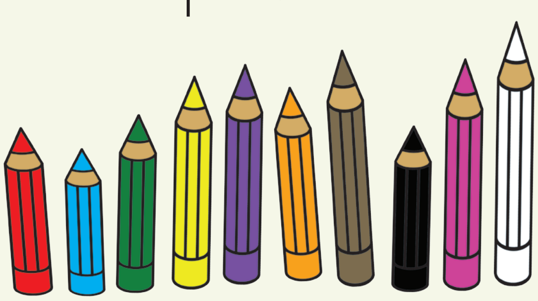
d. Your height ________

e. The length of your finger ________

> Remember the shorter words (abbreviations) we use to write centimetre (cm) and metre (m).

5 During the year you used your ten colouring pencils. The length of your pencils was 15 cm before you used them.

After you used it your red pencil is 7 cm, blue 5 cm, green 6 cm, yellow 11 cm, purple 12 cm, orange 9 cm, brown 14 cm, black 8 cm, pink 13 cm and white 15 cm.



a. Which pencil did you use the most? ________

b. Which pencil did you use the least? ________

c. Write the length of your pencils from the shortest to the longest ________________

98

Date:

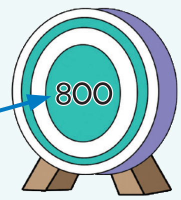
Numbers 700 to 800

Term 4

Count and write.

a. Use the following chart to help you count from 700 – 800. Say the numbers out aloud as you count.

700



701			704						710
							718		
	722								
					736				
741								749	
							758		
		773							
							788		790
	792			795					800

b. Write the missing numbers in the grid above.

c. Write the 10 numbers that come after 750.

750; ____; ____; ____; ____; ____; ____; ____; ____; ____; ____

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

762; 764; 766; ____; ____; ____; ____; ____; ____; ____

e. Write all the numbers in 2s pattern from 751 to 773.

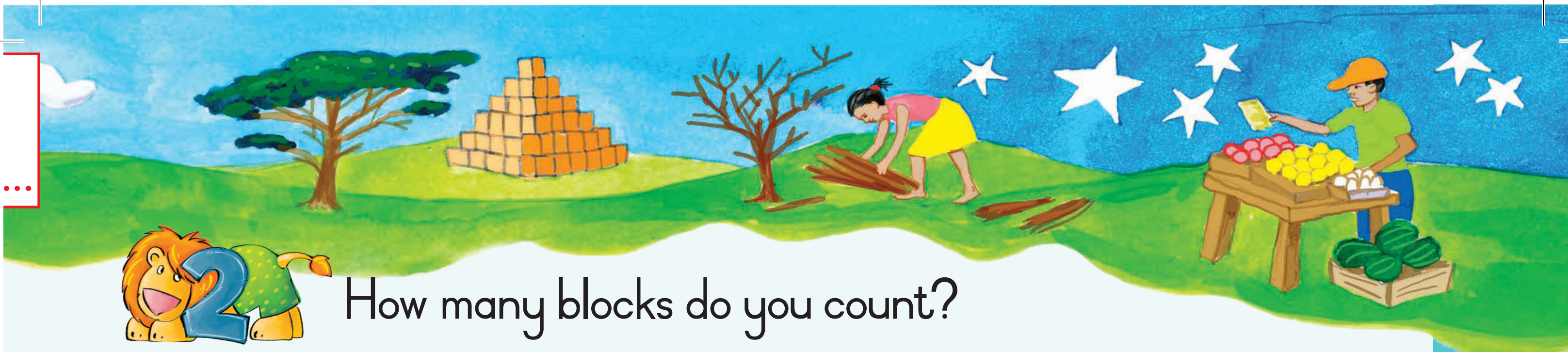
751; ____; ____; ____; ____; ____; ____; ____; ____; ____; ____; 773

f. Write the next 8 numbers in the 5s pattern.

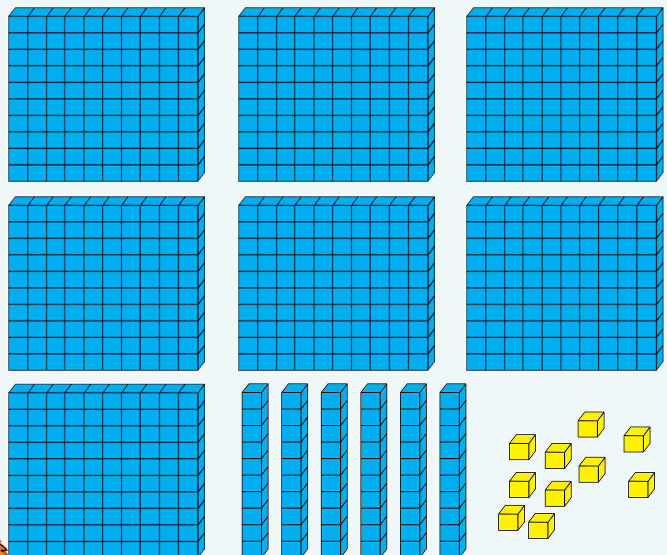
751; 756; 761; ____; ____; ____; ____; ____; ____; ____

1 2 3 4 5 6 7 8 9 10

ENG MATHS G3 B2 9781431501472.indb 70 2014/06/20 7:55 AM



2 How many blocks do you count?



How did you count the blocks?

3 Complete the number lines.

750			753				757		759	

							789	788	787	

					753	756	759			

4 Complete the table.

	Write from smallest to biggest.	Write from biggest to smallest.
776, 772, 779, 770, 778		
736, 703, 730, 713, 703		

5 Write the following in words.

788	

Teacher:
Sign:
Date:

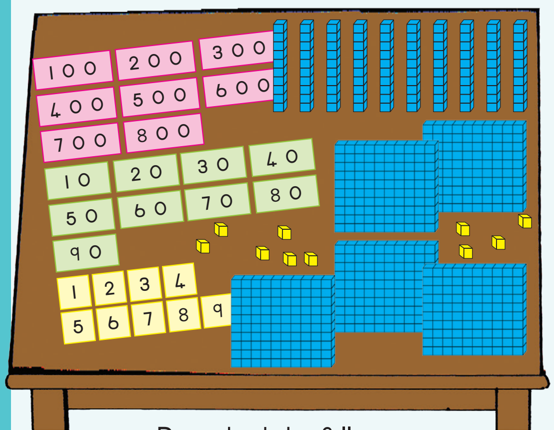
11 12 13 14 15 16 17 18 19 20

99

Date:

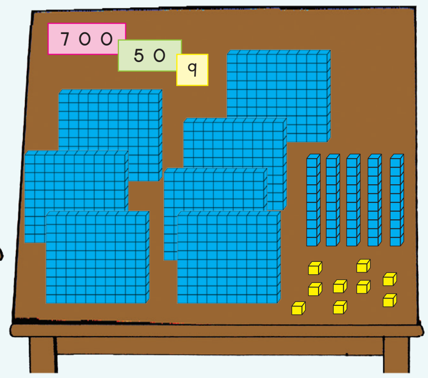
More numbers 700 to 800

Term 4

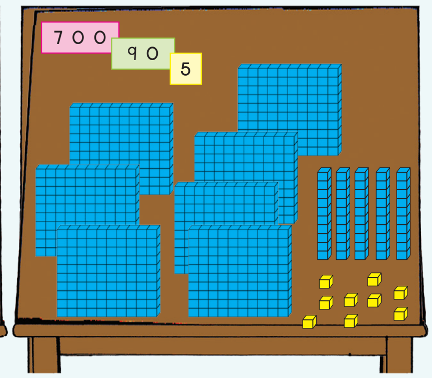


Peter had the following place value cards and base ten blocks.

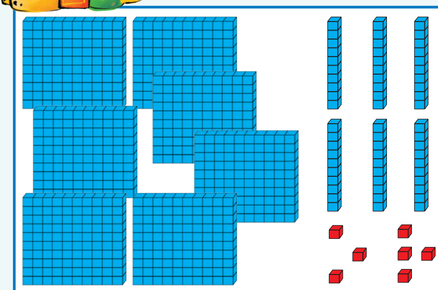
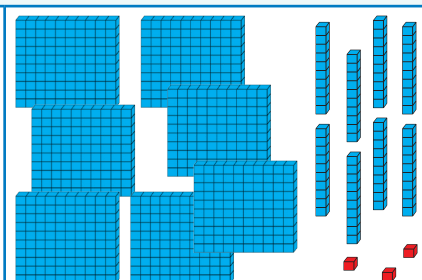
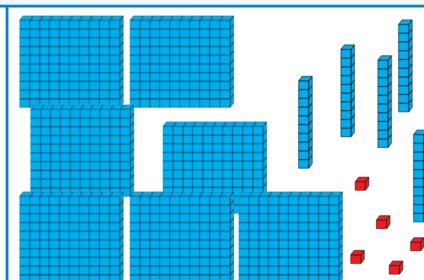
The teacher asked Peter to show 759 with his cards and blocks.



This is what Ben showed. What did he do wrong?

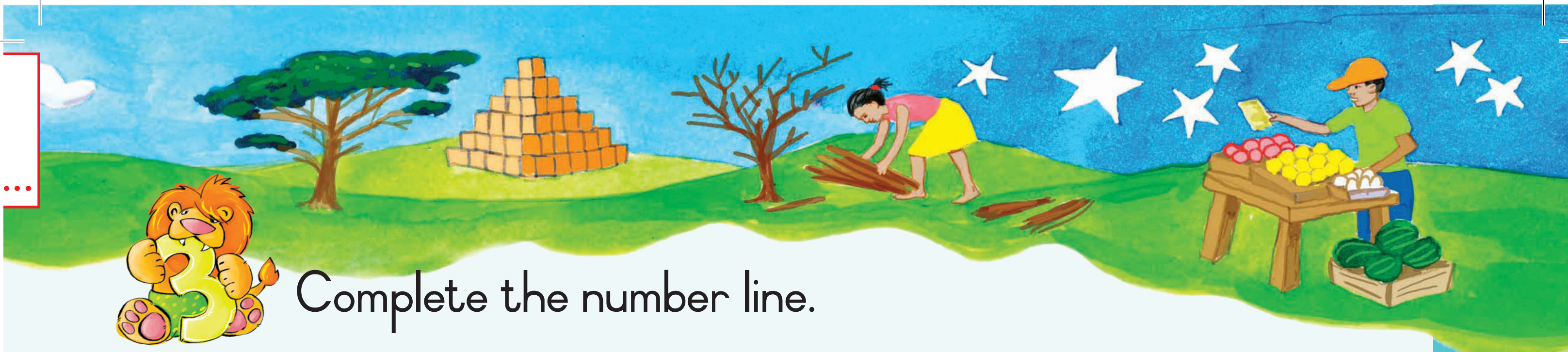


1 Write a number sentence and then the answer.

		
700 + 60 + 7 = | 767	|	|

2 Write a number sentence and then the answer.

700 / 90 / 9	500 / 50	60 / 5
700 + 90 + 9		
=		



3 Complete the number line.

789	790	791								799

Write all the numbers smaller than 795. ______________________

Write all the numbers bigger than 795. ______________________

4 Fill in <, > or =.

a. 799 ________ 766 b. 745 ________ 750

c. 700 + 90 + 7 ________ 767

5 Break up your number.

a. Build each number with your cards.

b. Write the value for each digit. Now do these: Break up your number.

790	
689	
699	
755	
690	

Example: 799

7	0	0
	9	0
		9
7	9	9

799	700 + 90 + 9

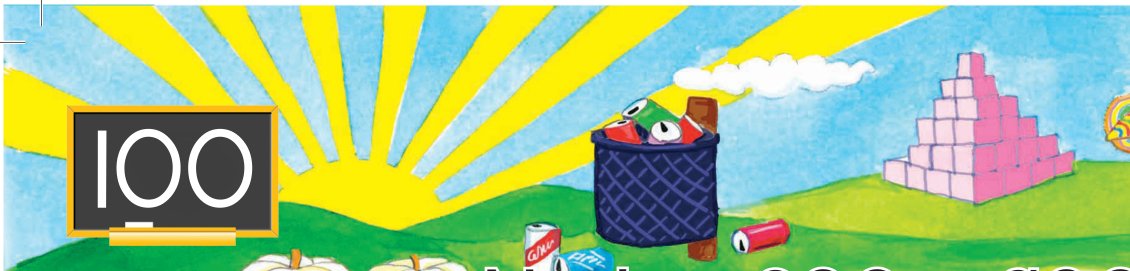
6 Write the number names.

668	
757	
799	
742	
691	

Teacher:
Sign:
Date:

11 12 13 14 15 16 17 18 19 20

ENG MATHS G3 B2 9781431501472.indb 73 2014/06/20 7:55 AM



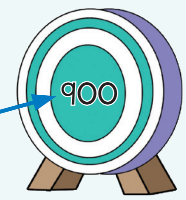
Date: ....

Numbers 800 to 900

Term 4

Count and write.

a. Use the following chart to help you count from 800 – 900. Say the numbers out aloud as you count.



800

801			804						810
							818		
	822								
					836				
841								849	
							858		
		873							
							888		890
	892			895					900

b. Write the missing numbers in the grid above.

c. Write the 10 numbers that come after 800.

800; _____; _____; _____; _____; _____; _____; _____; _____; _____; _____

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

852; 854; 856; _____; _____; _____; _____; _____; _____; _____; _____

e. Write all the numbers in the 2s pattern from 807 to 829.

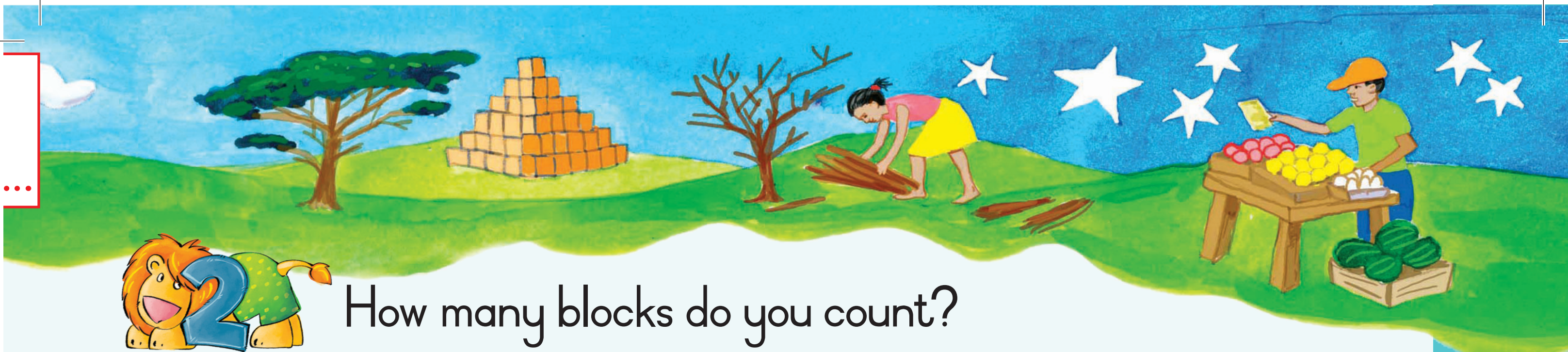
807; _____; _____; _____; _____; _____; _____; _____; _____; _____; _____; 829

f. Write the next 8 numbers in the 5s pattern.

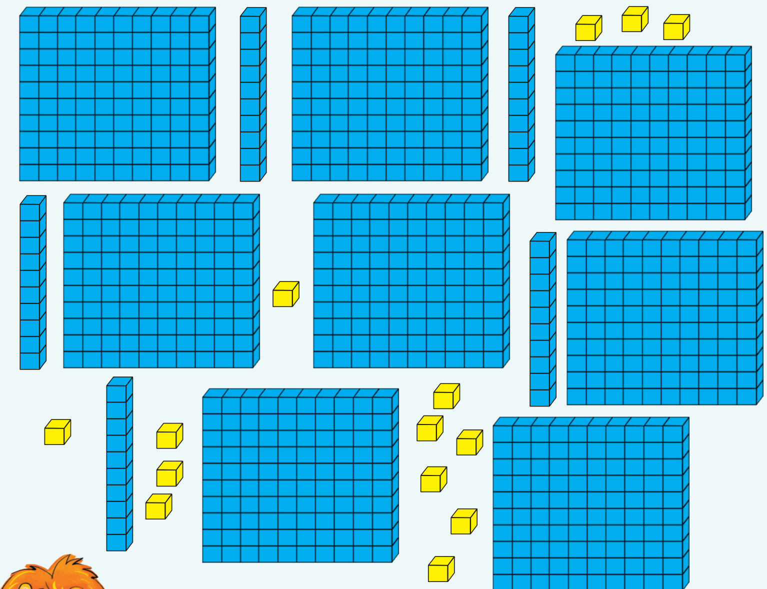
834; 839; 844; _____; _____; _____; _____; _____; _____; _____; _____

1 2 3 4 5 6 7 8 9 10

ENG MATHS G3 B2 9781431501472.indb 74 2014/06/20 7:55 AM



2 How many blocks do you count?



How did you count the blocks?

