

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.





MATHEMATICS IN ENGLISH
GRADE 4 – BOOK 1
TERMS 1 & 2
ISBN 978-1-4315-0015-4

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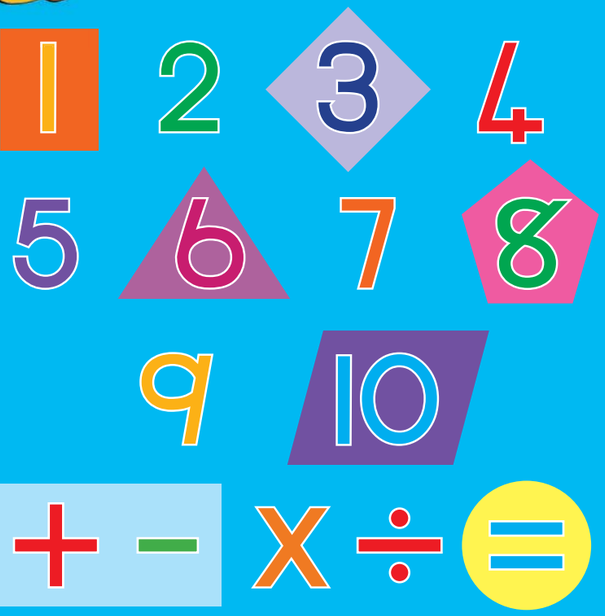

MATHEMATICS IN ENGLISH – Grade 4, Book 1

ISBN 978-1-4315-0015-4



Grade 4

Name:

Class:

basic education
Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

MATHEMATICS IN ENGLISH

Book 1

Terms 1 & 2



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2 x 2=4

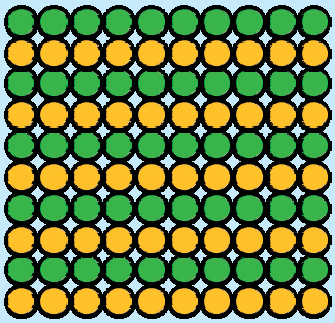
1	2	3	4	5	6	7	8	9	10
2	4	6	8	10	12	14	16	18	20
3	6	9	12	15	18	21	24	27	30
4	8	12	16	20	24	28	32	36	40
5	10	15	20	25	30	35	40	45	50
6	12	18	24	30	36	42	48	54	60
7	14	21	28	35	42	49	56	63	70
8	16	24	32	40	48	56	64	72	80
9	18	27	36	45	54	63	72	81	90
10	20	30	40	50	60	70	80	90	100

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

1 Base Ten Counting

How many beads are there? See how fast can you count them.

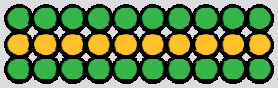






1. Write down how many beads you counted?

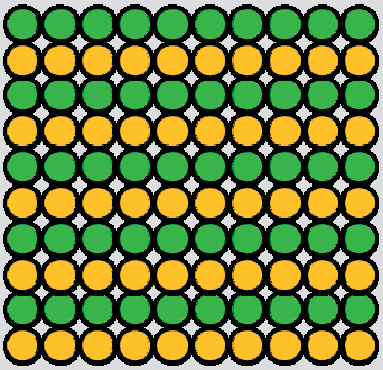
a. 

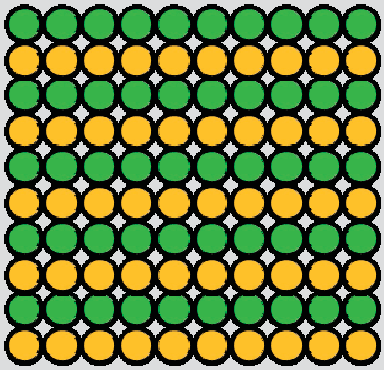
b. 

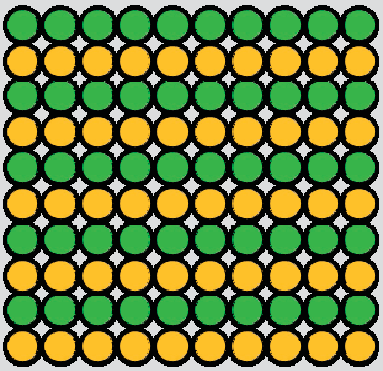


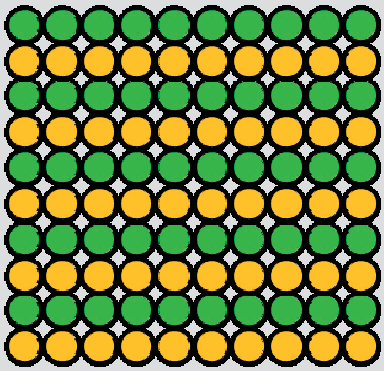
I wonder what is the fastest way to count? Can you help me?

c.











7 Multiplication

Talk about the patterns in the table below.

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

1. What will the next number be?

a. 40, 45, 50, ____

b. 85, 95, 105, ____, ____, ____

c. 378, 379, 380, ____, ____, ____

d. 405, 410, 415, ____, ____, ____

e. 599, 598, 597, ____, ____, ____

f. 600, 610, 620, ____, ____, ____

g. 775, 780, 785, ____, ____, ____

h. 800, 802, 804, ____, ____, ____

2. Complete the following patterns.

a. 3 + 5 = ____ 30 + 50 = ____ 300 + 500 = ____

b. 4 + 2 = ____ 40 + 20 = ____ 400 + 200 = ____

c. 3 + 6 = ____ 30 + 60 = ____ 300 + 600 = ____

d. 5 + 1 = ____ 50 + 10 = ____ 500 + 100 = ____

e. 7 + 2 = ____ 70 + 20 = ____ 700 + 200 = ____



12 Area

Look at the kitchen floor. How many tiles did I use to tile the floor?



1. Answer the following questions:

a. How many tiles did you use to tile the kitchen floor? _____

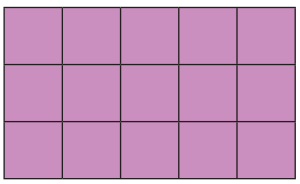
b. How many white tiles did you use to tile the kitchen floor? _____

c. How many black tiles did you use to tile the kitchen floor? _____

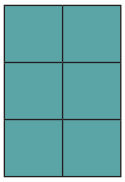
d. The girl takes one step per tile. How many steps will she take to go round the edges of the room on the tiles? _____

2. a. How many tiles are used to tile these floors?
b. What is the distance in tiles around the edges of each floor?

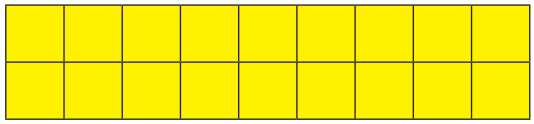
a. _____ b. _____



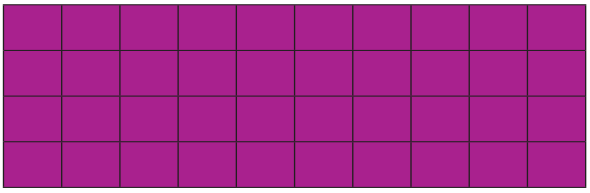
a. _____ b. _____



a. _____ b. _____



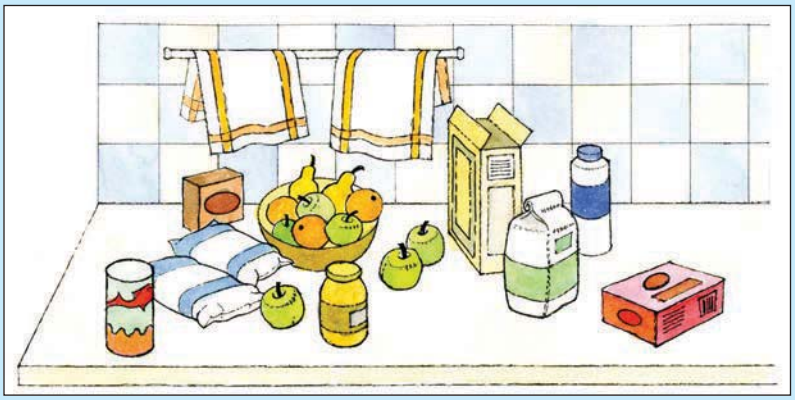
a. _____ b. _____



15 Weight (Mass)

Did you know that an average pineapple weighs 1 kg?
Identify the objects in the kitchen that are heavier or lighter than a pineapple.





1. Answer the questions.

a. What is lighter than a brick? 	b. What is heavier, a full or an empty bag? 
c. Is this bag heavier or lighter than a pineapple? 	d. Are the biscuits heavier or lighter than the handbag? 
e. Is this bag heavy or light? 	f. Is this suitcase heavy or light? 

2. Use the object on the left to estimate whether the object is heavier or lighter than a kilogram.

1 kg



a. feather 

b. shoes 

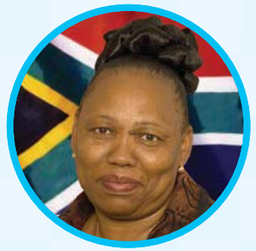
c. cupcake 

d. crayon 

e. school bag 

f. pencil case 

g. packet of chips 



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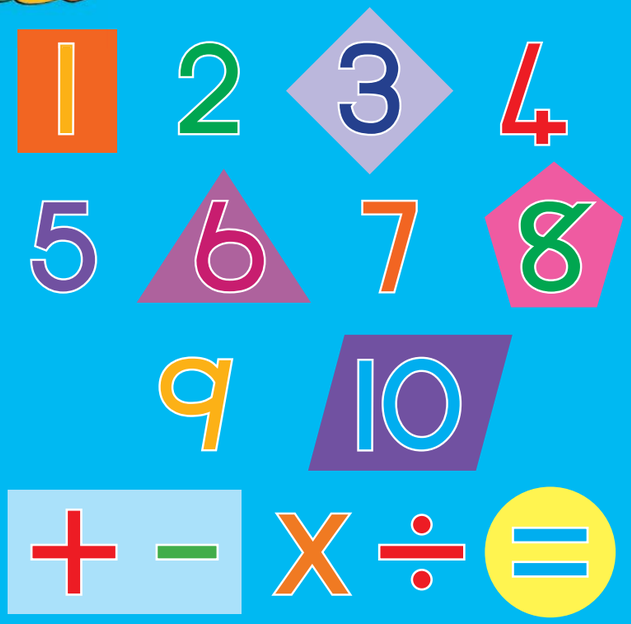