3 Complete the number lines.

830			833				837	838		
							876	881	886	
					843	846	849			

4 Complete the table.

	Write from smallest to biggest.	Write from biggest to smallest.
856, 853, 855, 851, 857		
898, 801, 810, 819, 891		

5 Write the following in words.

845	

Teacher:
Sign:
Date:

11 12 13 14 15 16 17 18 19 20

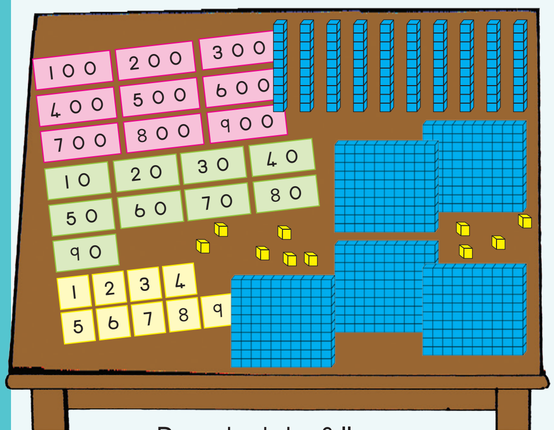
ENG MATHS G3 B2 9781431501472.indb 75 2014/06/20 7:55 AM

101

Date:

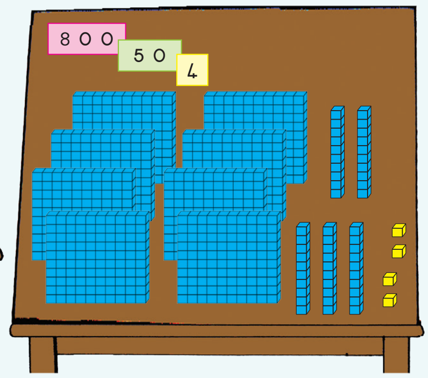
Term 4

More numbers 800 to 900

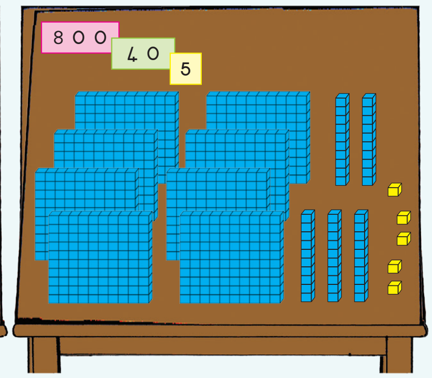


Peter had the following place value cards and base ten blocks.

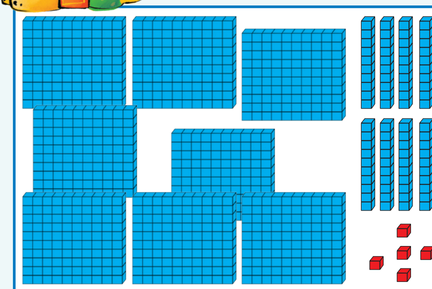
The teacher asked Peter to show 854 with his cards and blocks.



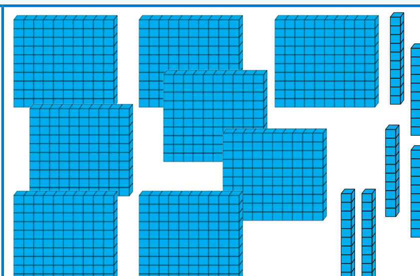
This is what Ben showed. What did he do wrong?

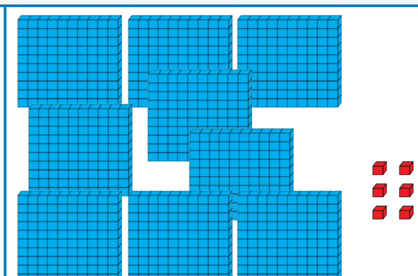


Write a number sentence and then the answer.



800 + 80 + 5 = 885





Write a number sentence and then the answer.

800 50 2	800 90 7	800 3
800 + 50 + 2		
=		

1 2 3 4 5 6 7 8 9 10

3 Complete the number line.

889	890	891									900

Write all the numbers smaller than 894. ______________________________

Write all the numbers bigger than 894. ______________________________

4 Fill in <, > or =

a. 899 ______ 898 b. 802 ______ 820

c. 900 + 70 + 5 ______ 785

5 Break up your number.

a. Build each number with your cards.

b. Write the value for each digit. Now do these: Break up your number.

890	
889	
802	
855	
840	

Example: 876

8	0	0
	7	0
		6
8	7	6

876	800 + 70 + 6

6 Write the number names.

889	
825	
803	
830	
899	

Teacher:
Sign:
Date:

11 12 13 14 15 16 17 18 19 20

ENG MATHS G3 B2 9781431501472.indb 77 2014/06/20 7:56 AM

102a

Date:

Term 4

Weighing things

1. Look at the following pictures and answer the questions.

a. Is the 1 kg washing powder, lighter or heavier than the 2 kg washing powder?

b. What is lighter: The 500 g breakfast cereal or the 200 g of biscuits?

c. What is heavier: The 100 g skin care cream or the 1 kg packet of samp?

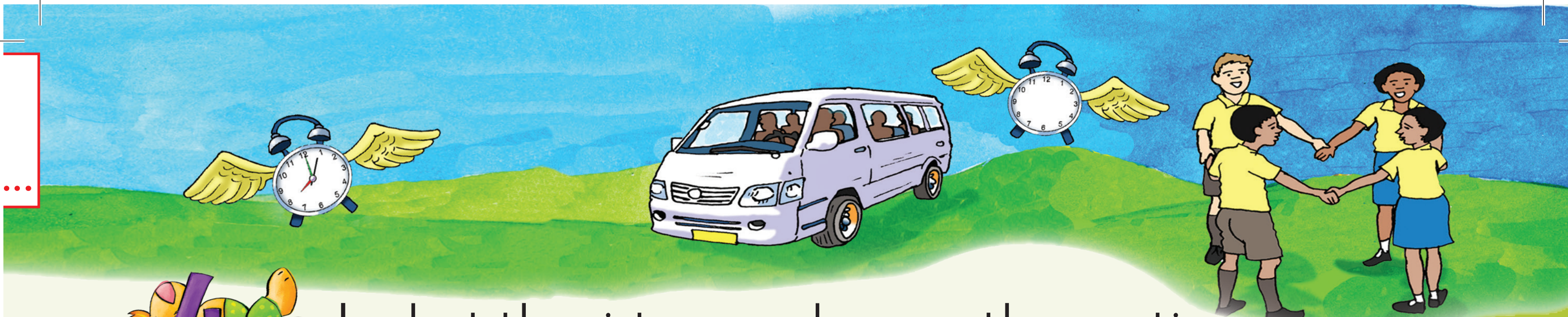
2. How much do we weigh all together?

I weigh 25 kg, my friend 29 kg and my brother 45 kg.

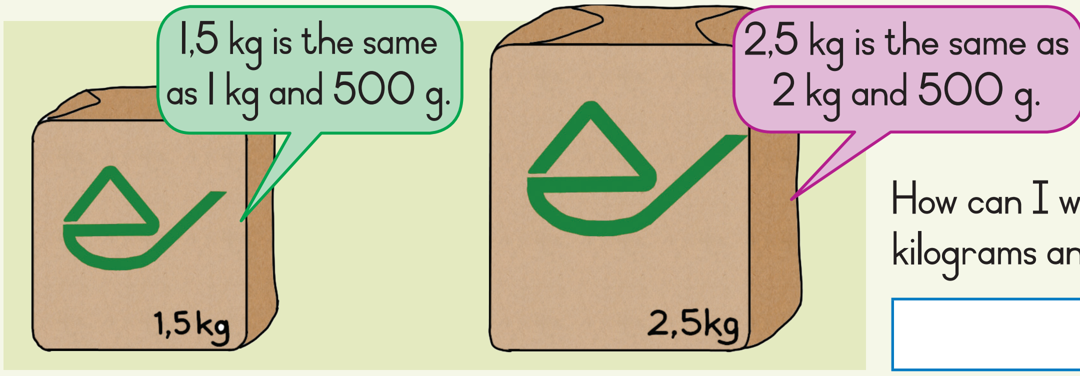
3. How much do the products weigh together?

The first product weighs 1 kg 500 g, the second product 3 kg 500 g and the last product 2 kg 500 g.

1 2 3 4 5 6 7 8 9 10



4 Look at the pictures and answer the questions.



How can I write 3,5 kg as kilograms and grams?

5 Complete the table.

Your teacher will give you five objects to look at. Estimate their weight and then measure it.

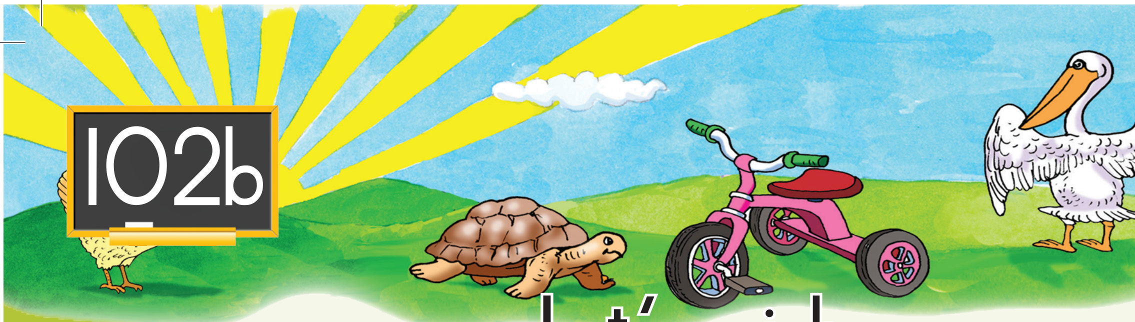
Object	Estimation	Measurement	Difference between estimation and measurement

6 How much do the products weigh together?

The first product weighs 2 kg 500 g, the second product 1 kg 500 g and the last product 3 kg 500 g.

Teacher:
Sign:
Date:

11 12 13 14 15 16 17 18 19 20



102b

Date:

Let's weigh some more

Mass is the measure of how much stuff or matter there is in an object. The more there is, the harder it is to move it.

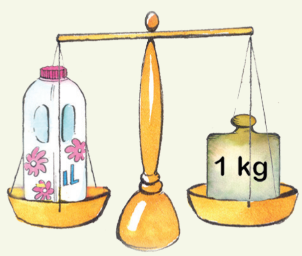
Weight is a measure of the force of gravity pulling on that matter. Gravity is less on the moon so things weigh less there.

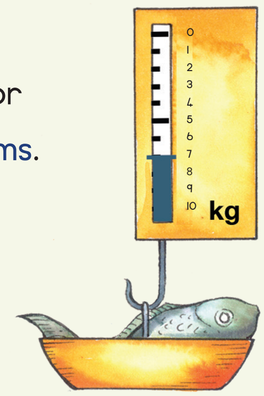
On earth for everyday purposes we use the same measures for both mass and weight. We measure mass in kilograms and grams.

Different scales

We use different kinds of scales to measure mass and weight. We measure mass with a balance and weight with a spring scale.

A litre of water has a mass of 1 kg.

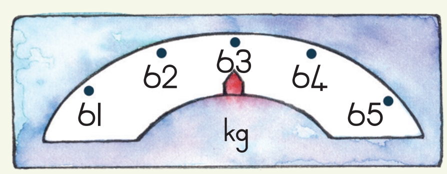


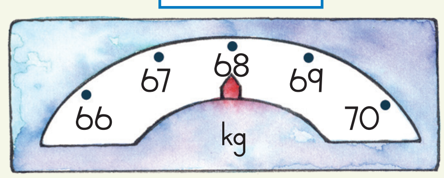


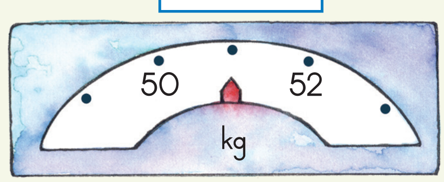
This fish has a weight of 7 kg.

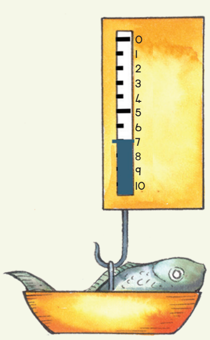
Find their weight

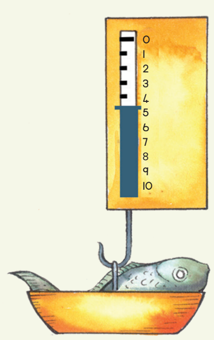
Write the weight in kg shown on each of these spring scales.

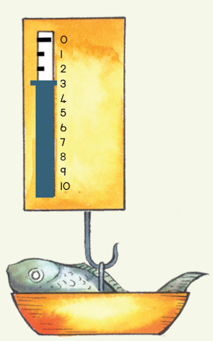






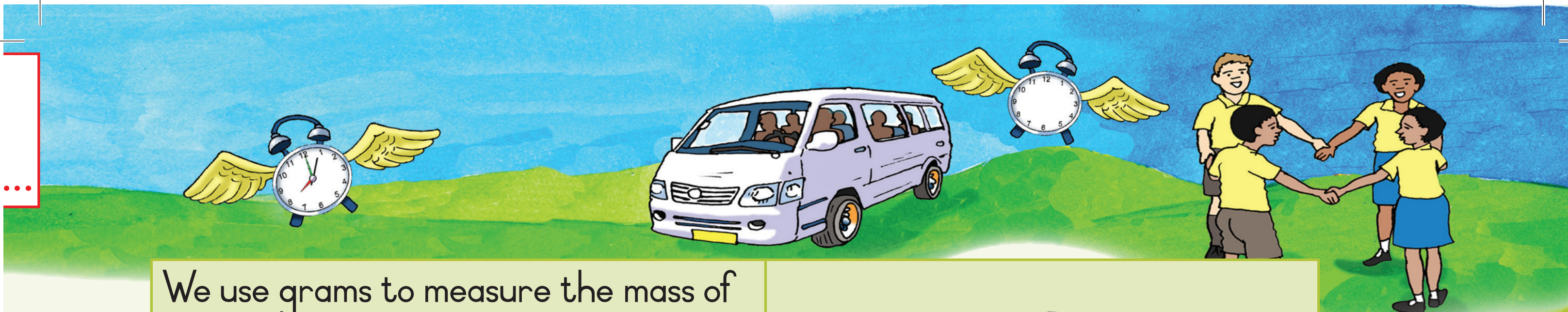






1 2 3 4 5 6 7 8 9 10

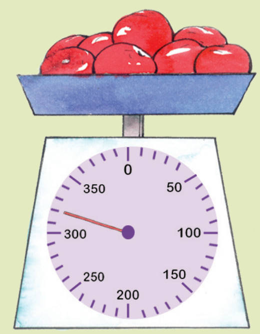
ENG MATHS G3 B2 9781431501472.indb 80 2014/06/20 7:56 AM



We use grams to measure the mass of smaller or lighter objects and to measure fractions of a kilogram.

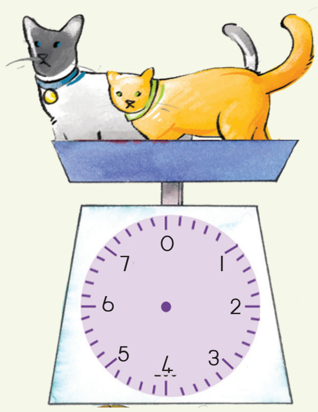
1 000 g = 1 kg

On this spring scale, each small line is 10 grams of weight. The tomatoes weigh 320 grams.

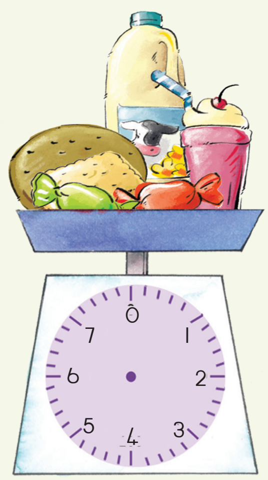


How much do they weigh?

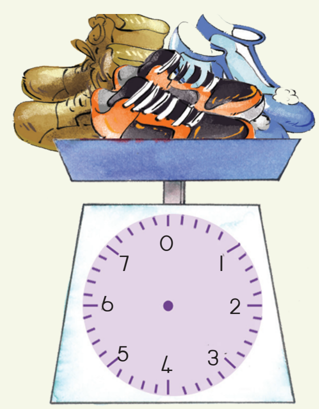
Draw where the arrow on the scale must go each time.



7 kg



4 kg



6 kg

Make a kilogram.

Add on to make 1 kg (1 000 g).

a. 125 g + 250 g + 125 g + __________ g = 1 000 g (1 kg)

b. 50 g + 30 g + 240 g + 60 g + 100 g + __________ = 1 kg

c. 57 g + 46 g + 243 g + 334 g = __________ = 1 000 g (1 kg)

d. 50 g + 90 g + 160 g + __________ = 1 000 g (1 kg)

11 12 13 14 15 16 17 18 19 20

103

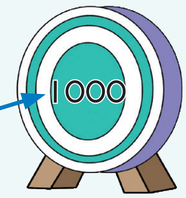
Date:

Term 4

Numbers 900 to 1 000

Count and write.

a. Use the following chart to help you count from 900 – 1 000. Say the numbers out aloud as you count.



900

901		903							910
								919	
		943					948		
981									
991								999	

b. Write the missing numbers in the grid above.

c. Write the 10 numbers that come after 900.

900; ____; ____; ____; ____; ____; ____; ____; ____; ____; ____

d. Write the next 8 numbers in the 2s patterns.

946; 948; 950; ____; ____; ____; ____; ____; ____; ____; ____

e. Write all the numbers in the 2s pattern from 945 to 967.

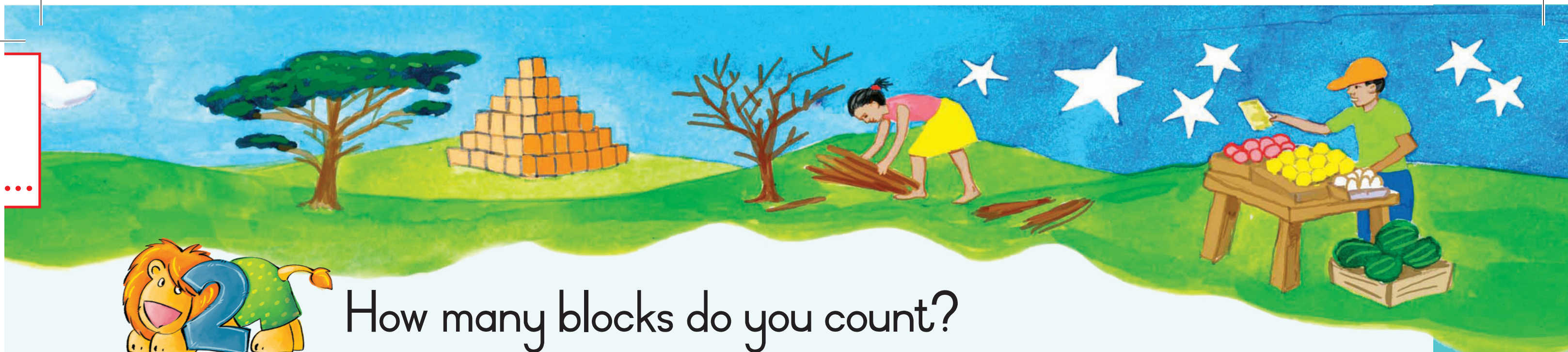
945; ____; ____; ____; ____; ____; ____; ____; ____; ____; ____; 967

f. Write the next 8 numbers in the 5s pattern.

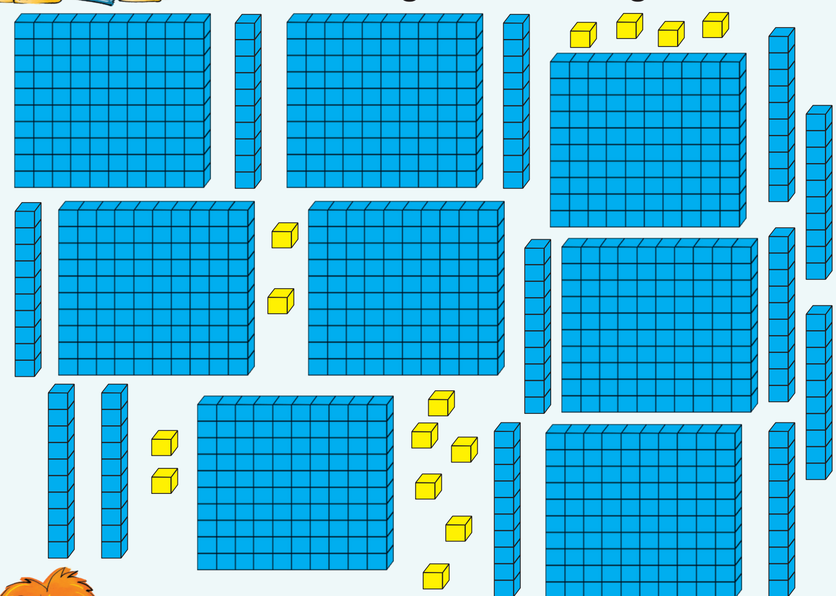
936; 941; 946; ____; ____; ____; ____; ____; ____; ____; ____

1 2 3 4 5 6 7 8 9 10

ENG MATHS G3 B2 9781431501472.indb 82 2014/06/20 7:56 AM



2 How many blocks do you count?



How did you count the blocks?

3 Complete the number lines.

950			953				957	958		

							956	961	966	

					903	906	909			

4 Complete the table.

	Write from smallest to biggest.	Write from biggest to smallest.
936, 933, 935, 931, 937		
978, 907, 970, 917, 971		

5 Write the following in words.

695	

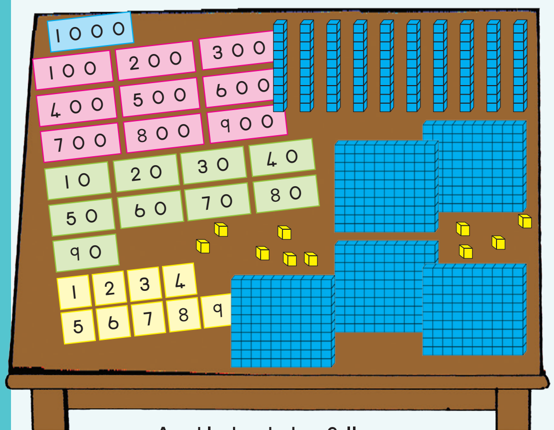
Teacher:
Sign:
Date:

104

Date:

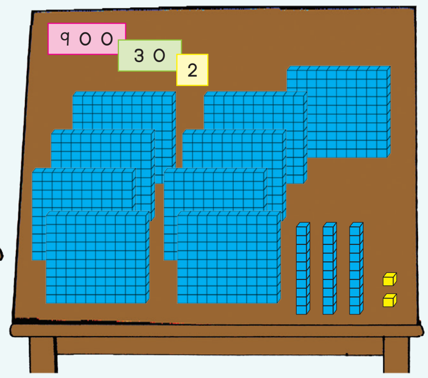
More numbers 900 to 1 000

Term 4

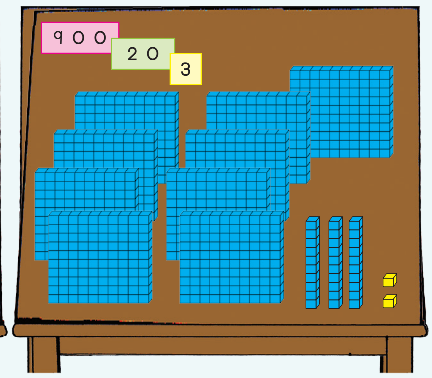


Andile had the following place value cards and base ten blocks.

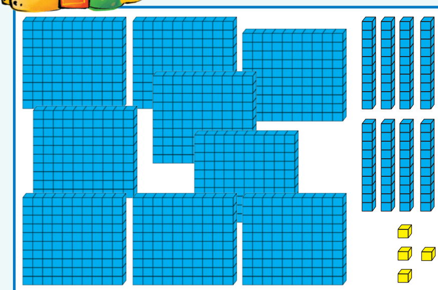
The teacher asked Andile to show 932 with his cards and blocks.



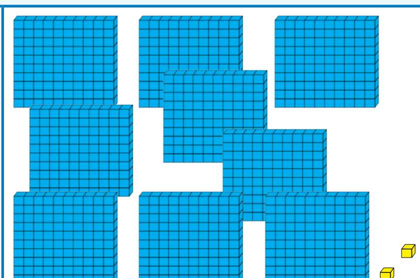
This is what Gugu showed. What did she do wrong?

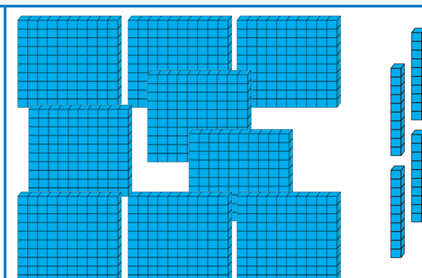


1 Write a number sentence and then the answer.



900 + 80 + 4 = | 984





2 Write a number sentence and then the answer.

9 0 0
9 0
9

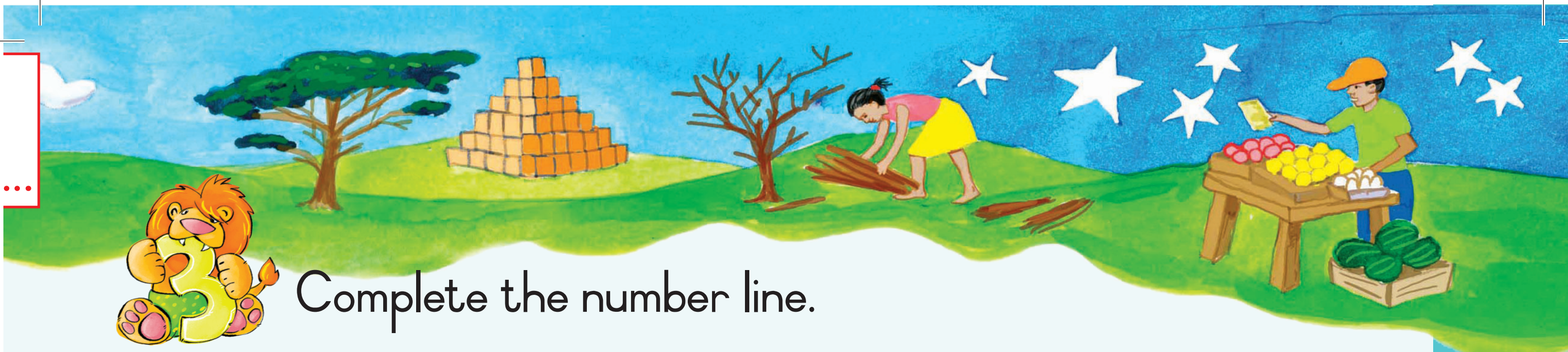
900 + 90 + 9

=

9 0 0
2 0

9 0 0
8

1 2 3 4 5 6 7 8 9 10



3 Complete the number line.

989	990	991								999

Write all the numbers smaller than 995. ____________________

Write all the numbers bigger than 995. ____________________

4 Fill in <, > or =.

a. 999 ______ 7 998 b. 957 ______ 975

c. 900 + 60 + 1 ______ 961

5 Break up your number.

a. Build each number with your cards.

b. Write the value for each digit. Now do these: Break up your number.

922	
959	
980	
907	
931	

Example: 984

9 0 0
8 0
4
9 8 4

984	900 + 80 + 4

6 Write the number names.

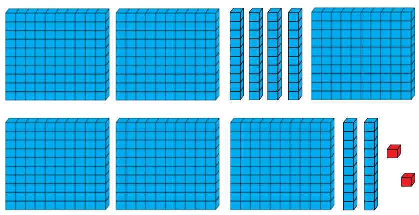
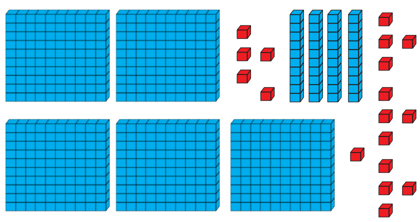
976	
905	
950	
821	
909	

11 12 13 14 15 16 17 18 19 20

Date: ....

Addition and subtraction to 999

1 Write a number sentence for each.

	Explain how you counted the blocks.
	Explain how you counted the blocks.

2 Use the example to guide you.

5 0 · 5 0 · double 50 is 100	3 0 0 · 3 0 0 ·
2 0 0 · 2 0 0 ·	3 · 3 ·

3 Use near doubles to solve the following. Use the example to guide you.

a. 43 + 44 =	double 43 + 1	43 + 43 + 1 = 87
b. 81 + 41 =		
c. 40 + 41 =		
d. 66 + 67 =		

Use doubles or near doubles
to solve the following.
Use the example to guide you.

a. Double 340
= 340 + 340
= Double 340
= 300 + 300 + 40 + 40
= 600 + 80
= 680

b. 340 + 341
= Double 340 + 1
= 300 + 300 + 40 + 40 + 1
= 600 + 80 + 1
= 681

c. 470 + 470

d. 461 + 462

Solve the following:

The Grade 2s have a collection of 360 marbles.

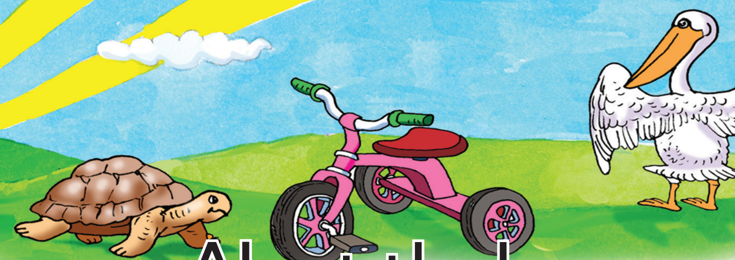
The Grade 3s have 216 fewer marbles than the Grade 2s.

How many marbles do the Grade 3s have?

Teacher:
Sign:
Date:

11 12 13 14 15 16 17 18 19 20

Date:



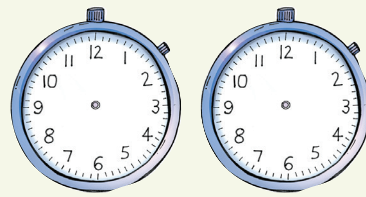
About the house

Baking day.

Aunt Phindi bakes bread in her oven.
Show the time on these watches.

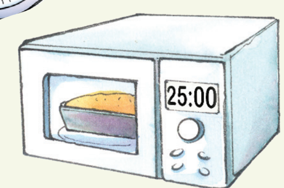
She puts the bread in at a quarter past 4.

She takes the bread out at five past five.



How long does the bread take to bake? ______________

Ann's mother uses a microwave oven. It is much quicker.



It is now 16:30. Look at the cooking time set on the microwave oven dial.

When will the bread be ready? ______________

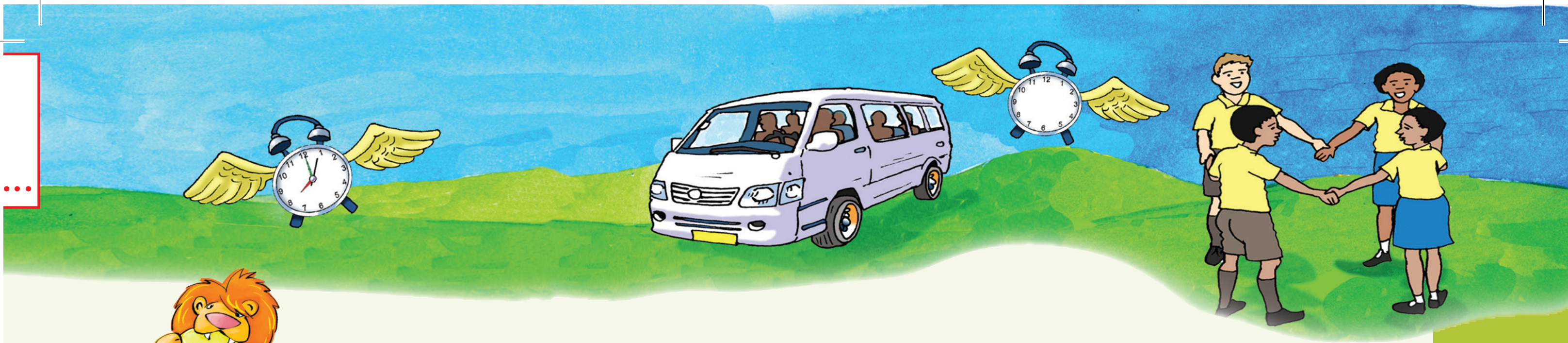
How much quicker is the microwave oven than the other oven?