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				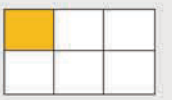	
				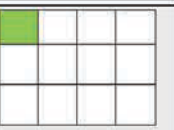	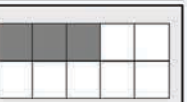
			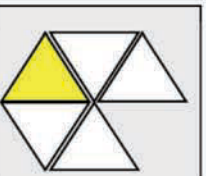		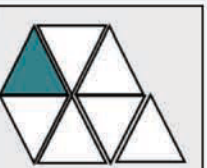
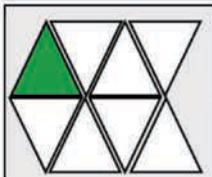	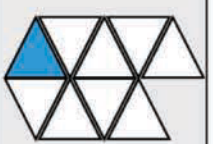		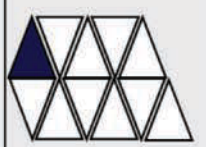	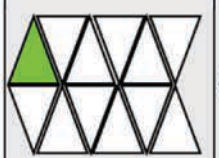	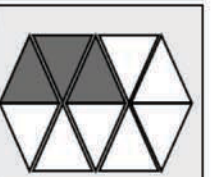
	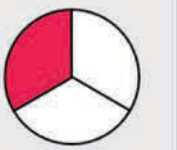	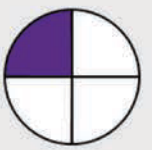	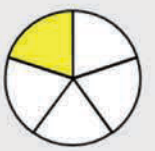		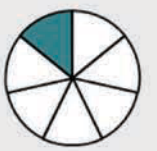
	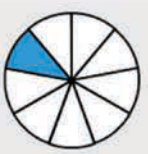			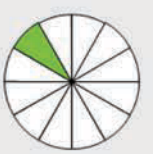	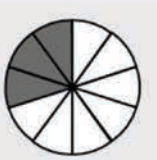

Mathematics Grade 4
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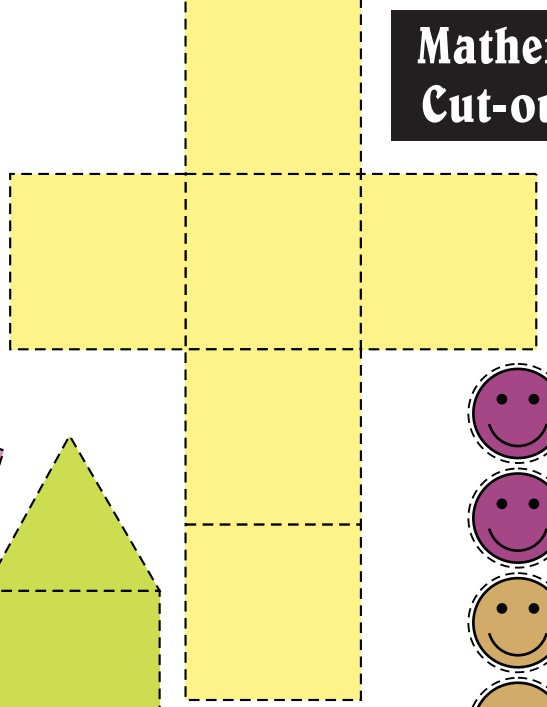