______________ minutes.

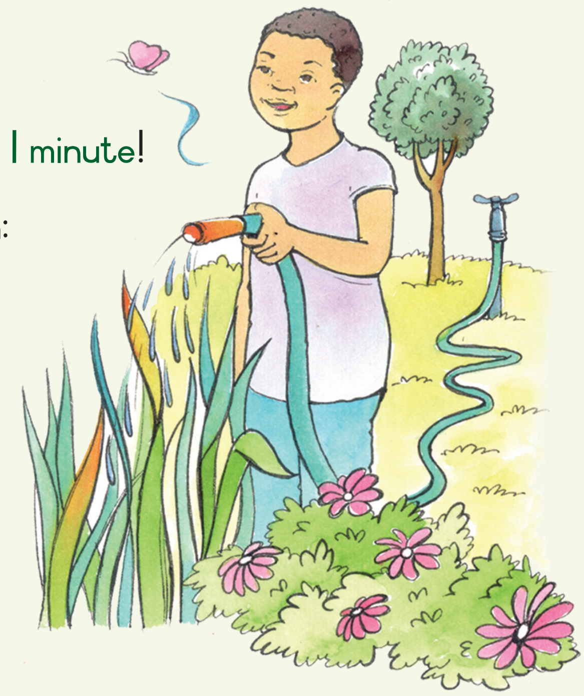
Morning jobs.

On Saturday morning Musa and Palesa help their mother in the house. How long does each task take?

	Start	End	How long?
Make breakfast	6:15	6:40	
Wash dishes	7:20	8:05	
Clean the kitchen	8:20	9:15	
Clean the bathroom	10:00	10:25	
Clean the bedrooms	11:30	12:15	



Water the garden.



A hosepipe can use up to 30 litres of water in 1 minute!

How many litres of water can a hosepipe use in:

2 minutes ________________ litres.

$2\frac{1}{2}$ minutes ________________ litres

5 minutes ________________ litres

10 minutes ________________ litres.

Cooking curry.

Babu's father makes and sells curry. In one week, he uses 750 ml of oil.

He writes down how much oil he uses each day.

Mon	Tues	Wed	Thurs	Friday	Sat	Sun
98 ml	122 ml	108 ml	117 ml	109 ml	135 ml	?

a. How many millilitres (ml) of oil does he use from Monday to Saturday?

_________ ml

b. How many millilitres (ml) of oil does he use on Sunday? _________ ml

c. One 750 millilitres (ml) bottle of oil costs R18,50.

How much do 4 bottles cost? _________.

Check!
Compare!
Correct!

11 12 13 14 15 16 17 18 19 20

107

Date:

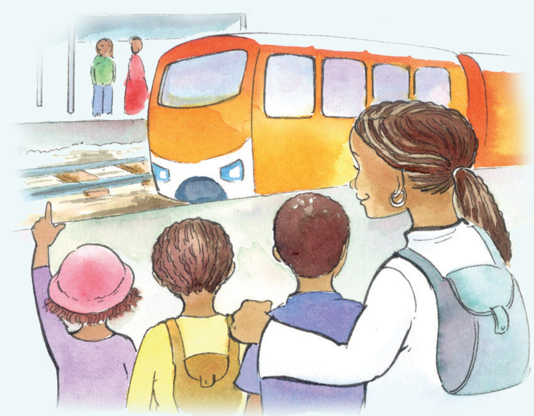
Working with money

1 Count coins and notes.

10 × 10c = R1	20 × 10c = R____	50 × 10c = R____
10 × 20c = R____	20 × 20c = R____	50 × 20c = R____
10 × 50c = R____	20 × 50c = R____	50 × 50c = R____
10 × R1 = R____	20 × R1 = R____	50 × R1 = R____
10 × R10 = R____	20 × R10 = R____	50 × R10 = R____

100 × 10c = R____	100 × 50c = R____	100 × R10 = R____
100 × 20c = R____	100 × R1 = R____	

2 A train journey.



Kgethi and her 3 children go on the train.

Adults and children pay the same.

Kgethi pays with these notes.

She gets R30 change.

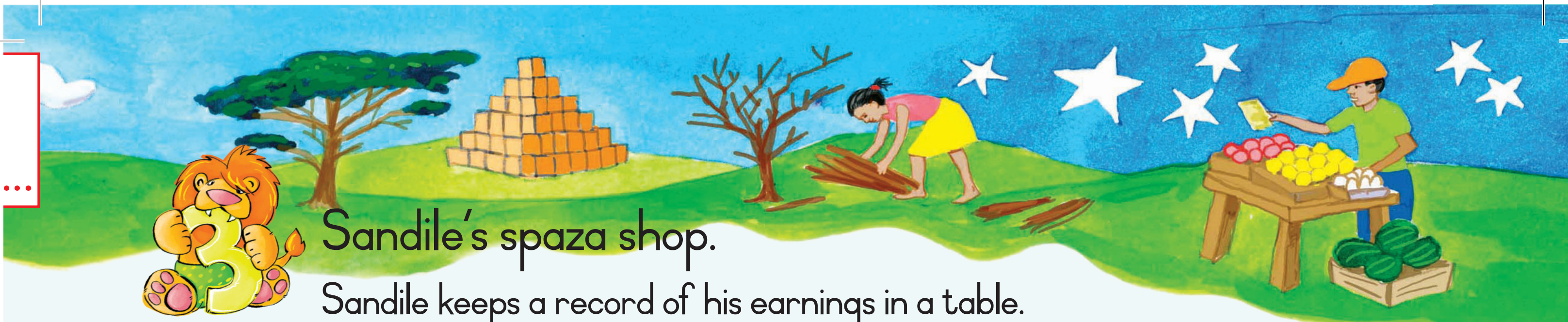
What is the price of 1 ticket? Tick (✓) the correct answer:

a. R90 ________ b. R32 ________ c. R80 ________ d. R45,50 ________

Check! Compare! Correct!

1 2 3 4 5 6 7 8 9 10

ENG MATHS G3 B2 9781431501472.indb 90 2014/06/20 7:56 AM



Sandile's spaza shop.

Sandile keeps a record of his earnings in a table.

First he estimates his daily income and then he calculates his daily income exactly. Income is the money we earn or receive. Help Sandile to complete his calculations in the table below. Write your answers in the table:

		Estimate	Total
Monday	R50 + R75 + R200 + R350 + R25		
Tuesday	R25 + R175 + R50 + R320 + R90		
Wednesday	R50 + R75 + R200 + R350 + R25		
Thursday	R120 + R55 + R180 + R245 + R25		
Friday	R60 + R150 + R140 + R200 + R125		
Saturday	R50 + R75 + R200 + R350 + R25		
Sunday			

Work out the change.

To work out your change you can add on from what the things cost to how much money in notes you hand over.

Example:

Palesa buys food for R87,50
She pays with a R200 note.
What is her change?

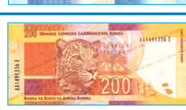
$$R87{,}50 \xrightarrow{+50c} R88 \xrightarrow{+R2} R90 \xrightarrow{+R10} R100 \xrightarrow{+R100} R200$$

50c + R2 + R10 + R100 = R112,50
change

Use number lines to help you work out the change.

Cost: R229,40
Pay with:

Cost: R305,60
Pay with:



11 12 13 14 15 16 17 18 19 20

ENG MATHS G3 B2 9781431501472.indb 91 2014/06/20 7:56 AM

108

Date: ....

More addition and subtraction to 999

Let us solve the problem.

Gugu collected 234 stickers.
Mandla gave her 501 more stickers.
How many stickers does she have now?

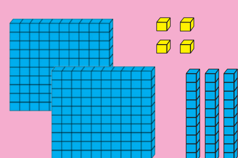
What is the question?
How many stickers does she have now?

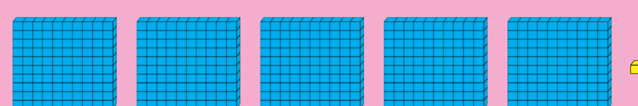
What is the key word? more

What are the numbers? 234 and 501

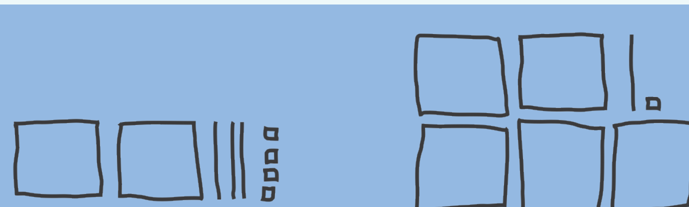
Let us show this with our base ten blocks.

This is what Lisa did to solve Gugu's problem.





This is what Aakar did.
He made a drawing.



How is Lisa's placing of her base ten blocks similar to Aakar's drawing.

Use the number in the problem to solve it below using two methods you have learnt so far.

Method 1	Method 2

ENG MATHS G3 B2 9781431501472.indb 92 2014/06/20 7:56 AM

Morning jobs.

Thembi collects items for the schools recycling projects. She collected 624 plastic bottles and 268 tin cans. How many items has she collected?

What is the question? ____________________

What are the numbers?	What is the key word? Tick the correct answer. The key word tells us to: Add ☐ Subtract ☐
Make a drawing.	Use your own method to solve the problem.

The shop had 900 packets of sugar. After selling some packets, they had 659 packets of sugar left. How many packets did they sell?

What is the question? ____________________

What are the numbers?	What is the key word? Tick the correct answer. The key word tells us to: Add ☐ Subtract ☐
Make a drawing.	Use your own method to solve the problem.

Teacher:
Sign:
Date:

11 12 13 14 15 16 17 18 19 20

Date:

109

Addition and subtraction to 999 again

Term 4

Look at the diagrams and describe it.

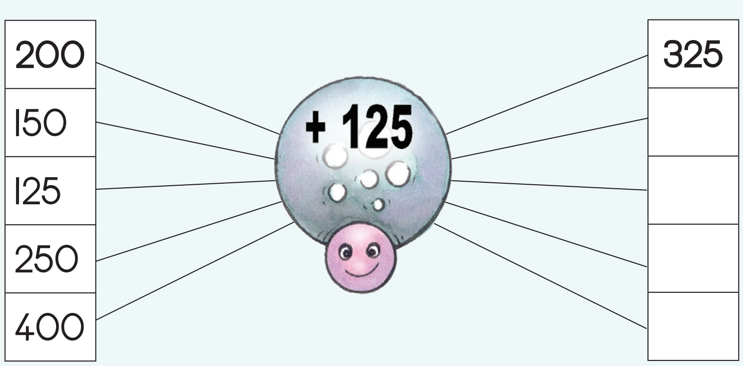
Complete the following:

a. 223 + 223 = ____________	e. 117 + 117 = ____________
b. 160 + 160 = ____________	f. 450 + 450 = ____________
c. 115 + 115 = ____________	g. 112 + ________ = 224
d. 315 + 315 = ____________	h. 116 + ________ = 232

Write the numbers

a. 12 more than 523 is ____________	e. 537 less 29 is ____________
b. 15 less than 540 is ____________	f. Half of 300 is ____________
c. 20 more than 576 is ____________	g. Double 420 is ____________
d. 60 less than 590 is ____________	h. Half of 600 is ____________

Add 125



ENG MATHS G3 B2 9781431501472.indb 94 2014/06/20 7:56 AM

What makes a 1 000?

a.	200 + 150 +50 + ☐ = 1 000	e.	25 + ☐ + 900 = 1 000
b.	1 000 = 560 + ☐ + 400	f.	☐ + 700 + 50 = 1 000
c.	670 + ☐ = 1 000	g.	1 000 = 420 + ☐ + 500
d.	910 + 40 + ☐ = 1 000	h.	☐ + 30 + 900 = 1 000

Find the + and – number families

Example: 125 + 600 = 725   725 – 125 = 600   725 – 600 = 125

123 + 77 = ☐	☐ – 77 = 123	☐ – 123 = 77
650 + ☐ = 800	800 – 650 = ☐	☐ + 650 = 800
1 000 – 250 = ☐	1 000 – ☐ = 250	250 + ☐ = 1 000
56 + ☐ = 300	300 – ☐ = 56	☐ + 56 = ☐
820 + ☐ = 1 000	1 000 – ☐ = 820	1 000 – 820 = ☐

Check!
Compare!
Correct!

Add and take away tens and hundreds

a. Tens and hundreds

78 + 10 =	149 + 10 =	456 + 100 =	987 + 10 =
636 + 100 =	801 + 100 =	727 + 100 =	612 + 10 =
456 – 10 =	749 – 100 =	829 – 100 =	987 – 10 =
875 + 10 =	709 – 100 =	815 + 10 =	903 – 100 =

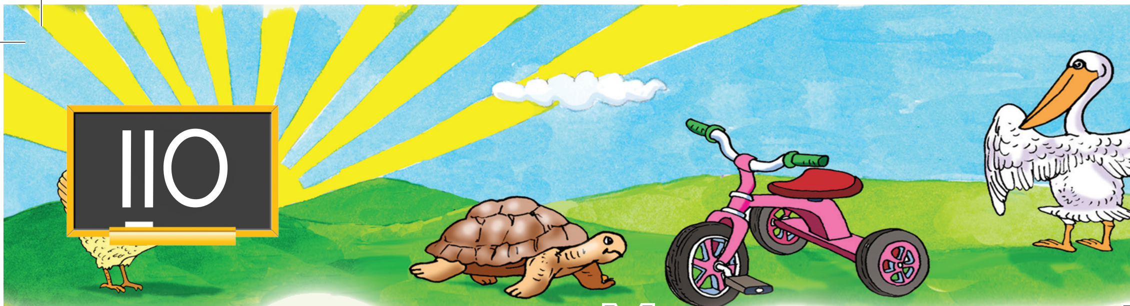
b. Whole tens (Multiples of 10)

150 – 30 =	190 – 60 =	175 – 50 =	990 – 80 =
210 + 90 =	335 + 60 =	660 + 50 =	812 + 60 =
256 – 50 =	320 – 30 =	785 – 60 =	999 – 90 =
567 + 37 =	671 + 90 =	832 + 80 =	928 + 80 =

Solve the following:

925 + 53 = ☐   571 + 202 = ☐   786 + 75 = ☐   903 + 95 = ☐

11 12 13 14 15 16 17 18 19 20



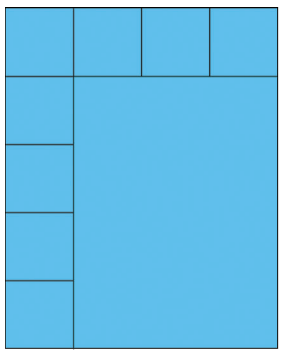
Date: ....

Measurement puzzles

Find the area

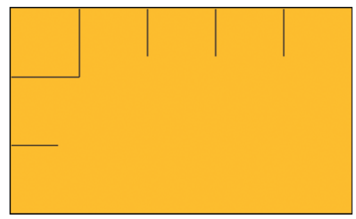
How many squares this size ■ do you need to completely cover each figure? Use your own way to work it out. You can draw squares on the pictures to help you work it out.

a.



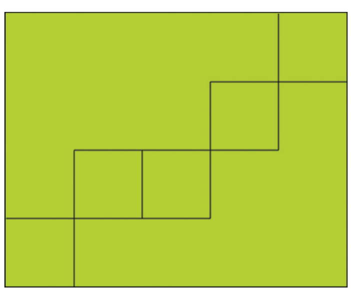
____

b.



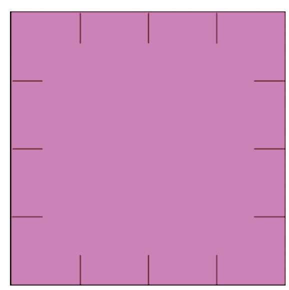
____

c.



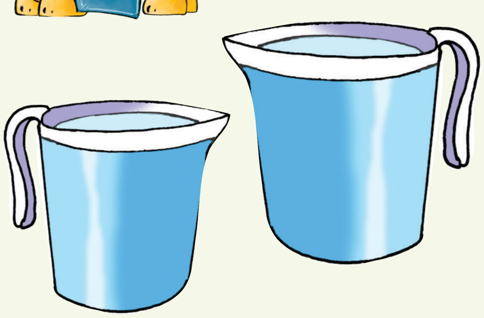
____

d.



____

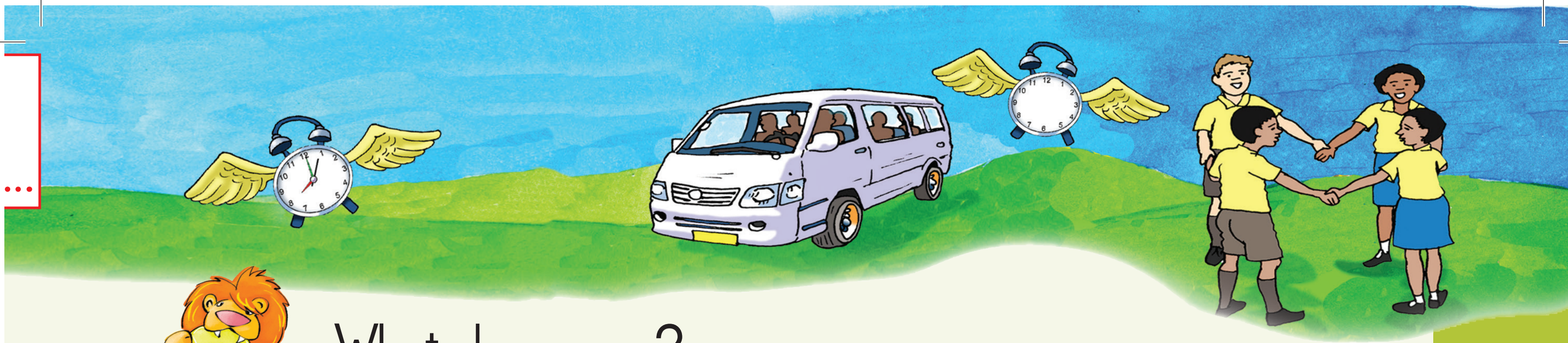
Solve the riddle



You want to measure out exactly 4 litres of water. You have only two containers: one holds 3 litres and the other 5 litres. How do you do it?

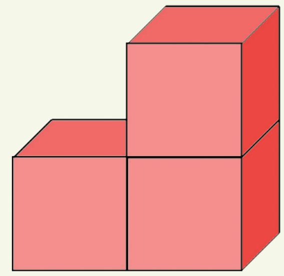
Clue: there are at least two possible ways.

ENG MATHS G3 B2 9781431501472.indb 96 2014/06/20 7:56 AM



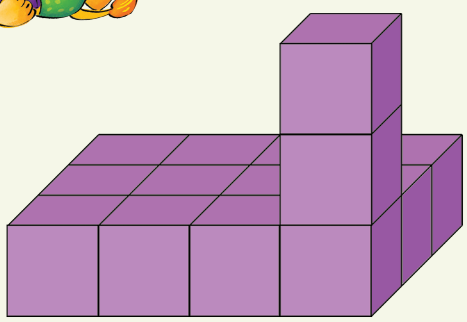
3 What do you see?

Three blocks are glued together as in this picture.



If you pick up the joined together blocks how many squares do you count on the outside? ________

4 Count the cubes



How many cubes make up this shape?

____

5 Challenge: a time riddle

Clues

You have two sand timers.

One measures exactly 7 minutes and the other measures exactly 11 minutes.

How can you use the timers to find out when exactly 15 minutes has passed?

____

____

____

Check! Compare! Correct!

Teacher:
Sign:
Date:

11 12 13 14 15 16 17 18 19 20

Date: ....

Term 4

Number patterns: tens up to 900

Let us count in tens from 810 to 900.

801	802	803	804	805	806	807	808	809	810
811	812	813	814	815	816	817	818	819	820
821	822	823	824	825	826	827	828	829	830
831	832	833	834	835	836	837	838	839	840
841	842	843	844	845	846	847	848	849	850
851	852	853	854	855	856	857	858	859	860
861	862	863	864	865	866	867	868	869	870
871	872	873	874	875	876	877	878	879	880
881	882	883	884	885	886	887	888	889	890
891	892	893	894	895	896	897	898	899	900

What patterns do the circled numbers show us?

Circled in red: Counting in _____.	Write down the pattern: ____________________
Circled in green: Counting in _____.	Write down the pattern: ____________________

Calculate.

a. 874 + 10 + 10 + 10 = _____	b. 858 – 10 – 10 – 10 – 10= _____
c. 845 + 10 + 10 = _____	d. 858 – 10 – 10 – 10 = _____
e. 836 + 10 = _____	f. 866 – 10 – 10 = _____
g. 892 + 10 + 10 + 10 = _____	h. 87 – 10 – 10 – 10 = _____
i. 880 + 10 + 10 = _____	j. 855 – 10 = _____

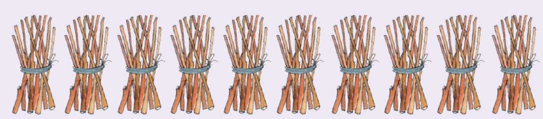
1 2 3 4 5 6 7 8 9 10

3 How many sticks?

There are ten sticks in a bundle.

1	=	_____ sticks		10	=	_____ sticks
2	=	_____ sticks		20	=	_____ sticks
3	=	_____ sticks		30	=	_____ sticks
4	=	_____ sticks		40	=	_____ sticks
5	=	_____ sticks		50	=	_____ sticks
6	=	_____ sticks		60	=	_____ sticks
7	=	_____ sticks		70	=	_____ sticks
8	=	_____ sticks		80	=	_____ sticks
9	=	_____ sticks		90	=	_____ sticks
10	=	_____ sticks		100	=	_____ sticks

4 Rows of sticks.



There are ten bundles of sticks in a row = 100 sticks

1 row of 10 bundles = 100 sticks	$10 \times 10 = 100$
2 rows of 10 bundles = _____ sticks	$20 \times 10 =$ _____
4 rows of 10 bundles = _____ sticks	$40 \times 10 =$ _____
10 rows of 10 bundles = _____ sticks	$100 \times 10 =$ _____

5 How many bundles?

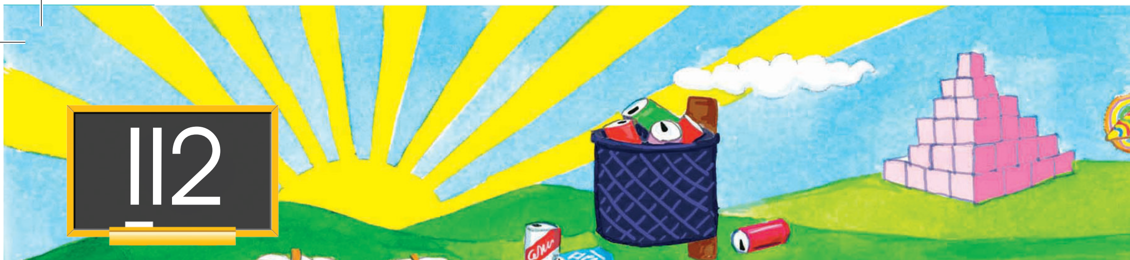
700 sticks make _____ bundles.

900 sticks make _____ bundles.

1 000 sticks make _____ bundles.

Teacher:
Sign:
Date:

11 12 13 14 15 16 17 18 19 20



112

Date: ....

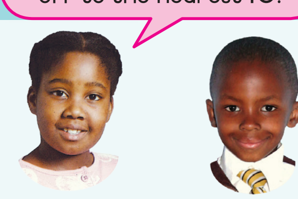
Round off to the nearest 10

Term 4

We did some rounding off in a previous worksheet. Look at this number line and explain to your friend how you will round off to the nearest ten.

0	1	2	3	4	5	6	7	8	9	10

Remember you should look at the units when rounding off to the nearest 10.



Round off to the nearest 10.

114 rounded off is? ______   117 rounded off is? ______

110	111	112	113	114	115	116	117	118	119	120

159 rounded off is? ______   151 rounded off is? ______

150	151	152	153	154	155	156	157	158	159	160

Round off to the nearest 10.
Draw your own number line.

195

945

1 2 3 4 5 6 7 8 9 10

ENG MATHS G3 B2 9781431501472.indb 100 2014/06/20 7:56 AM

3 Round of to the nearest 10.

Before you round off:

a. write down between which two tens the number to be rounded off is.

b. show with an arrow more or less where this number to be rounded off will be on the number line.

a. 128 rounded off to the nearest ten is 130

120 130

b. 877

c. 901

d. 566

e. 999

4 Round the following numbers off to the nearest 10.

a. 161 ☐ b. 583 ☐ c. 415 ☐ d. 848 ☐ e. 612 ☐

f. 230 ☐ g. 327 ☐ h. 989 ☐ i. 534 ☐ j. 748 ☐

5 How many R10 notes do I need?

Mbali and her 8 friends are going to the school's fun day. The fun day costs R4 per person. Mbali saved money and offered to pay for her friends. She went to the ATM to withdraw money. The ATM only gives notes. How many R10 notes does she need? ☐

Teacher:
Sign:
Date:

11 12 13 14 15 16 17 18 19 20

113

Date: ....

Term 4

Multiplication and division: fives up to 100

1. Complete the flow diagram.

input	rule	output
1	× 5	
3		
5		
7		
9		

input	rule	output
2	× 4	
4		
6		
8		
10		

2. Complete the table below:

×	1	2	3	4	5	6	7	8	9	10
5										

3. Calculate:

12 × 5 = (10 + 2) × 5 = 50 + 10 = 60	11 × 5
13 × 5 = (10 + 3) × 5 = 50 + 15 = 50 + 10 + 5 = 65	13 × 5

1 2 3 4 5 6 7 8 9 10

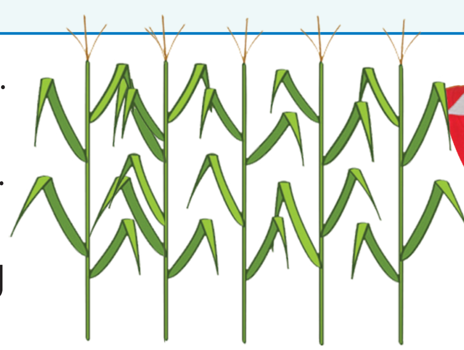
$45 \div 5$ $= (40 + 5) \div 5$ $= (45 \div 5) + (5 \div 5)$ $= 8 + 1$ $= 9$	$75 \div 5$
$48 \div 5$ $= (40 + 8) \div 5$ $= (40 \div 5) + (8 \div 5)$ $= 8 + 1 \text{ rem } 3$ $= 9 \text{ rem } 3$	$13 \div 5$

4 Solve the following problems:

A vegetable garden has 14 rows of plants.

Every row has the same number of plants.

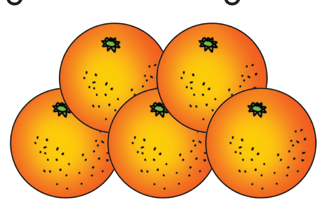
If there is a total of 70 plants, how many plants are there in each row?



David sells bags of oranges. He puts five oranges in each bag.

He has 85 oranges.

How many bags can he fill?



Teacher:
Sign:
Date:

11 12 13 14 15 16 17 18 19 20

ENG MATHS G3 B2 9781431501472.indb 103 2014/06/20 7:56 AM

114

Date:

Term 4

Number patterns: fives up to 1 000

Let us count in fives from 805 to 900.

801	802	803	804	805	806	807	808	809	810
811	812	813	814	815	816	817	818	819	820
821	822	823	824	825	826	827	828	829	830
831	832	833	834	835	836	837	838	839	840
841	842	843	844	845	846	847	848	849	850
851	852	853	854	855	856	857	858	859	860
861	862	863	864	865	866	867	868	869	870
871	872	873	874	875	876	877	878	879	880
881	882	883	884	885	886	887	888	889	890
891	892	893	894	895	896	897	898	899	900

1 What patterns do the circled and shaded numbers show us?

Circled in blue:	Counting in ______________.
Write down the pattern:	
Circled in purple:	Counting in ______________.
Write down the pattern:	

2 Calculate.

a. 875 + 5 + 5 + 5 = ____	b. 850 – 5 – 5 – 5 = ____	c. 845 + 5 + 5 = ____
d. 830 – 5 – 5 – 5 = ____	e. 886 + 5 = ____	f. 846 – 5 – 5 = ____
g. 802 + 5 + 5 + 5 = ____	h. 801 – 5 = ____	i. 853 – 5 – 5 – 5 = ____

Number board 901 to 1 000

901		903	904	905	906		908	909	910
911		913	914	915	916		918	919	920
921		923	924	925	926		928	929	930
931		933	934	935	936		938	939	940
941		943	944	945	946		948	949	950
951		953	954	955	956		958	959	960
961		963	964	965	966		968	969	990
971		973	974	975	976		978	979	990
981		983	984	985	986		988	989	990
991		993	994	995	996		998	999	1 000

Fill in the missing numbers.

What is the difference between the green and purple numbers in the same row?

Complete the patterns.

Do you notice the pattern?	Describe it.
963, 968, 973, 978, 983, ______	
944, 949, 954, 959, 964, ______	
921, 926, 931, 936, 941, ______	
956, 951, 946, 941, 936, ______	
982, 987, 992, 997, ______	
927, 922, 917, 912, 907, ______	

11 12 13 14 15 16 17 18 19 20

Eng NUM G3 B2 113-128 TWISTED.indd 105
2014/07/02 1:44 PM

Eng NUM G3 B2 113-128 TWISTED.indd 106

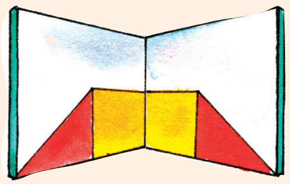
Term 4

115

Date:

More about symmetry

1 Mirror, mirror.



Play with a partner using one of the sets of tiling puzzles (with 14 pieces) from Cut-out 10.

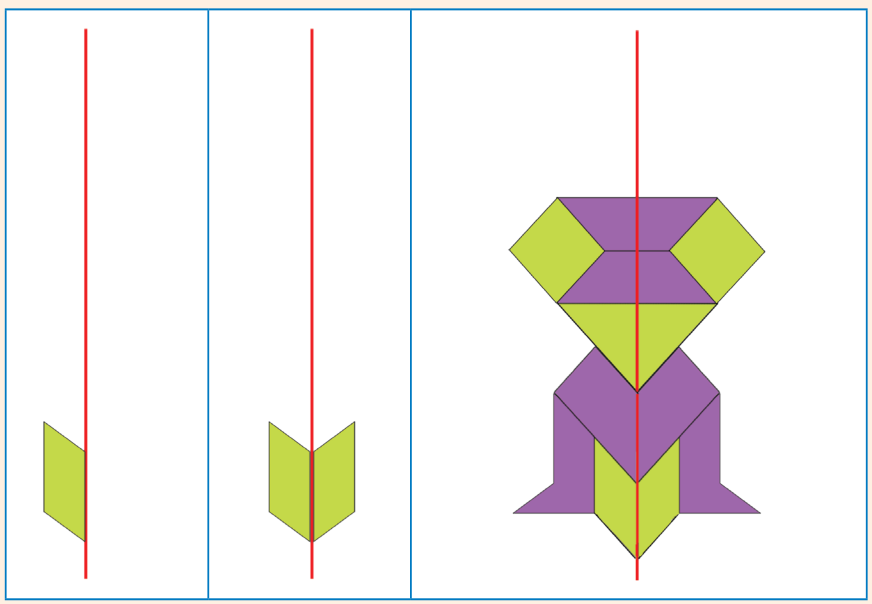
Each player has half of the pieces (7 pieces) of tiling puzzle shapes. No piece must be the same.

Draw a line along the middle of a piece of paper. This will be the "line of reflection".

The first player places one of his or her pieces next to the line.

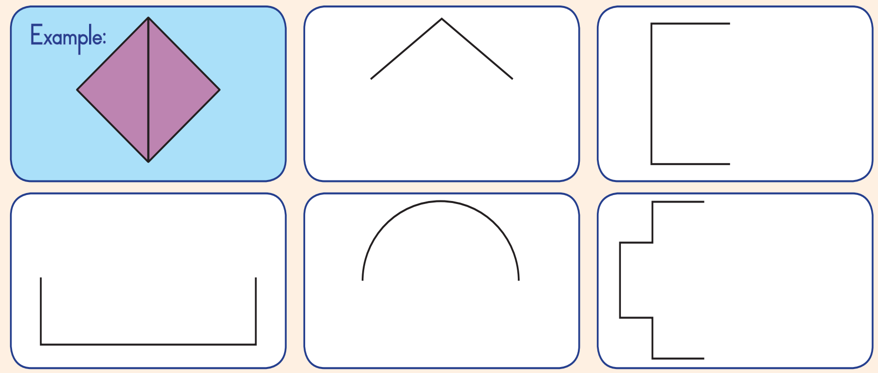
The second player now puts its reflection on the other side of the line. It must touch the line or one of the already placed shapes.

Continue until all the pieces are used.

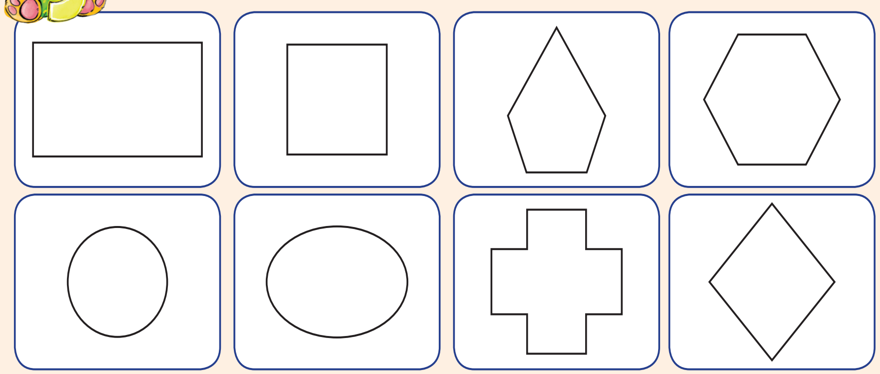


2 Draw the other side of the shape.

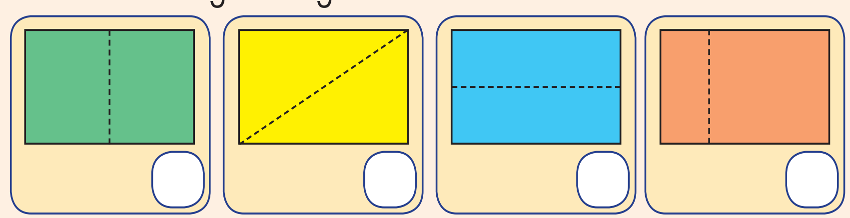
Show the line of symmetry.