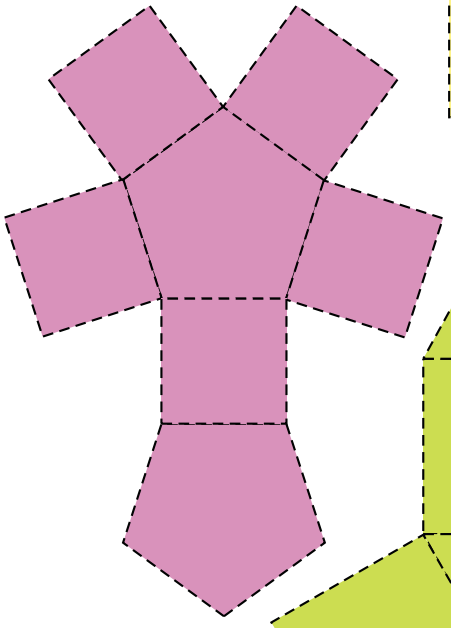

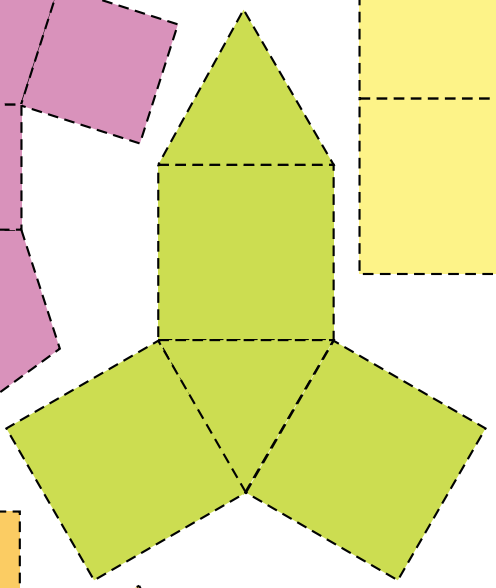

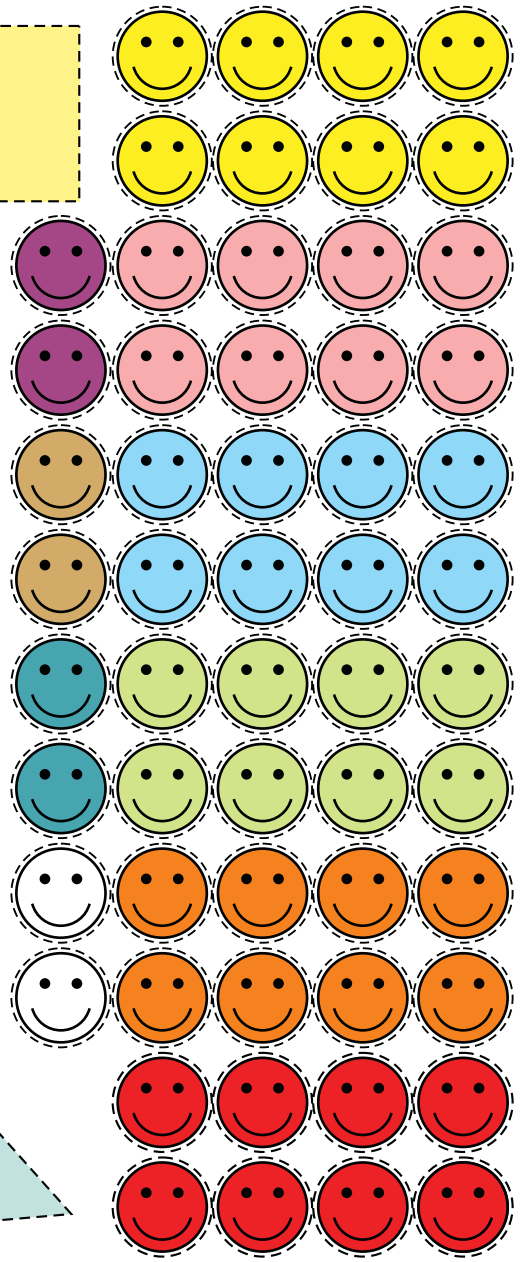

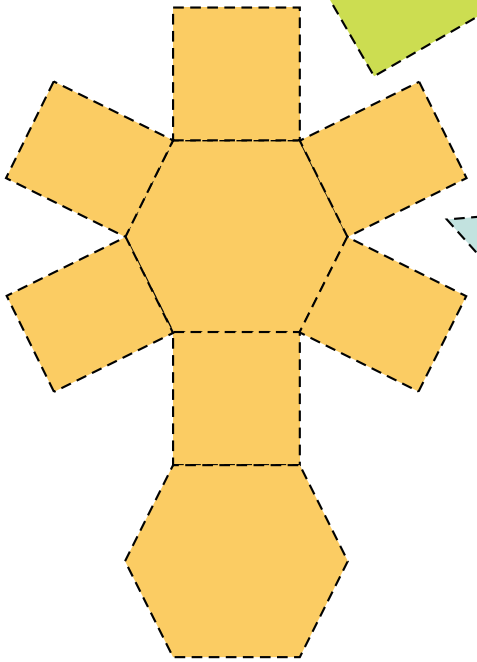

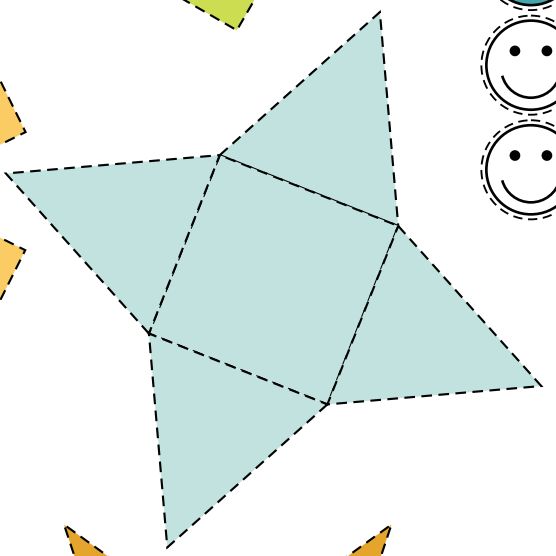

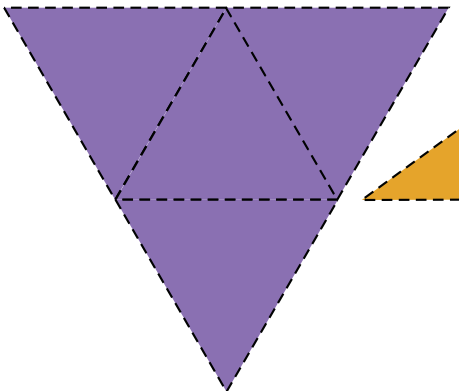

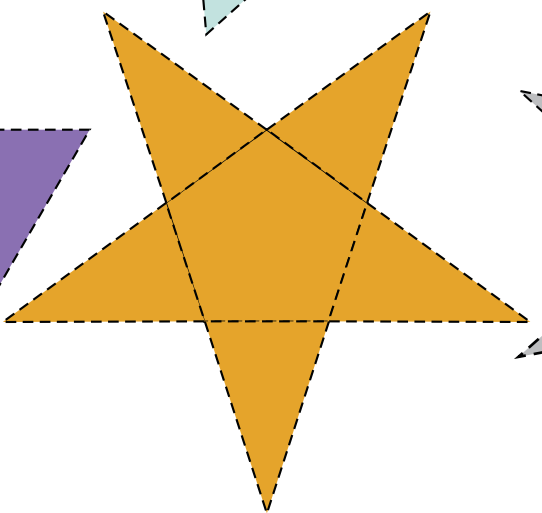

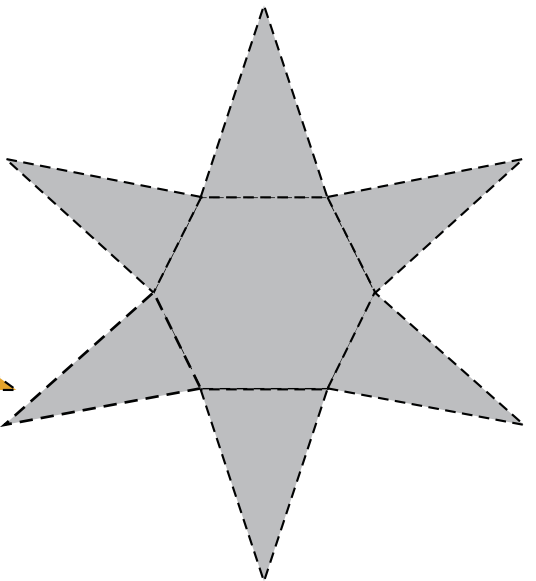

Grade 4

Rainbow WORKBOOKS

Mathematics in ENGLISH



ENGLISH Book 1

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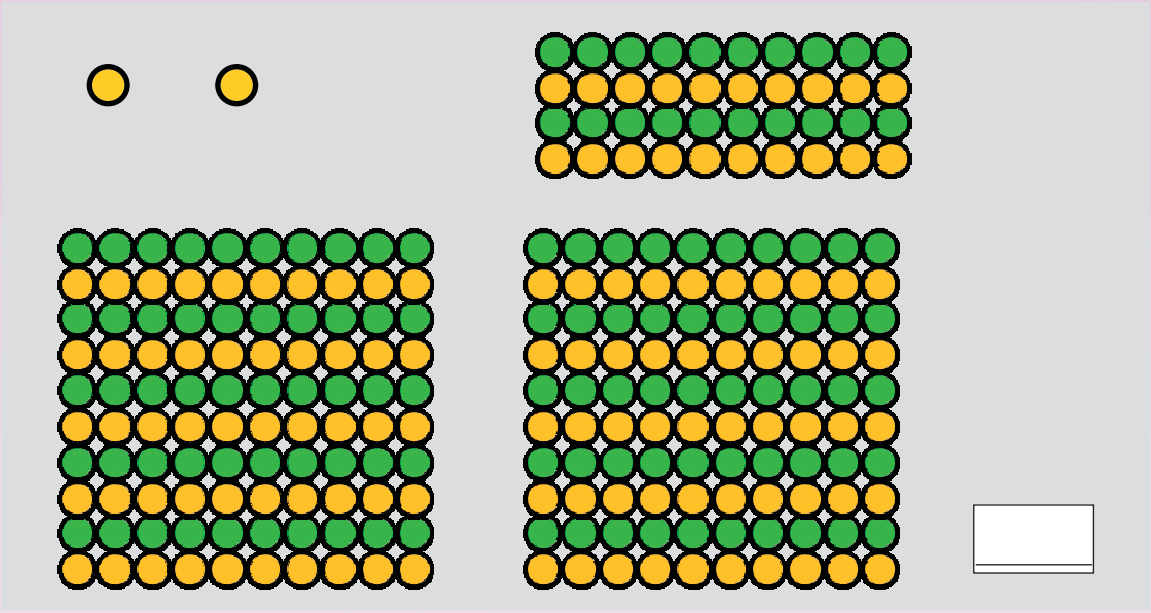

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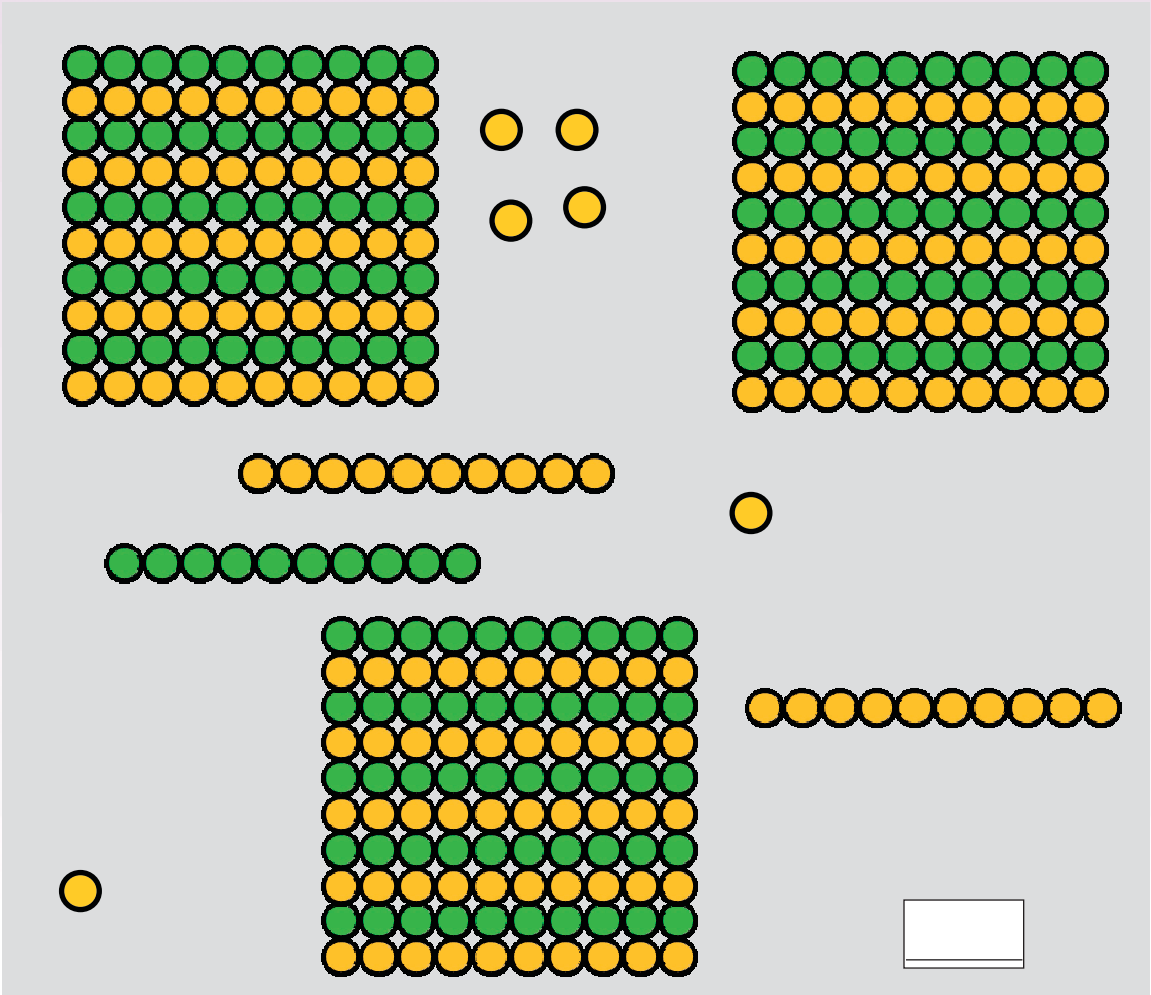

continued ☛

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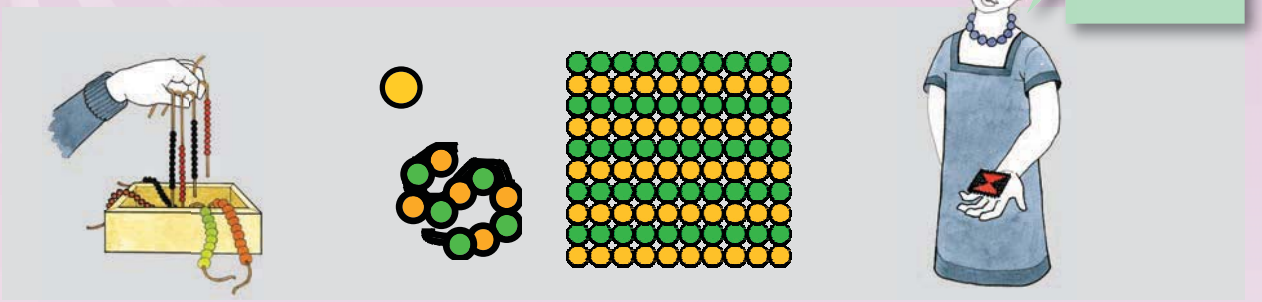
Base Ten Counting continued

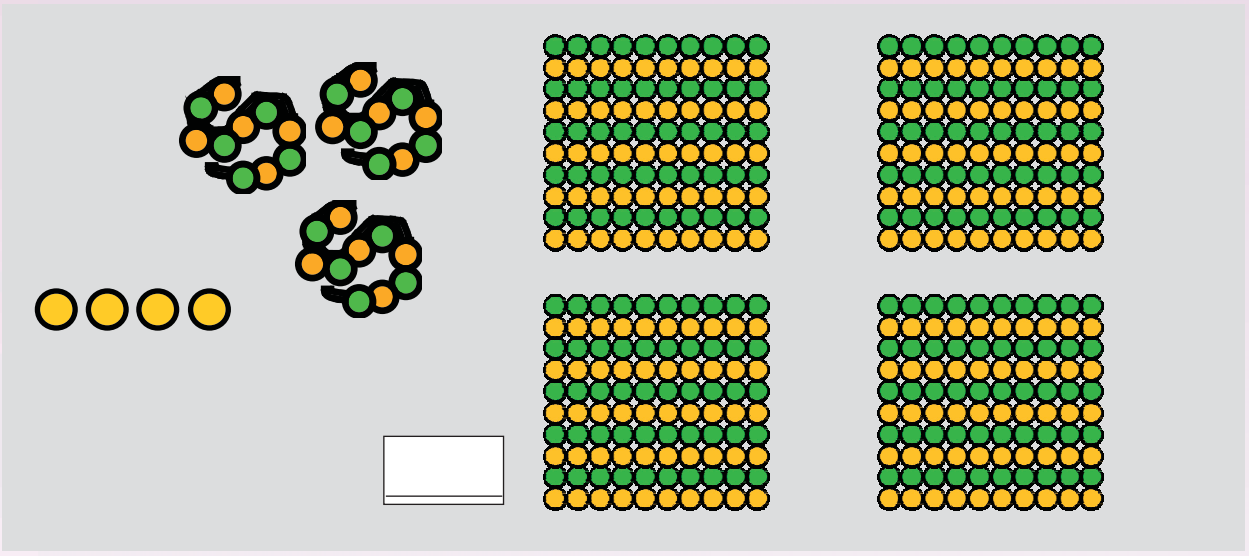
2. Write down how many beads there are.

a.