3 Draw the lines of symmetry on the following:



4 Tick the shapes that have the correct lines of symmetry.



Teacher:
Sign:
Date:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

2014/07/02 1:44 PM

Eng NUM G3 B2 113-128 TWISTED.indd 107

Term 4

116

Date:

Number patterns: twos up to 900

Let us count in twos from 802 to 900.

801	802	803	804	805	806	807	808	809	810
811	812	813	814	815	816	817	818	819	820
821	822	823	824	825	826	827	828	829	830
831	832	833	834	835	836	837	838	839	840
841	842	843	844	845	846	847	848	849	850
851	852	853	854	855	856	857	858	859	860
861	862	863	864	865	866	867	868	869	870
871	872	873	874	875	876	877	878	879	880
881	882	883	884	885	886	887	888	889	890
891	892	893	894	895	896	897	898	899	900

1 What patterns do the circled and shaded numbers show us?

Circled in blue:	Counting in __________.
Write down the pattern:	
Coloured in green:	Counting in __________.
Write down the pattern:	

2 Calculate.

a. $872 + 2 + 2 + 2 =$ ___	b. $820 - 2 - 2 - 2 =$ ___	c. $844 + 2 + 2 =$ ___
d. $832 - 2 - 2 - 2 - 2 =$ ___	e. $883 + 2 =$ ___	f. $842 - 2 - 2 =$ ___
g. $801 + 2 + 2 + 2 + 2 =$ ___	h. $815 - 2 =$ ___	i. $846 - 2 - 2 - 2 =$ ___

Date:

3 Odds and evens.

a. Draw a (x) next to the odd numbers and a (✓) next to the even numbers.

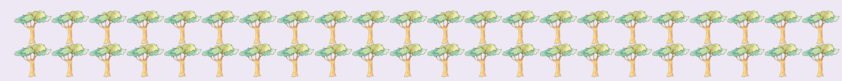
914 923 916 907 929 912 911 915
908 917 925 931 930 910 909 922 933

b. Answer even or odd.

Add two odd numbers. You get an ________ number.
Add two even numbers. You get an ________ number.
You add three odd numbers. You get an ________ number.

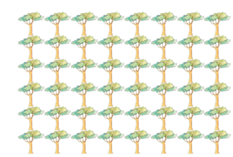
4 Planting trees.

This is one way to plant out 48 trees in equal rows.

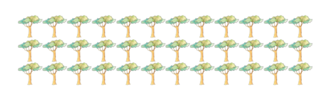


We can write: $2 \times 24 = 48$ (2 rows of 24 trees = 48) or $48 \div 2 = 24$ (48 trees put out in 2 equal rows gives 24 trees in a row). Count the rows and the trees in each picture below. Write a $\times$ and a $\div$ number sentence to match.

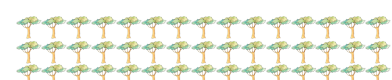
a. ___ $\times$ ___ $=$
___ $\div$ ___ $=$



b. ___ $\times$ ___ $=$
___ $\div$ ___ $=$



c. ___ $\times$ ___ $=$
___ $\div$ ___ $=$



d. Find another way to plant 48 trees in rows.
___ $\times$ ___ $=$
___ $\div$ ___ $=$

e. Find another way to plant 48 trees in rows.
___ $\times$ ___ $=$
___ $\div$ ___ $=$

Teacher:
Sign:
Date:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

2014/07/02 1:44 PM

117

Date:

Multiplication and division: twos up to 100

1. Complete the flow diagram.

input	rule	output
1	× 2	
3		
5		
7		
9		

input	rule	output
2	× 2	
4		
6		
8		
10		

2. Complete the table below:

×	1	2	3	4	5	6	7	8	9	10
2										

3. Calculate:

12 × 2 = (10 + 2) × 2 = 20 + 4 = 24	11 × 2
18 × 2 = (10 + 8) × 2 = 20 + 16 = 20 + 10 + 6 = 36	22 × 2

46 ÷ 2 = (40 + 6) ÷ 2 = (40 ÷ 2) + (6 ÷ 2) = 20 + 3 = 23	74 ÷ 2
47 ÷ 2 = (40 + 7) ÷ 2 = (40 ÷ 2) + (7 ÷ 2) = 20 + 3 rem 1 = 23 rem 1	75 ÷ 2

4. Solve the following problems:

A vegetable garden has 32 rows of plants.
Each row has 2 plants.
How many plants are there in the garden?

A vegetable garden has 40 rows of plants.
Every row has the same number of plants.
If there are a total of 80 plants, how many plants are there in each row?

Teacher:
Sign:
Date:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

118

Multiplication and division: threes up to 100

Date:

1. Complete the flow diagram.

input	rule	output
1	$\times 3$	
3		
5		
7		
9		

input	rule	output
2	$\times 3$	
4		
6		
8		
10		

2. Complete the table below:

×	1	2	3	4	5	6	7	8	9	10
3										

3. Calculate:

12×3 $= (10 + 2) \times 3$ $= 30 + 6$ $= 36$	11×3
17×3 $= (10 + 7) \times 3$ $= 30 + 21$ $= 30 + 20 + 1$ $= 51$	19×3

$63 \div 3$ $= (60 + 3) \div 3$ $= (60 \div 3) + (3 \div 3)$ $= 20 + 1$ $= 21$	$96 \div 3$
$65 \div 3$ $= (60 + 5) \div 3$ $= (60 \div 3) + (5 \div 3)$ $= 20 + 1$ rem 2 $= 21$ rem 2	$98 \div 3$

4. Solve the following problems:

Marlene has 30 sweets.

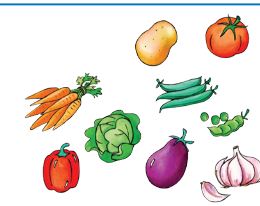
This is ten times more than what Jacob has.

How many sweets does Jacob have?

A vegetable garden has 29 rows of plants.

Each row has 3 plants.

How many plants are there in the garden?



Teacher:
Sign:
Date:

119

Date:

Number patterns: threes up to 1 000

Let us count in threes from 803 to 899.

801	802	803	804	805	806	807	808	809	810
811	812	813	814	815	816	817	818	819	820
821	822	823	824	825	826	827	828	829	830
831	832	833	834	835	836	837	838	839	840
841	842	843	844	845	846	847	848	849	850
851	852	853	854	855	856	857	858	859	860
861	862	863	864	865	866	867	868	869	870
871	872	873	874	875	876	877	878	879	880
881	882	883	884	885	886	887	888	889	890
891	892	893	894	895	896	897	898	899	900

1. What patterns do the circled and shaded numbers show us?

Circled in orange:	Counting in ______.
Write down the pattern:	
Circled in green:	Counting in ______.
Write down the pattern:	

2. Calculate.

a. $873 + 3 + 3 + 3 =$ ___	b. $824 - 3 - 3 - 3 =$ ___	c. $841 + 3 + 3 =$ ___
d. $837 - 3 - 3 - 3 - 3 =$ ___	e. $889 + 3 =$ ___	f. $846 - 3 - 3 =$ ___
g. $802 + 3 + 3 + 2 =$ ___	h. $819 - 3 =$ ___	i. $880 - 3 - 3 - 3 =$ ___

Number board 901 to 1 000

901		903	904		906	907		909	910
	912	913		915	916		918	919	
921	922		924	925		927	928		930
931		933	934		936	937		939	940
	942	943		945	946		948	949	
951	952		954	955		957	958		960
961		963	964		966	967		969	990
	972	973		975	976		978	979	
981	982		984	985		987	988		990
991		993	994		996	997		999	1 000

3. Fill in the missing numbers.

Colour the missing number blocks green. Colour the white blocks with numbers in them red. What pattern do you see?

4. Complete the patterns.

a. Add 4 threes to 981.	984, 987, 990, 993
b. Add 5 threes to 973.	______
c. Subtract 4 threes from 975.	______
d. Subtract 3 threes from 947.	______
e. Add 2 threes to 932.	______

Teacher:
Sign:
Date:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

120

Multiplication and division: fours up to 100

Date:

1. Complete the flow diagram.

input	rule	output
1	× 4	
3		
5		
7		
9		

input	rule	output
2	× 4	
4		
6		
8		
10		

2. Complete the table below:

×	1	2	3	4	5	6	7	8	9	10
4										

3. Calculate:

12×4
$= (10 + 2) \times 4$
$= 40 + 8$
$= 48$

11×4

13×4
$= (10 + 3) \times 4$
$= 30 + 12$
$= 30 + 10 + 2$
$= 52$

15×4

$48 \div 6$
$= (40 + 8) \div 4$
$= (40 \div 4) + (8 \div 4)$
$= 10 + 2$
$= 12$

$64 \div 4$

$45 \div 4$
$= (40 + 5) \div 4$
$= (40 \div 4) + (5 \div 4)$
$= 10 + 1$ rem 1
$= 11$ rem 1

$49 \div 4$

4. Solve the following problems:

Tony has 36 sweets.
He eats 4 sweets every day.
For how many days can he eat sweets?

David sells packets of oranges. He puts four oranges in each packet.
He has 88 oranges.
How many packets can he fill?

Teacher:
Sign:
Date:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

121

Date:

Number patterns: fours up to 1 000

Let us count in fours from 804 to 900.

801	802	803	804	805	806	807	808	809	810
811	812	813	814	815	816	817	818	819	820
821	822	823	824	825	826	827	828	829	830
831	832	833	834	835	836	837	838	839	840
841	842	843	844	845	846	847	848	849	850
851	852	853	854	855	856	857	858	859	860
861	862	863	864	865	866	867	868	869	870
871	872	873	874	875	876	877	878	879	880
881	882	883	884	885	886	887	888	889	890
891	892	893	894	895	896	897	898	899	900

1 What patterns do the circled and shaded numbers show us?

Circled in green:	Counting in ____________.
Write down the pattern:	
Circled in purple:	Counting in ____________.
Write down the pattern:	

2

a. 872 + 4 + 4 + 4 = ____	b. 821 − 4 − 4 − 4 = ____	c. 840 + 4 + 4 = ____
d. 836 − 4 − 4 − 4 − 4 = ____	e. 885 + 4 = ____	f. 845 − 4 − 4 = ____
g. 803 + 4 + 4 + 4 = ____	h. 813 − 4 = ____	i. 847 − 3 − 3 − 3 = ____

Number board 901 to 1 000

901		903	904	905		907	908	909	
911	912	913		915	916	917		919	920
921		923	924	925		927	928	927	
931	932	933		935	936	937		939	940
941		943	944	945		947	948	949	
951	952	953		955	956	957		959	960
961		963	964	965		967	968	969	
971	972	973		975	976	977		979	980
981	982	983	984	985		987	988	989	
991	992	993		995	996	997		999	1 000

3 Fill in the missing numbers.

Colour the missing number blocks green. Colour the white blocks with numbers in them red. What pattern do you see?

4 Complete the patterns.

a. Add 4 fours to 980.	984, 988, 992, 996
b. Add 5 fours to 971.	____________
c. Subtract 4 fours from 963.	____________
d. Subtract 3 fours from 927.	____________
e. Add 2 fours to 938.	____________

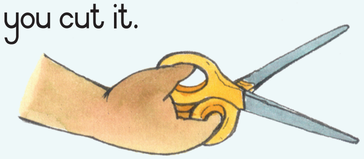
Teacher:
Sign:
Date:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Date:

Equal parts of a whole

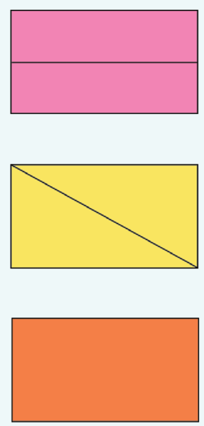
1 One half, any way you cut it.



Cut out some rectangles from coloured paper (from Cut-out 11).

Explore different ways to make one half.

1. Fold a paper rectangle in half lengthwise. Cut the paper in half on the fold. Both pieces are exactly the same size. Each piece is one half ($\frac{1}{2}$) of the original rectangle.
2. Fold another paper rectangle in half on the diagonal. Cut the paper in half on the fold. Both pieces are exactly the same size. Each piece is one half of the original piece of paper.
3. What is another way to divide the paper into two equal parts? Explore with paper and scissors, and then sketch in the line where you fold and cut.



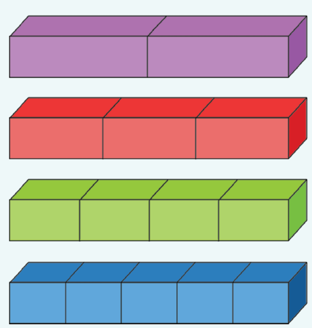
2 More equal parts of a whole.

When we divide something into 2 equal parts we call the parts halves.

When we divide something into 3 equal parts we call the parts thirds.

When we divide something into 4 equal parts we call the parts fourths.

When we divide something into 5 equal parts we call the parts fifths.



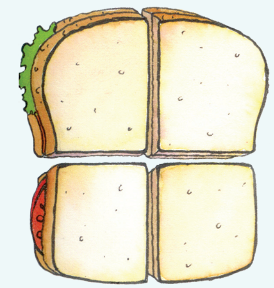
3 Sandwiches for lunch.

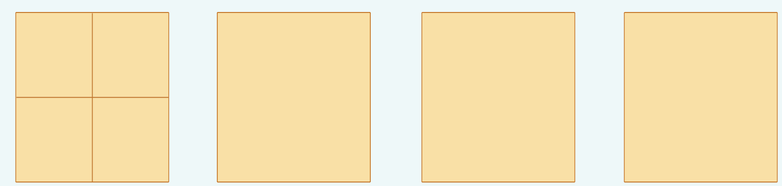
Thabo and his 3 friends make lots of sandwiches for lunch.

They cut them up into fourths or quarters.

This means they cut them into 4 equal pieces.

Here is one way. Show 3 other ways they can do this.

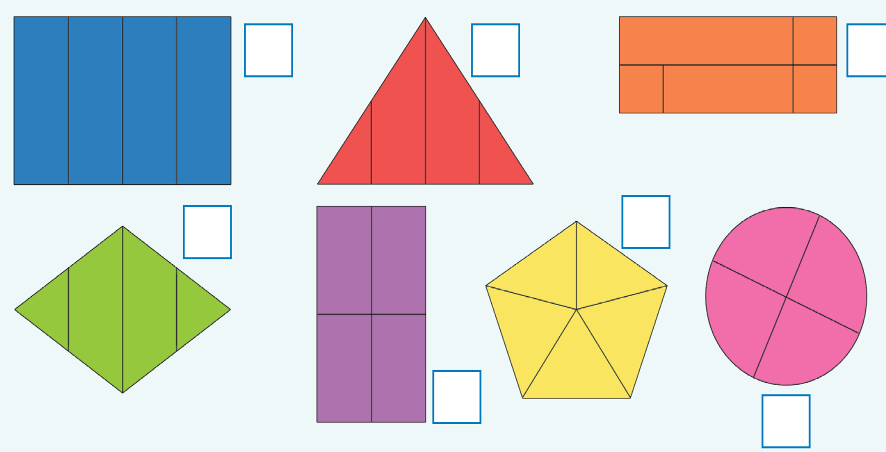




4 Dividing into fourths.

When we cut something into quarters ($\frac{1}{4}$s), we divide it into 4 equal parts.

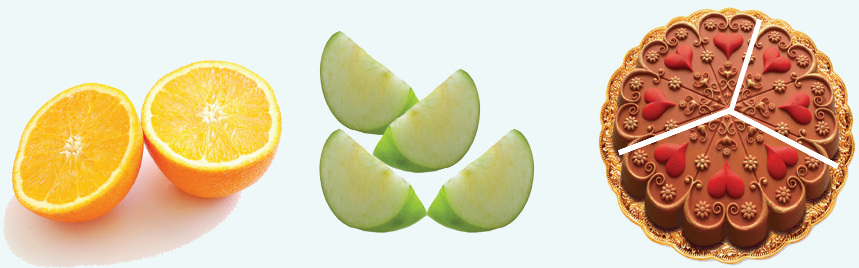
Tick (✓) the pictures below that show quarters or fourths.



Date:

Fraction problems

Discuss the fractions with your friends.



Solve the following problems by answering the questions and making drawings.

a. The netball coach gives half an orange to each player. There are 14 players.

How many oranges does she need? ____________

What is the question? ____________

What are the numbers or fractions in the problem? ____________

What is the key word? ____________

The key word is the word that will help me to choose the correct operation.

Draw a picture.

What is the answer? ____________

b. My mother gave me and my eleven friends each a quarter of an apple.

How many apples does she need? ____________

What are the numbers or fractions in the problem? ____________

What is the key word? ____________

Draw a picture.

What is the answer? ____________

c. At the school fete they sold cakes cut up into three pieces each.

They sold pieces of cake to 24 people.

How many cakes did they sell? ____________

What are the numbers or fractions in the problem? ____________

What is the key word? ____________

Draw a picture.

What is the answer? ____________

Teacher:
Sign:
Date:

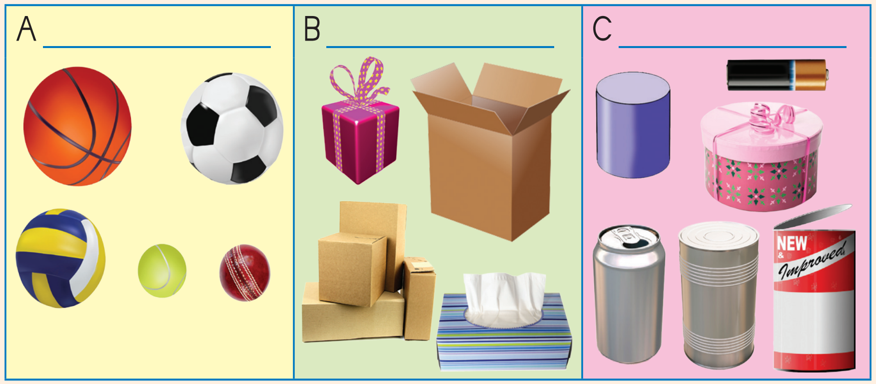
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Date: ....

3-D objects

1 Look at the pictures.

Which group shows balls, cylinders and boxes.



2 Find two pictures of each and paste them below.

3 Underline the correct answer.

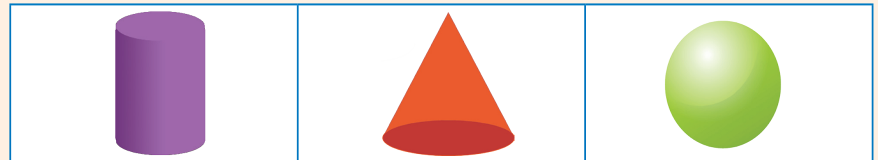
a. A tomato is ball/box/cylinder-shaped.

b. A drinking glass is ball/box/cylinder-shaped.

c. A book is ball/box/cylinder-shaped.

4 Straight and curved.

Some solid objects only have flat surfaces. Others have curved surfaces.



A **cylinder** has two flat faces and one curved face.	A **cone** has one flat face and one curved face.	A **sphere** has curves only, in every direction.

5 Rolling

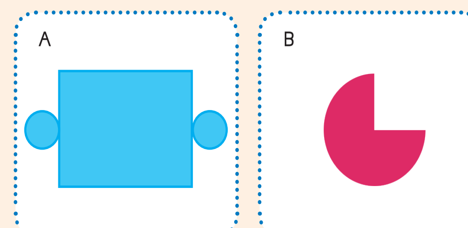
Think about how a cylinder, cone, or sphere can roll.

Answer these questions about the 3 objects:

a. Which one cannot roll very far?	
b. Which one can roll only in a straight line?	
c. Which one can roll in any direction?	

6 What is a net?

A flat shape that can fold up to make a solid figure is called a net.



Write the letter of the net that can fold up to make a cone. ________

Write the letter of the net that can fold up to make a cylinder. ________

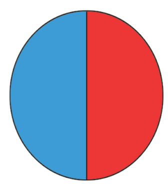
Teacher:
Sign:
Date:

Date:

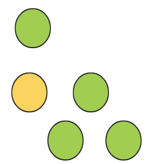
More fractions

1 Name the fractions.

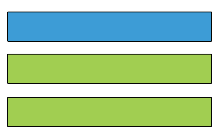
Write the fraction for the pictures below.



a. What fraction is red? ______



b. What fraction is green? ______



c. What fraction is blue? ______

d. What fraction is yellow? ______

2 Answer the questions.

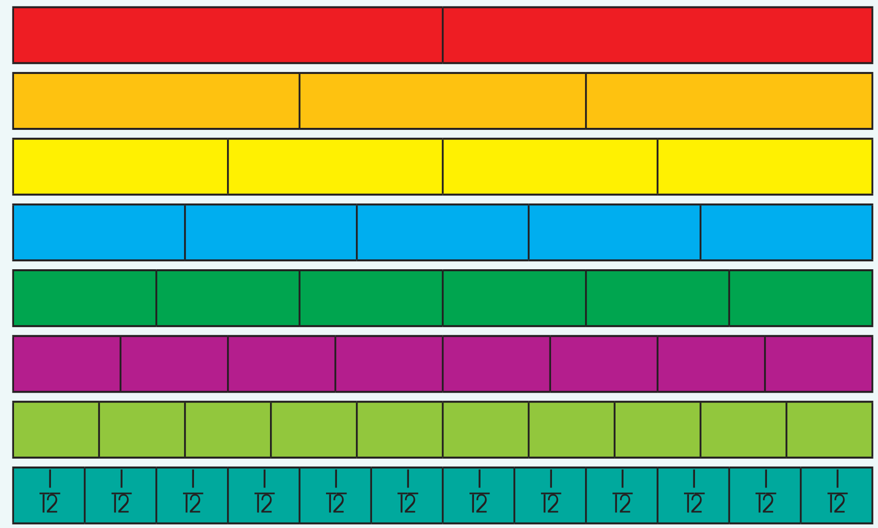
a. Sizwe has four pieces of chocolate. He gives one piece to his friend. What fraction of the chocolates does he have left? ______

b. Yasmin has two oranges. She shares one with Ann. What fraction does she have left? ______

c. Maria buys 5 chocolate bars. She keeps 1 for herself, gives 2 to Mohamed, and 2 to her brother. What fraction does Maria keep for herself?

______

3 Fraction wall.

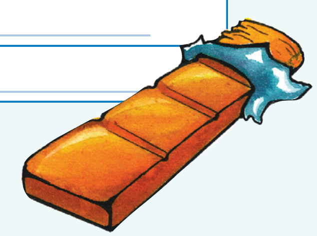


Each row is divided into equal parts. The bottom row is divided into twelfths ($\frac{1}{12}$). Label the other rows with the correct fraction.

Use your ruler or a straight edge from a piece of paper to find which fractions are equal, and to help you answer these questions.

From the fraction wall, find all the different ways to make:

a. one half $\frac{1}{2}$	
b. one whole (1)	
c. three quarters $\frac{3}{4}$	



Check! Compare! Correct!

Teacher:
Sign:
Date:

Eng NUM G3 B2 113-128 TWISTED.indd 116

2014/07/02 1:44 PM

126

Date:

More grouping and sharing

1 Quick calculations.

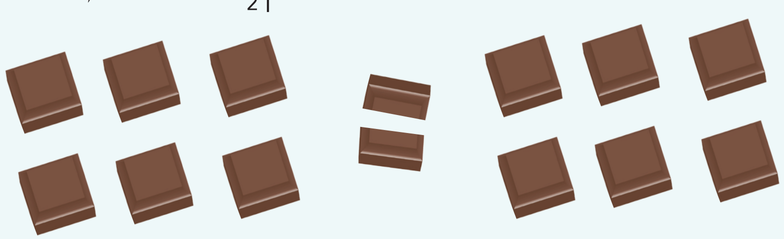
Look for links.

30 ÷ 3 = ____	15 ÷ 3 = ____	60 ÷ 3 = ____	600 ÷ 3 = ____
150 ÷ 3 = ____	24 ÷ 4 = ____	24 ÷ 8 = ____	240 ÷ 4 = ____
120 ÷ 4 = ____	12 ÷ 4 = ____	40 ÷ 10 = ____	40 ÷ 5 = ____
400 ÷ 10 = ____	400 ÷ 5 = ____	200 ÷ 5 = ____	18 ÷ 2 = ____
36 ÷ 2 = ____	72 ÷ 2 = ____	72 ÷ 4 = ____	72 ÷ 8 = ____

2 Share out what's left.

Jabu and Lebo want to share 13 chocolate pieces. How many pieces do they each get?

They can only share 12 whole squares, they get six each. The remaining piece they break in half, so each has $6\frac{1}{2}$ pieces.



a. At a party 25 sugar strips are shared between 10 children. Share out exactly! Draw pictures to help you.

Each one gets ____________ strips.

b. Share 37 strips between 4 children.

Each one gets ____________ strips.

c. Share 48 strips between 5 children.

Each one gets ____________ strips.

d. Share 73 strips between 10 children.

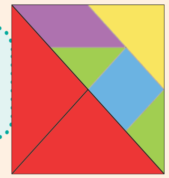
Each one gets ____________ strips.

Teacher:
Sign:
Date:

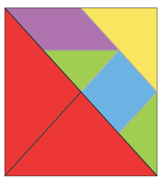
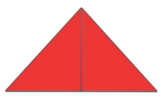
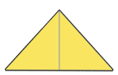
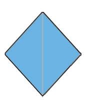
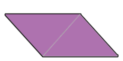
Date:

Tangram fractions

The Tangram is an old Chinese puzzle made up of 7 flat shapes, called tans, all of which are put together to form various shapes.



1 Fractions in the tangram.

	Look at the tangram puzzle. What fraction of the whole square is each of the two large triangles? (Pink in this picture.)	___
	If you fold one of the large triangles into two equal pieces, each piece is the same size as the medium size triangle (yellow in the picture). What fraction of the whole square is the medium triangle?	___
	If you fold the medium triangle into two equal pieces, each piece is the same size as the two small triangles. (green in the picture.) What fraction of the whole square is each small triangle?	___
	You can put two small triangles together to make the small square. What fraction of the whole square is the small square (blue in the picture)?	___
	You can put two small triangles together to make the parallelogram. What fraction of the whole square is the parallelogram?	___

2 Using the tangram.

Cut out the tangram from Cut-out 12 and label each piece with its fraction of the whole square.

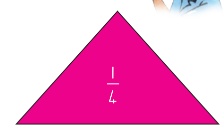
Put your name on the back of each piece, so you can get your own pieces back at the end of the game.

3 Fair shares fraction game.

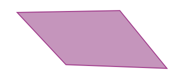
Play with 4 (or 8) players using your tangram pieces.

Everyone must put one quarter of the tangram set into the kitty.

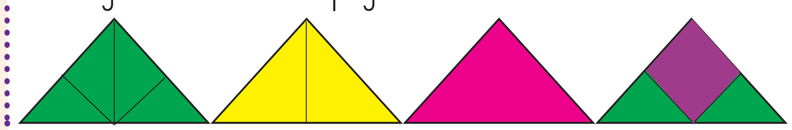
1. Players take turns being the dealer.
2. The dealer decides what fraction of the whole tangram each player must put into the kitty.
3. Each player guesses whether the coin will come up heads or tails, then the dealer flips the coin.
4. The dealer then shares the kitty among those who guessed right. (He or she may have to trade one or more pieces for other pieces of equal value.)
5. Any remainder that cannot be shared stays in the kitty for the next round.
6. All players check to see if the sharing is done correctly.
7. If a player finds an error, the dealer pays a penalty of $\frac{1}{8}$ of the whole square to that player.
8. A player with no pieces may take any remainder from the kitty.
9. Play continues until each player has been dealer.



I'll put in one large triangle.



Two eighths are equal to one fourth. I can put in the square and the parallelogram.



Teacher:
Sign:
Date:

128a Measuring capacity

Date:

1. Use a plastic bottle container and a cup.

How many cups do you think will fill this container?

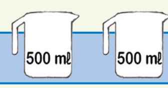
You do not have to mention litres or millilitres. Only use the words 'cup' and 'bottle'.

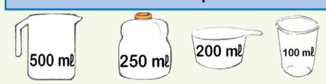
2. Make a litre.

Find a way to make a litre using different amounts of liquid.

Write a number sentence for each way.

Number sentence: 500 ml + 500 ml = 1 000 ml (1 ℓ)

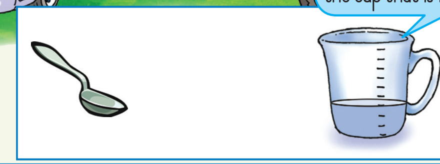




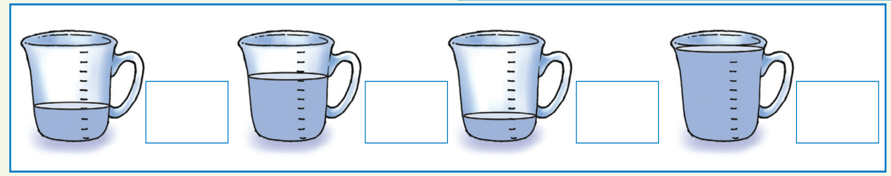
Number sentence ______ = 1 000 ml (1 ℓ)	Number sentence ______ = 1 000 ml (1 ℓ)
Number sentence ______ = 1 000 ml (1 ℓ)	Number sentence ______ = 1 000 ml (1 ℓ)

When we write metric symbols, we leave a small space between the last digit and the symbol. For example we write 3 ℓ not 3ℓ; 299 g not 299g; 15 km not 15km.

3. What is the volume of each cup that is filled?



The capacity of the cup is 10 and the volume of the cup that is filled is 1.

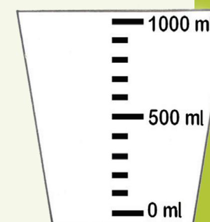


4. We measure small amounts of liquid in millilitres (ml).

This measuring cup for medicine contains 10 ml, which is about two teaspoons.

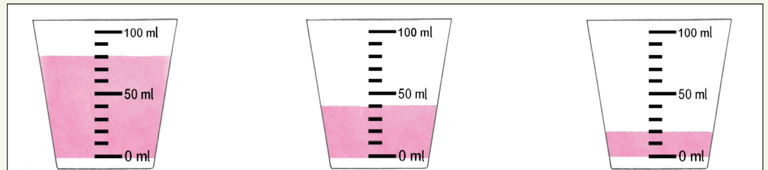
We measure larger amounts in litres (ℓ).

There are one thousand millilitres in a litre.



5. How much liquid?

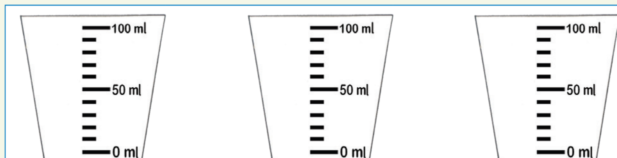
How many ml of liquid are in each jug?



______ ml ______ ml ______ ml

6. How much liquid?

Shade the medicine cups to show the amount in each one.



50 ml 10 ml 70 ml

Teacher:
Sign:
Date:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Date:

Measure and pour

1 At the game.

At half time each player drinks $\frac{1}{4}$ of a litre of juice.

a. How many players can share?

1 litre ______ 4 litres ______ $2\frac{1}{2}$ litres ______

b. How much juice do they need for?

8 players ______ 9 players ______ 12 players ______

2 Litres and millilitres (ml).

1 litre = 1 000 ml $\frac{1}{2}$ a litre = ______ ml $\frac{1}{4}$ of a litre = ______ ml

125 ml = ______ of a litre 50 ml = ______ of a litre

3 Make half a litre.

Tick (✓) the 3 amounts that add up to half a litre.

120 ml	140 ml	160 ml	28 ml	240 ml
120 ml	140 ml	160 ml	28 ml	240 ml

4 Milk is good for you!

Share 4 litres of milk between:

a. 8 children Each child gets ______ litres

b. 16 children Each child gets ______ litres

c. 12 children Each child gets ______ litres

5 Bongi's Juice Bar.

For 1 jug, Bongi uses one quarter ($\frac{1}{4}$) of a cup of juice and 2 cups of water.

Work out how much juice and water Bongi uses for up to 5 jugs of juice.

Jugs	1	2	3	4	5
Cups of Juice	One quarter ($\frac{1}{4}$)				
Cups of water	2				

6 Make a litre.

50 ml	100 ml	200 ml	250 ml	500 ml

How many of each container do you need to make a litre?

a. ______ × 100 ml b. ______ × 200 ml c. ______ × 250 ml

d. ______ × 500 ml e. ______ × 50 ml

7 After the party.

Thandi's party is over. There are drinks left over.