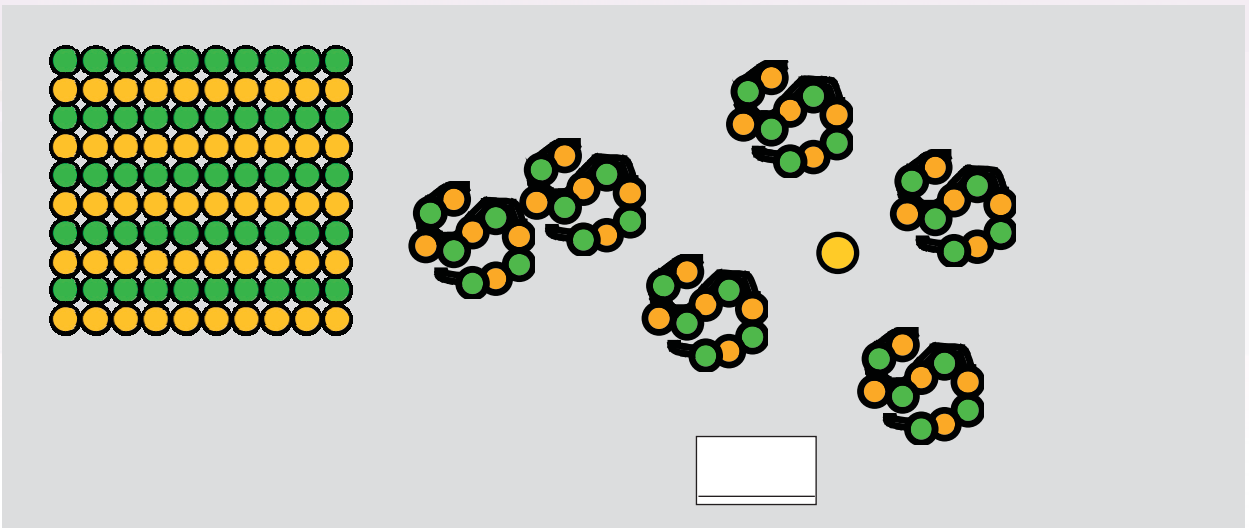


These blocks of beads have the same number in each as the block above. Write down the total number of beads.

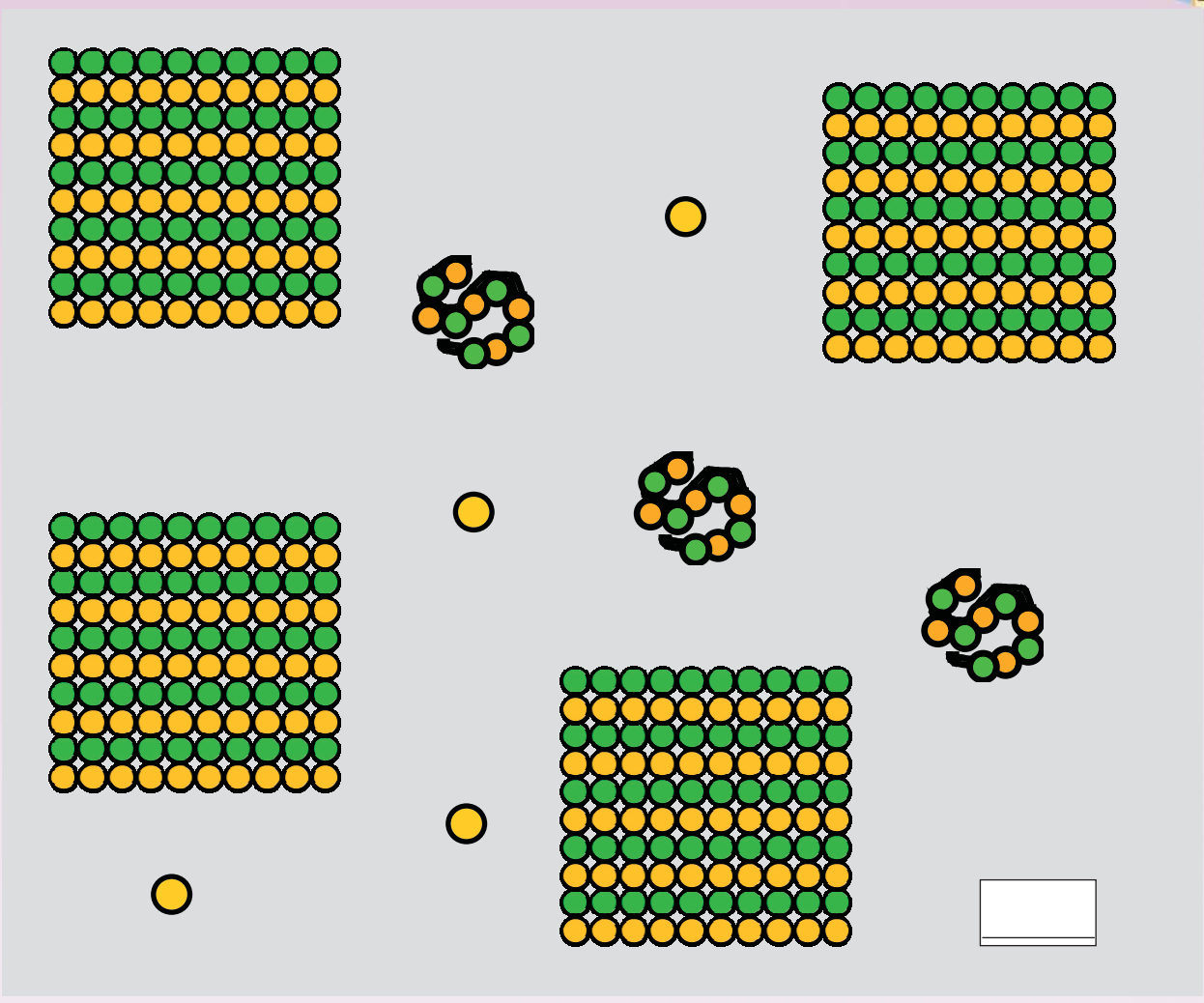
b.



c.



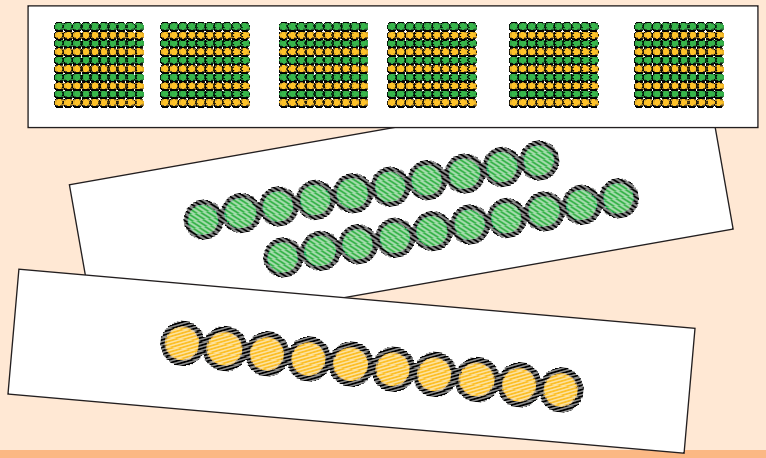
d.



How quick are you?

What you need:

- Cut-out 1.



What to do:

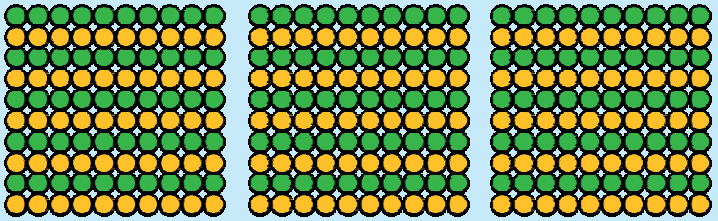
- Play in pairs.
- Cut out the cards from Cut-out sheet 1 at the back of the book.
- Place them face down on your desk.
- You choose five cards and your partner chooses five.
- See who is first to give the total number of beads on the cards.
- Check your partner's answer.
- Do the same with 6/7/8/9/ and 10 cards.
- The person with the most correct answers is the winner.

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

2 Numbers 0 to 1 000

What number will these cards make?

300 20 5



325

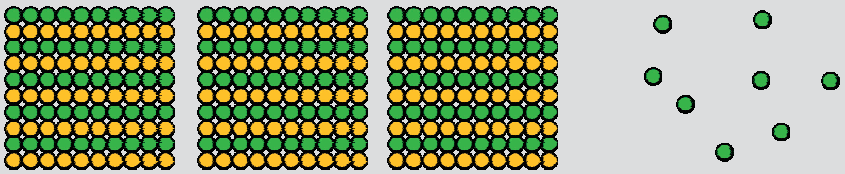
In words it is

Three hundred and twenty-five

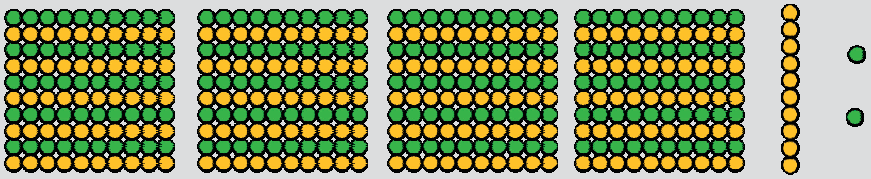
1. Match column A with column B.

Column A Column B

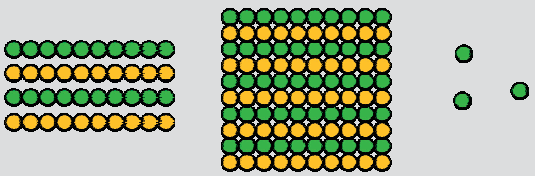
a. 300 8



b. 100 40 3



c. 400 10 2



2. Write the number in the correct column:

	Number cards	Hundreds	Tens	Units
a.	200 50 3	2	5	3
b.	400 60 5			
c.	100 20 10 9			
d.	9 300 10			
e.	40 2 3 400			

3. Complete the following. We have done the first one to guide you.

a. 723 = 7 hundreds + 2 tens + 3 units

b. 648 = _____

c. 521 = _____

d. 704 = _____

e. 230 = _____

4. Look at the first example. Write the other numbers also in expanded notation.

a. 654 = 600 + 50 + 4

b. 203 = _____

c. 745 = _____

d. 650 = _____

e. 605 = _____

f. 475 = _____

5. Write the following in words.

a. 54 _____

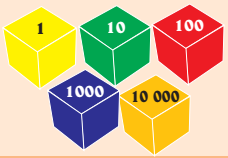
b. 308 _____

c. 847 _____

What is the size of your number:

Remember zero is a place holder.

What you need:
- Cut out 2
- Cut out 3: Cut and fold the dice (units to hundreds)

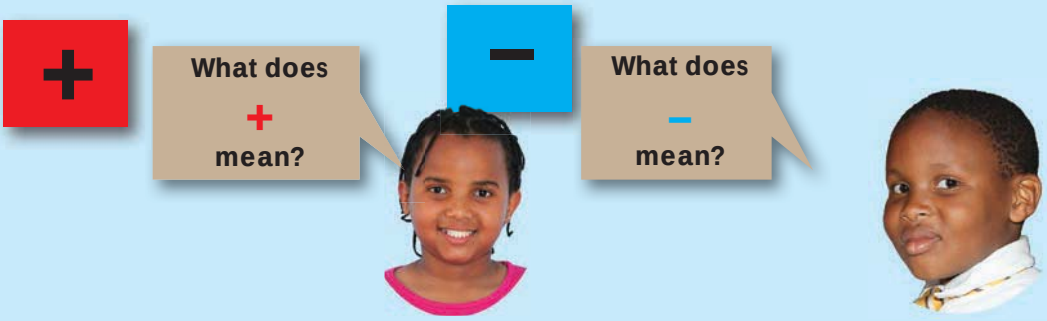


What to do:
- Play in pairs.
- Each player roles a hundreds dice (red, blue or orange dice), a tens (green dice) and a units (yellow dice) dice.
- Each player makes his or her own 3-digit number with the number cards.
- The winner is the player with the greatest number.
- Do the same activity five times.

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3 Addition and Subtraction to 999

What do addition and subtraction mean?



1. Complete the pattern:

a. + 100, + 100, + 100: 200, 300, 400, ____, ____, ____

b. – 20, – 20, – 20: 200, 180, 160, ____, ____, ____

c. + 50, + 50, + 50: 50, 100, 150, ____, ____, ____

d. + 30, + 30, + 30: 60, 90, 120, ____, ____, ____

e. – 40, – 40, – 40: 500, 460, 420, ____, ____, ____

Examples :

Example 1: 612 + 56

612	+	56
600 10 2		50 6

612 + 56
= 600 + 10 + 50 + 2 + 6
= 600 + 60 + 8
= 668

Example 2: 389 + 74

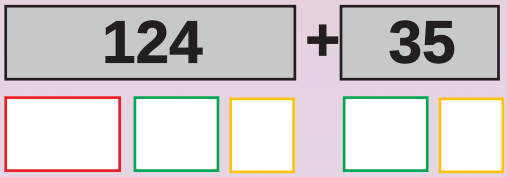
389	+	74
300 80 9		70 4

389 + 74
= 300 + 80 + 70 + 9 + 4
= 300 + 150 + 13
= 300 + 100 + 50 + 10 + 3
= 400 + 60 + 3
= 463



2. Add the following using the given example.

a. 124 + 35



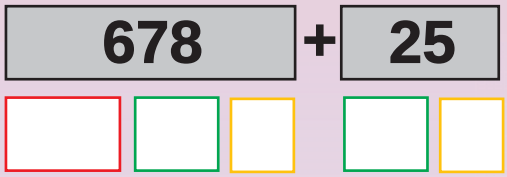
124 + 35

= 100 + 20 + 30 + 4 + 5

= _____

= _____

b. 678 + 25



678 + 25

= 600 + 70 + 20 + 8 + 5

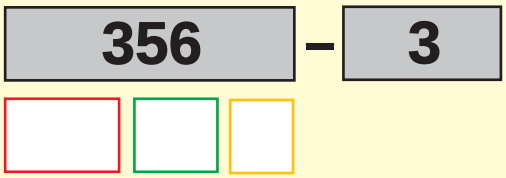
= _____

= _____

= _____

Examples:

Example 1: 356 - 3



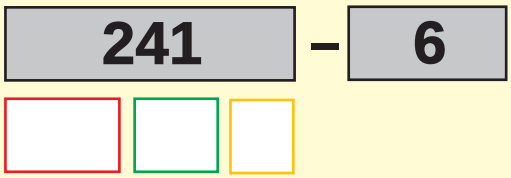
356 - 3

= 300 + 50 + (6 – 3)

= 300 + 50 + 3

= 353

Example 2: 241 - 6



241 - 6

= 200 + 40 + (1 – 6)

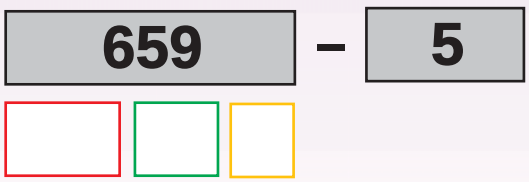
= 200 + 30 + (11 – 6)

= 200 + 30 + 5

= 235

3. Subtract the following using the given example.

a. 659 – 5



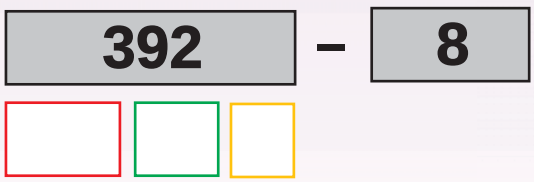
659 – 5

= 600 + 50 + (9 – 5)

= _____

= _____

b. 392 – 8



392 – 8

= 300 + 90 + (2 – 8)

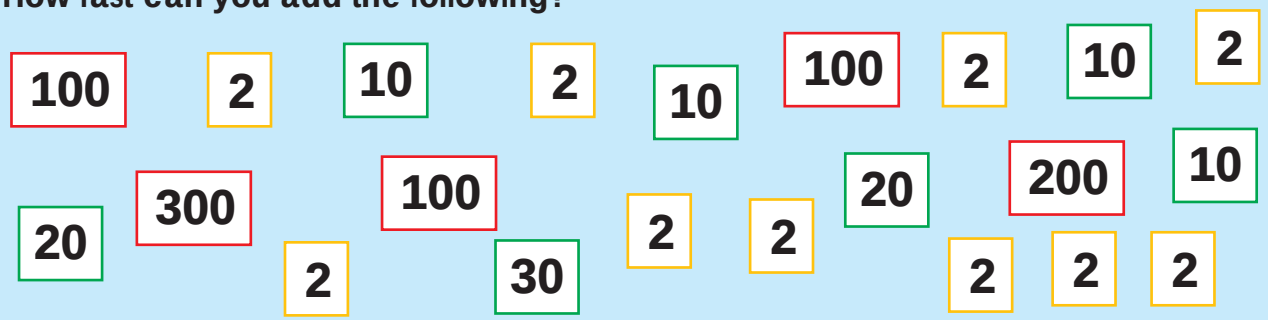
= _____

= _____

= _____

4 More Addition and Subtraction to 999

How fast can you add the following?



Examples:

Example 1:

212 + 456

200 10 2 + 400 50 6

= 200 + 400 + 10 + 50 + 2 + 6

= 600 + 60 + 8

= 668

Example 2:

124 + 387

100 20 4 + 300 80 7

= 100 + 300 + 20 + 80 + 4 + 7

= 400 + 100 + 11

= 500 + 10 + 1

= 511

1. Add the following using the examples above.

a. 234 + 362

□ □ □ + □ □ □

= 200 + 300 + 30 + 60 + 4 + 2

= _____

= _____

b. 644 + 213

□ □ □ + □ □ □

= _____

= _____

= _____

c. 396 + 145

□ □ □ + □ □ □

= 300 + 100 + 90 + 40 + 6 + 5

= _____

= _____

= _____

= _____

d. 247 + 356

□ □ □ + □ □ □

= _____

= _____

= _____

= _____

= _____



Examples:

Example 1:

784 – 323

700	80	4	–	300	20	3

= (700 – 300) + (80 – 20) + (4 – 3)

= 400 + 60 + 1

= 461

Example 2:

546 – 288

500	40	6	–	200	80	8

= (500 – 200) + (40 – 80) + (6 – 8)

= 300 + (30 – 80) + (16 – 8)

= 200 + (130 – 80) + (16 – 8)

= 200 + 50 + 8

= 258

2. Subtract the following using the given example.

a. 486 – 214

			–			

= (400 – 200) + (80 – 10) + (6 – 4)

= _____

= _____

b. 698 – 453

			–			

= _____

= _____

= _____

c. 384 – 267

			–			

= (300 – 200) + (80 – 60) + (4 – 7)

= _____

= _____

= _____

= _____

d. 413 – 168

			–			

= _____

= _____

= _____

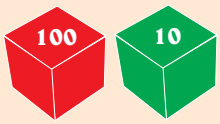
= _____

= _____

What is the size of your number:

What you need:

- Use the 10s and100s dice made in the previous activity.
- Piece of paper.



What to do:

- Roll the tens (green) dice.
- Add the number landed on to the first number on the blue card. Write your addition sum on a piece of paper.
- Do the same with the next four numbers on the blue card.
- Repeat the activity using both the 10s and 100s dice.
- Learners check each other's addition sums.
- The winner is the person with the most correct answers

132
423
400
675
897

Repeat the activity using subtraction.

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

5 Multiplication



We have six beads repeated four times.