How much yellow juice is left? ______

How much purple juice is left? ______

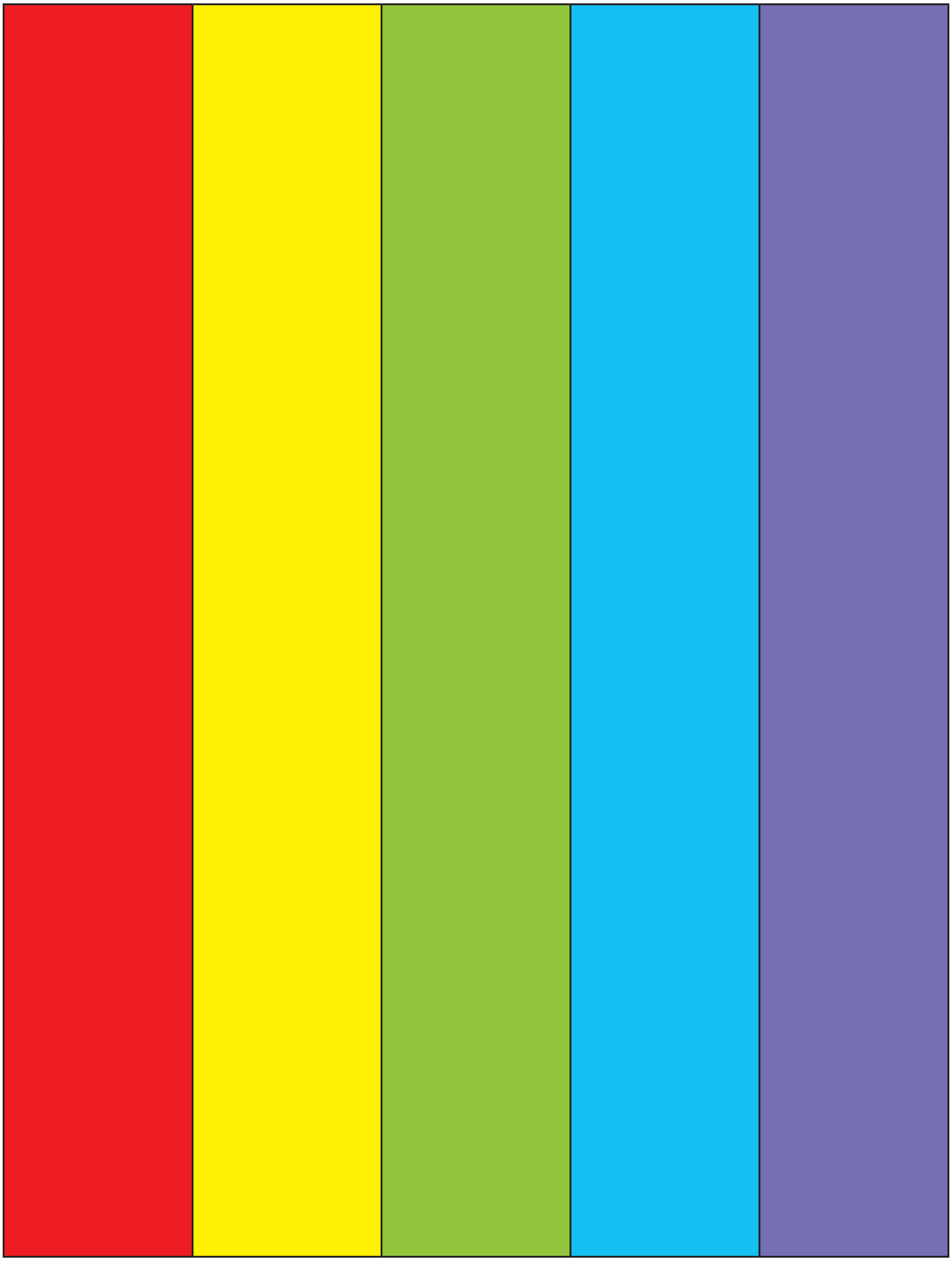
Thandi mixes the two juices together.

How many full jugs can she fill? ______

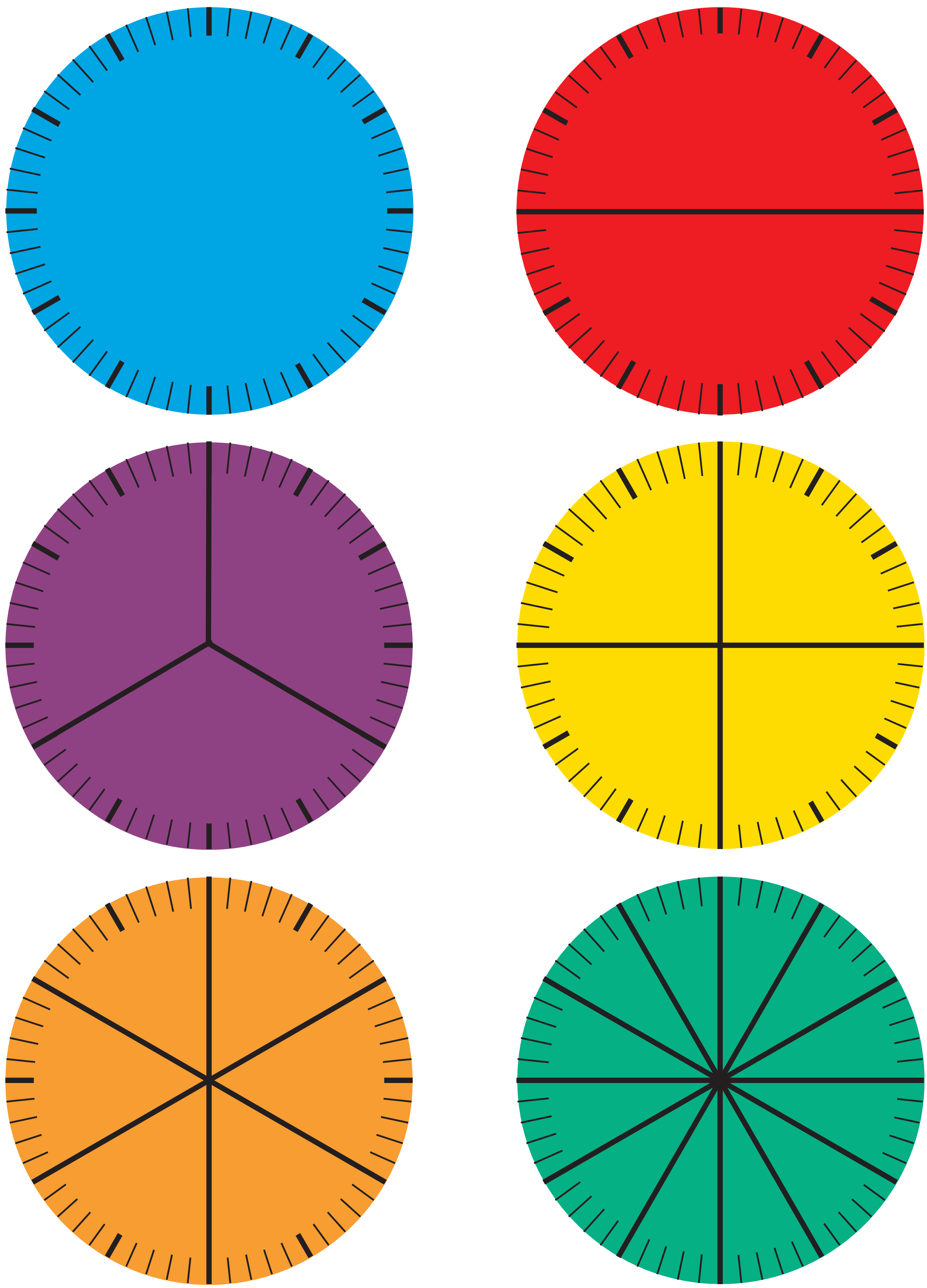
Teacher:
Sign:
Date:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Cut-out 5



Cut-out 6



Cut-out 7

ENG MATHS G3 B2 9781431501472.indb 125 2014/06/20 7:57 AM

Cut-out 8

Ic	
IOc	
RIs	
RIOs	
RIOOs	

Cut-out 9

R100	R100	R100	R100
R100	R100	R100	R100
R10	R10	R10	R10
R10	R10	R10	R10
R10	R10	R10	R10
R10	R10	R10	R10

R1 R1 R1 R1 R1 R1 R1 R1

R1 R1 R1 R1 R1 R1 R1 R1

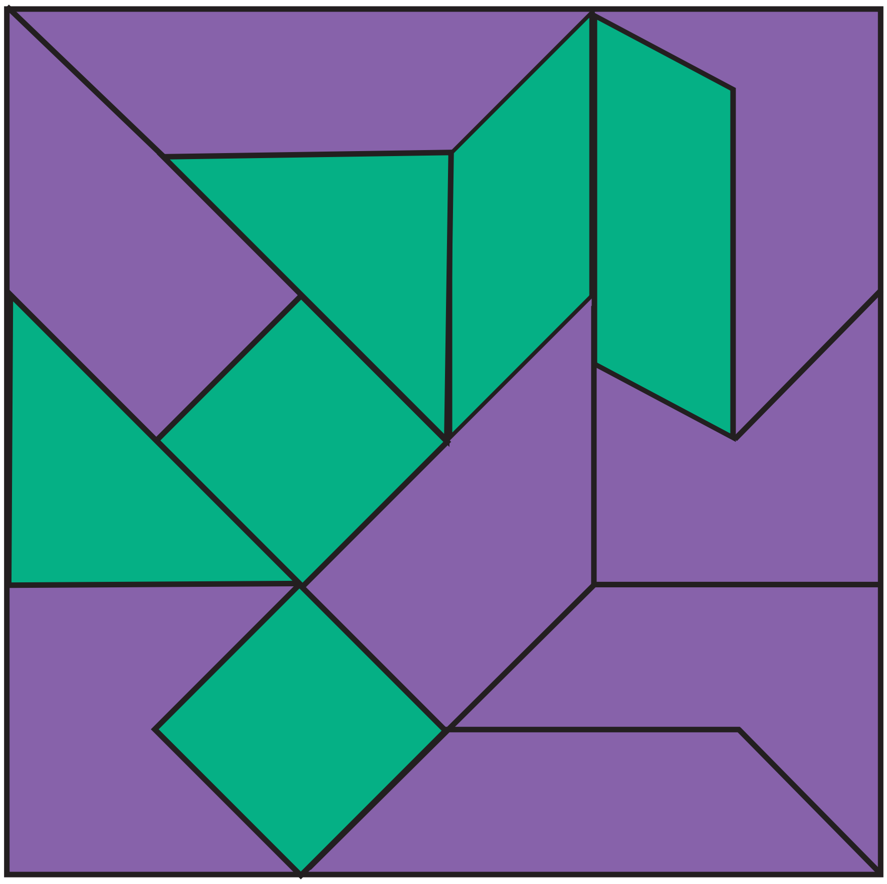
10c 10c 10c 10c 10c 10c 10c 10c 10c

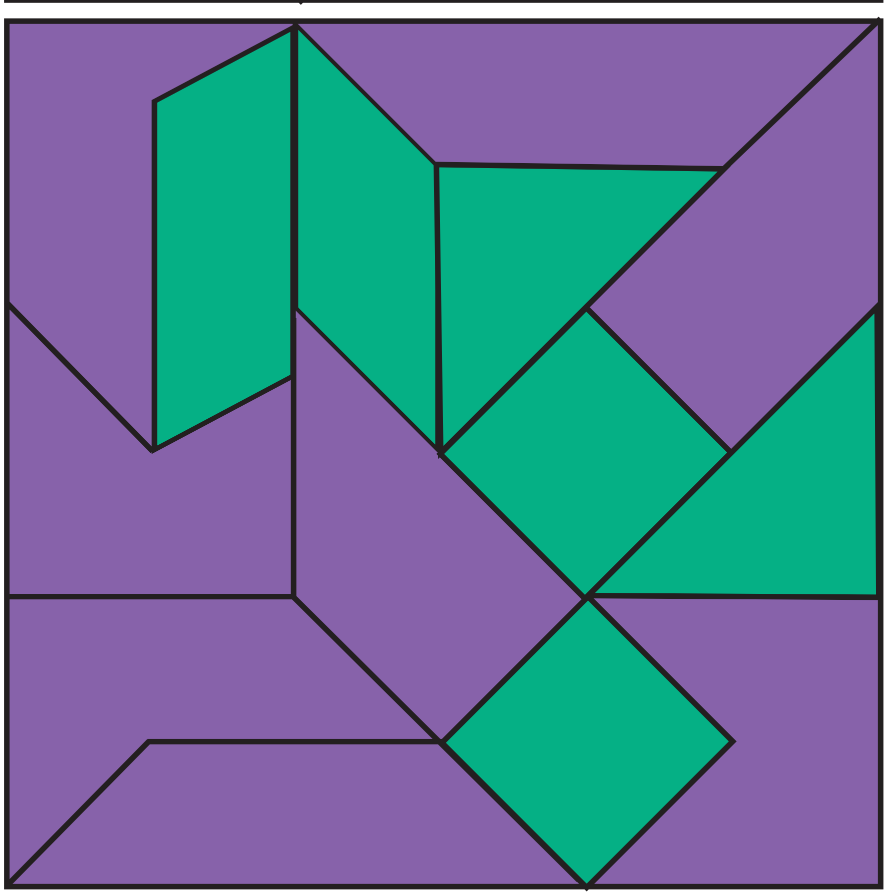
10c 10c 10c 10c 10c 10c 10c 10c 10c

1c 1c 1c 1c 1c 1c 1c 1c 1c

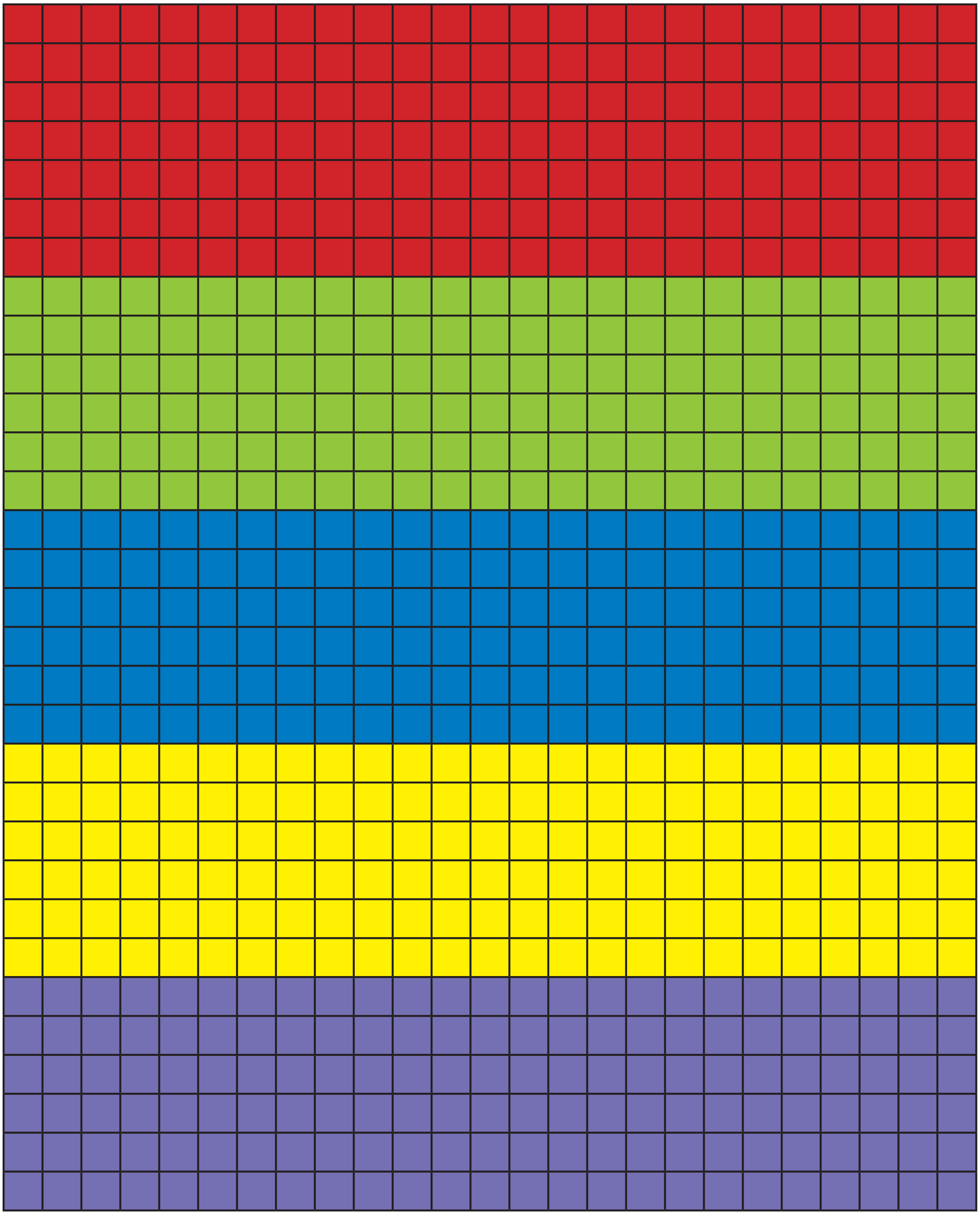
1c 1c 1c 1c 1c 1c 1c 1c 1c

Cut-out 10





Cut-out 11



Cut-out 12