This is the same as

6 + 6 + 6 + 6 which is the same as:

6x4

1. Complete the patterns:

a. 2, 4, 6, ____ , ____ , ____ , ____ , ____ , ____ , ____ , ____

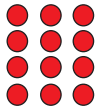
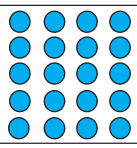
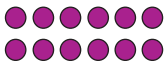
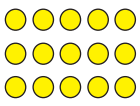
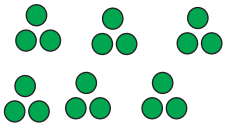
b. 3, 6, 9, ____ , ____ , ____ , ____ , ____ , ____ , ____ , ____

c. 5, 10, 15, ____ , ____ , ____ , ____ , ____ , ____ , ____ , ____

d. 4, 8, 12, ____ , ____ , ____ , ____ , ____ , ____ , ____ , ____

e. 10 , 20 , 30 , ____ , ____ , ____ , ____ , ____ , ____ , ____ , ____

2. Complete the table:

Diagram	Addition sum	Words	Multiplication sum
	4 + 4 + 4 = 12		
		Four groups of five	
			
			3 x 5 = 15
			



3. Match the cats with the mice.

a. 9 

b. 24 

c. 21 

d. 32 

e. 10 


7x3


3x3


6x4


5x2


8x4

4. Fill in the x and = in the right places.

a. 6 ☐ 3 ☐ 18

b. 16 ☐ 4 ☐ 4

c. 28 ☐ 7 ☐ 4

d. 6 ☐ 6 ☐ 36

e. 12 ☐ 3 ☐ 4

f. 7 ☐ 7 ☐ 49

g. 18 ☐ 2 ☐ 9

h. 4 ☐ 12 ☐ 48

i. 54 ☐ 9 ☐ 6

j. 12 ☐ 7 ☐ 84

k. 50 ☐ 5 ☐ 10

l. 27 ☐ 3 ☐ 9

m 12 ☐ 2 ☐ 24

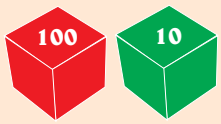
n. 9 ☐ 9 ☐ 81

o. 60 ☐ 5 ☐ 12

X

In one minute I can ...

What you need:
- Use the units and tens dice made in the previous activity from Cut-out 3.
- Piece of paper.



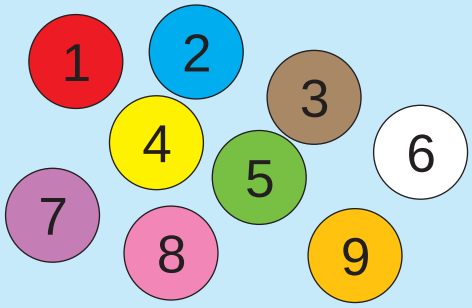
What to do:
- Roll the units and tens dice. Multiply the two numbers. Write down the multiplication sum with its answer.
- Repeat doing this until your teacher says stop after a minute.
- Give your multiplication sum to your friend to mark.
- The winner is the person with the most correct answers.

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

6 More Multiplication

See how many sums you can make by multiplying a number from the square by a number in a circle.

1	2	3
4	5	6
7	8	9



1. Complete the table.

	1	2	3	4	5	6	7	8	9
1	1 x 1 =	1 x 2 =	1 x 3 =	1 x 4 =	1 x 5 =	1 x 6 =	1 x 7 =	1 x 8 =	1 x 9 =
2	2 x 1 =	2 x 2 =	2 x 3 =	2 x 4 =	2 x 5 =	2 x 6 =	2 x 7 =	2 x 8 =	2 x 9 =
3	3 x 1 =	3 x 2 =	3 x 3 =	3 x 4 =	3 x 5 =	3 x 6 =	3 x 7 =	3 x 8 =	3 x 9 =
4	4 x 1 =	4 x 2 =	4 x 3 =	4 x 4 =	4 x 5 =	4 x 6 =	4 x 7 =	4 x 8 =	4 x 9 =
5	5 x 1 =	5 x 2 =	5 x 3 =	5 x 4 =	5 x 5 =	5 x 6 =	5 x 7 =	5 x 8 =	5 x 9 =
6	6 x 1 =	6 x 2 =	6 x 3 =	6 x 4 =	6 x 5 =	6 x 6 =	6 x 7 =	6 x 8 =	6 x 9 =
7	7 x 1 =	7 x 2 =	7 x 3 =	7 x 4 =	7 x 5 =	7 x 6 =	7 x 7 =	7 x 8 =	7 x 9 =
8	8 x 1 =	8 x 2 =	8 x 3 =	8 x 4 =	8 x 5 =	8 x 6 =	8 x 7 =	8 x 8 =	8 x 9 =
9	9 x 1 =	9 x 2 =	9 x 3 =	9 x 4 =	9 x 5 =	9 x 6 =	9 x 7 =	9 x 8 =	9 x 9 =



Examples:

Example 1:

14 x 6

= (10 + 4) x 6

= (10 x 6) + (4 x 6)

= 60 + 24

= 84

10	4	6

Example 2:

28 x 6

= (20 + 8) x 6

= (20 x 6) + (8 x 6)

= 120 + 48

= 168

20	8	6

2. Calculate the following using the method above.

a. 28 x 3 ☐☐☐

= _____

= _____

= _____

b. 18 x 4 ☐☐☐

= _____

= _____

= _____

c. 43 x 2 ☐☐☐

= _____

= _____

= _____

d. 14 x 7 ☐☐☐

= _____

= _____

= _____

3. Calculate the following using the method above.

a. 18 x 5 ☐☐☐

= _____

= _____

= _____

b. 23 x 8 ☐☐☐

= _____

= _____

= _____

c. 34 x 6 ☐☐☐

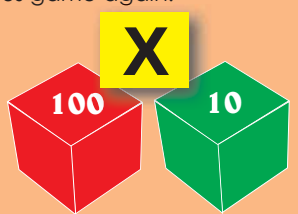
= _____

= _____

= _____

In one minute I can ...

Play the previous game again.



3. What will you put in the place of the orange?

a. 4 + 3 = ● + 4 — 3

b. 6 + 2 = ● + 6

c. 5 + 4 = ● + 5

d. ● + 3 = 3 + 5

e. 2 + ● = 7 + 2

f. 8 + 1 = 1 + ●

g. 6 + ● = 3 + 6

h. 9 + 0 = ● + 9

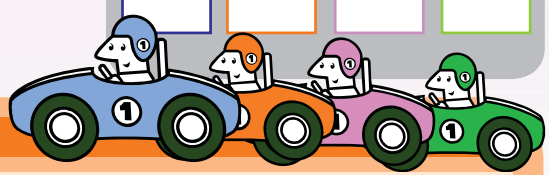
i. 7 + ● = 1 + 7

j. ● + 6 = 6 + 1

Pattern fun

How fast can you get the answer?

2	6	11	15
4	12	22	30
6	18	33	45



Coloured cards...

Look at the cards. What do you notice?

4 + 3 | 5 + 6 | 4 + 5 | 2 + 7 | 3 + 4 | 3 + 9

8 + 1 | 7 + 2 | 9 + 3 | 5 + 4 | 6 + 5 | 1 + 8

8 Fractions

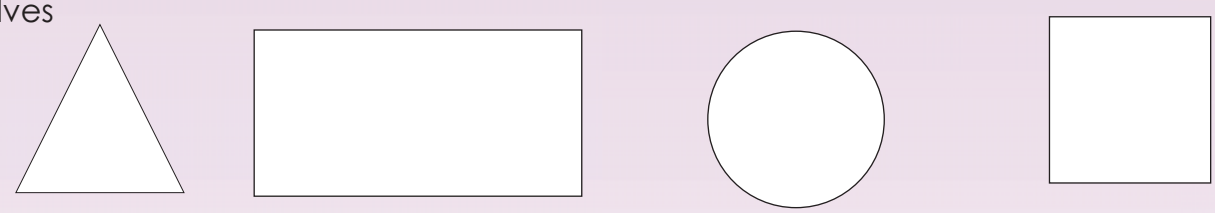
Use fractions to describe the pictures.



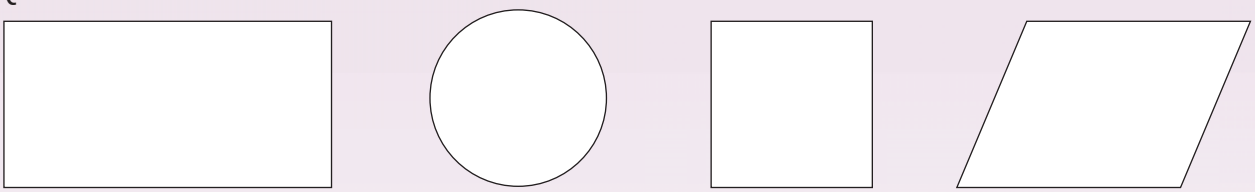


1. Divide these shapes into:

Halves



Quarters



2. Colour in the following fractions.

a. $\frac{2}{4}$ =

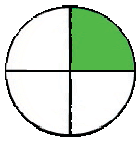
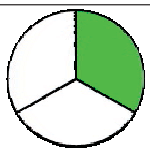
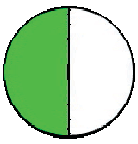
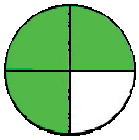
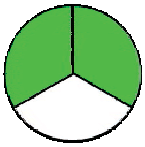
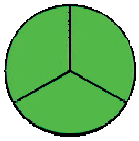
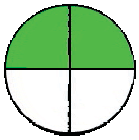
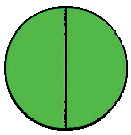
b. $\frac{1}{4}$ =

c. $\frac{2}{3}$ =

d. $\frac{2}{2}$ =

e. $\frac{3}{3}$ =

3. Complete the table below.

Fraction circle	Fraction that is green.	Colour the same fraction on this diagram.
a. 	$\frac{1}{4}$	 $\frac{1}{4}$ is green
b. 		
c. 		
d. 		
e. 		
f. 		
g. 		
h. 		

Fractions dice and strips

Throw a dice.

Then take a fraction strip that matches the fraction on the face of the dice.

If the face is $\frac{1}{4}$, take a quarter strip. If you are correct keep the fraction strip.

At the end count your fraction strips.

The winner is the person with the most fractions strips.



15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

9 More Fractions

Use fractions to describe the pictures.



$= \frac{1}{4}$

$= \frac{1}{4}$

$= \frac{1}{4}$

$= \frac{1}{4}$



1. Share the sweets. What fraction will each child get?

Children	Total number of sweets	What fraction will each child get?	How many sweets will each child get?
			
			
			
			
			

2. You divide 16 sweets between four children. What fraction will each child get?

Continue on an extra sheet of paper

3. You divide 18 sweets between two children. What fraction will each get?

Continue on an extra sheet of paper

4. Four children each get $\frac{1}{4}$ of 28 sweets. How many sweets does each child get?

Continue on an extra sheet of paper

Fractions dice and strips

Play this game again. See the previous lesson.

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

10 Money

Identify all the coins and notes:











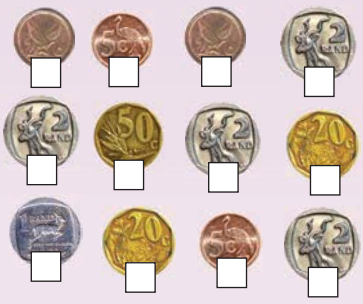


1. Tick the coins that are equal to the amount shown:

a. R5,40



b. R3,20



c. R7,50



d. R9,42



2. Colour the blocks:

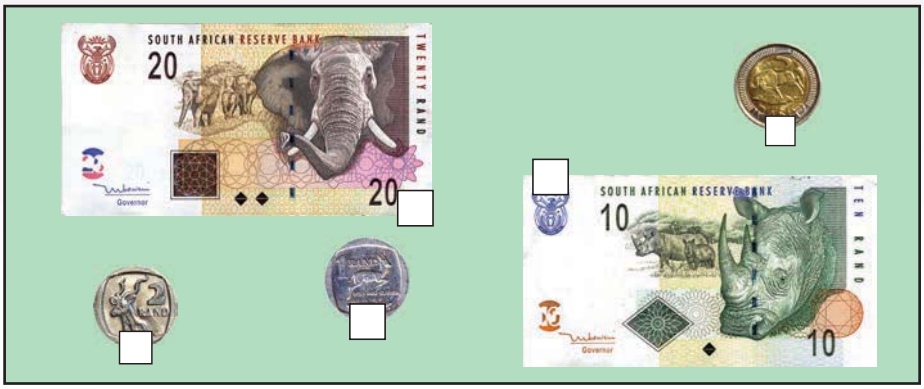
a. R2 = Green

b. R1 = Blue

c. R5 = Red

d. R10 = Purple

e. R20 = Yellow



3. Tick the correct change.

a. I bought sweets for R3,50. I paid with a R5.



b. I bought sweets for R4,89c. I paid with a R5,00.



c. I bought sweets for R7,99. I paid with R5, R2 and R2 coin.

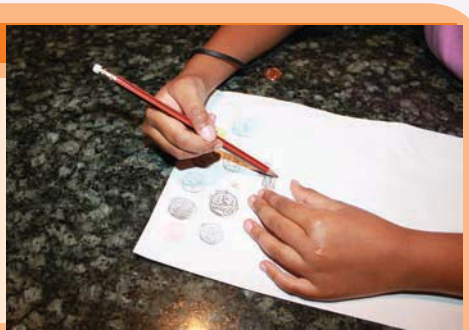


d. I bought sweets for 910c. I paid with R10,00.



Coin rubbing …

Take some coins.
Make a coin rubbing by putting a coin under a piece of paper and rubbing over the top with a crayon/pencil.
Cut out the coins and make five of your own sums.



15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

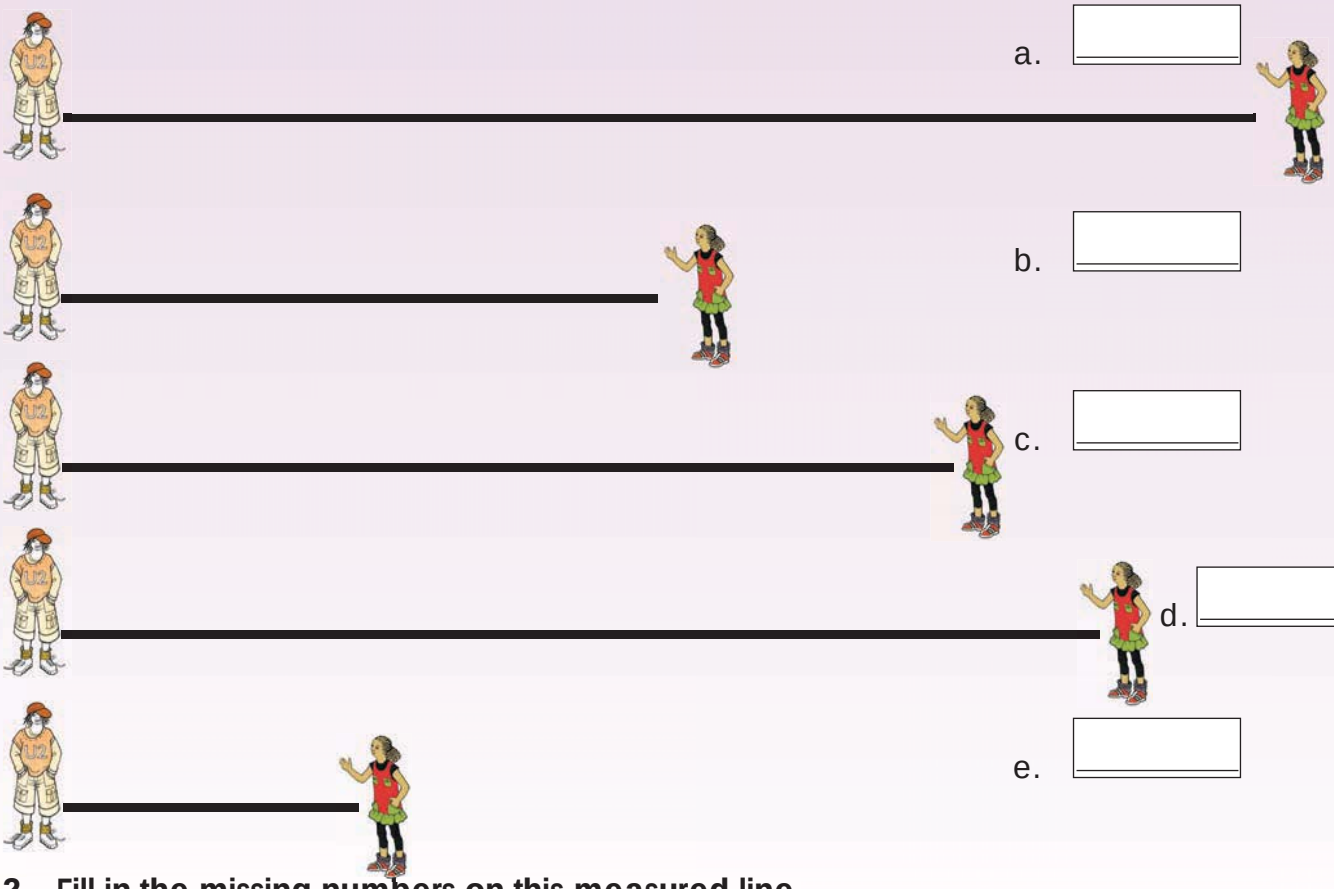
11 Length

How long is a metre? Can you take a step that is one metre long?



1. If this worm is one metre long, what is the distance from the boy to the girl?





a. _____

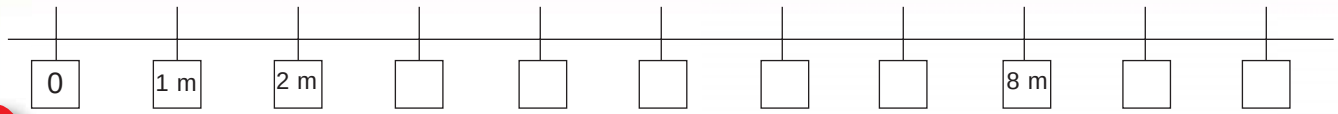
b. _____

c. _____

d. _____

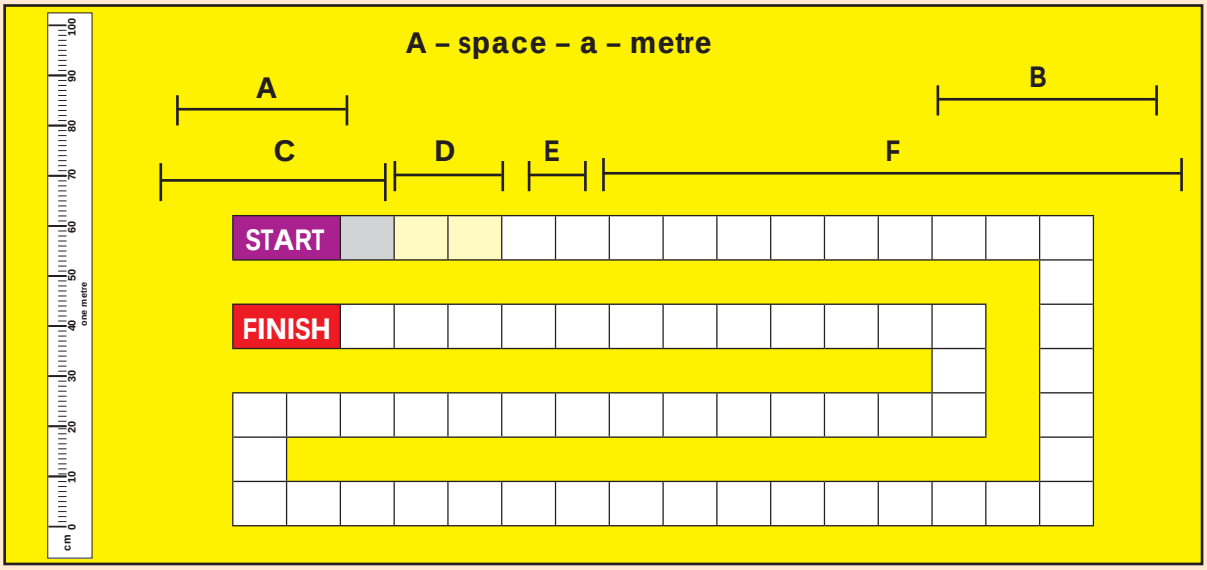
e. _____

2. Fill in the missing numbers on this measured line.

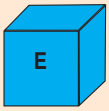




3. Use the game board to answer the questions:

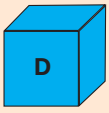


We have already rolled the dice for you. The length of the line is the number of spaces you moved. We did the first two for you, E=1 and D = 2, so you are standing on square 3 now. Carry on. Colour the blocks as you go. The first one to finish wins.



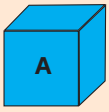
Spaces moved: 1

metres moved: 1



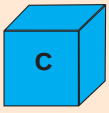
Spaces moved: 3 (1+2)

metres moved: 3



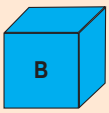
Spaces moved:

metres moved:



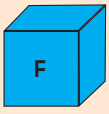
Spaces moved:

metres moved:



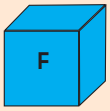
Spaces moved:

metres moved:



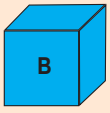
Spaces moved:

metres moved:



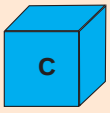
Spaces moved:

metres moved:



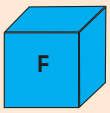
Spaces moved:

metres moved:



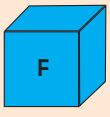
Spaces moved:

metres moved:



Spaces moved:

metres moved:



Spaces moved:

metres moved:

How many more spaces must you move to get to the finish?

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Use Cut-out 5. You also need glue and a pair of scissors.
Tile all the floors. Try and create a beautiful pattern with your tiles.



a. Total tiles: _____

Total distance (in tiles) around the floor: _____

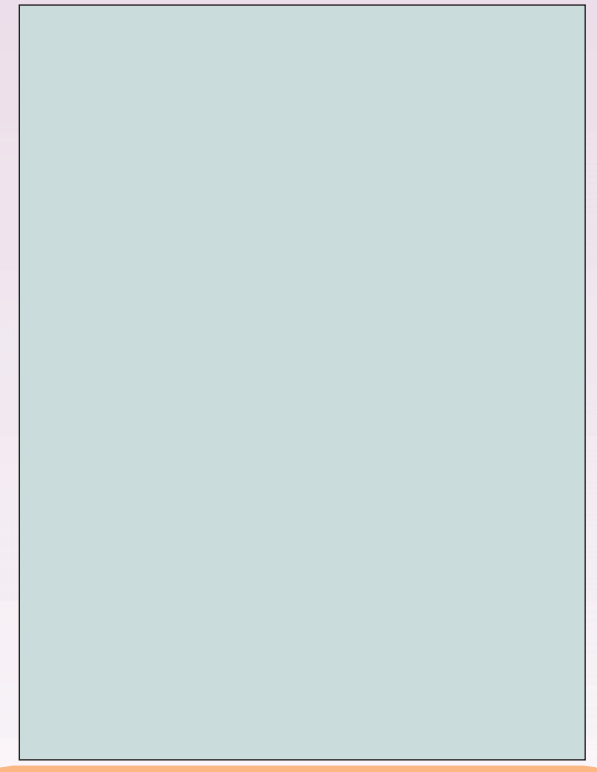
b. Total tiles: _____

Total distance (in tiles) around the floor: _____



c. Total tiles: _____

Total distance (in tiles) around the floor: _____



d. Total tiles: _____

Total distance (in tiles) around the floor: _____



A4 page ...

tile

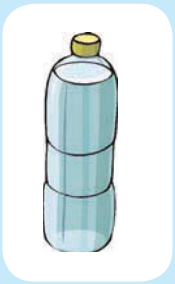
How many whole tiles from Cut-out 5 will fit on a sheet of A4 size paper?

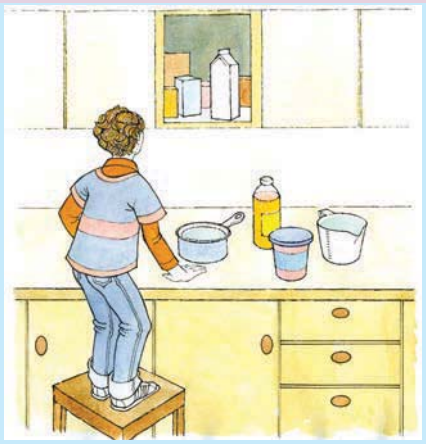
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

13 Capacity

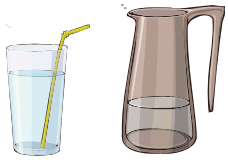
This bottle holds 1 litre.

Identify the objects in the kitchen that can hold more or less than 1 litre.



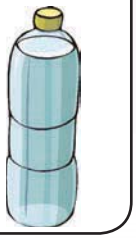


1. Answer the following questions:

a. What can take more water than a cup? 	b. Is this container full or empty? 
c. Is this bottle full or empty? 	d. Which container can take more water? 
e. Is this container full or half full? 	f. Is this bottle full? 

2. Use the bottle on the left, and estimate whether the container can take more or less than a litre.

1 litre



a. 

b. 

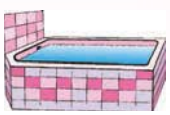
c. 

d. 

e. 

f. 

g. 

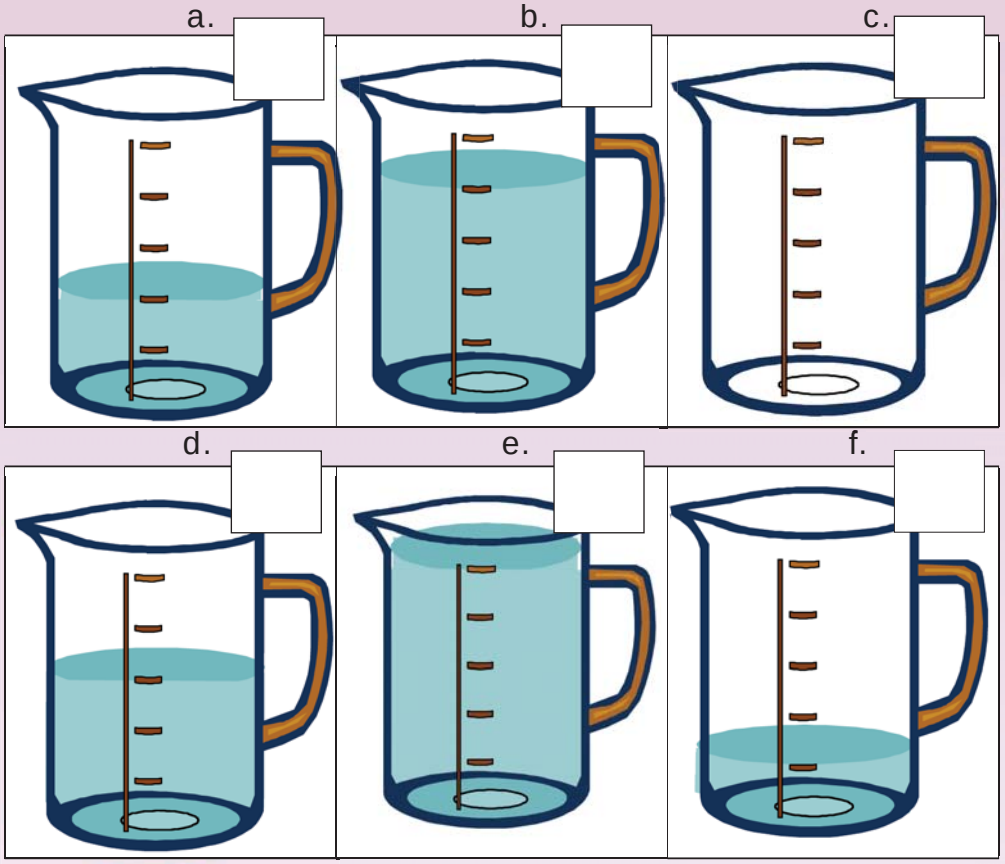
h. 

3. How many bottles of water did you take to fill each measuring jug?
The picture on the left will guide you.

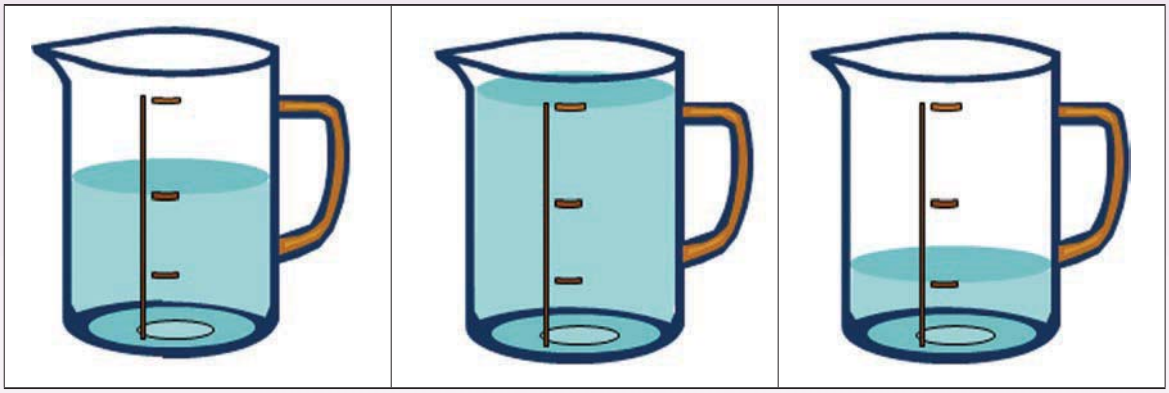


a. b. c.

d. e. f.



4. If each jug takes 3 litres of water, how many litres of water are there in each jug?



a. _____ b. _____ c. _____

Capacity fun ...

Make a list of 10 things in your house that have a capacity of 1 litre.

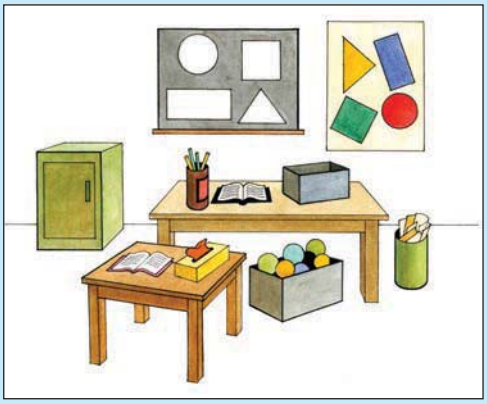
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

14 2-D Shapes and 3-D Objects

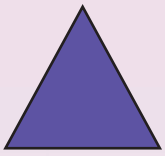
How many shapes and objects can you find?

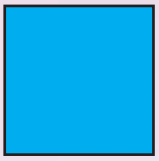
Words that can help:

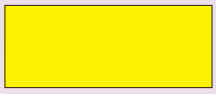
Rectangle	Circle
Square	Triangle
Box (Prism)	Ball (Sphere)
Cylinder	

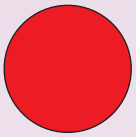


1. Name the following shapes:

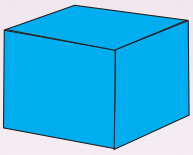
a. 

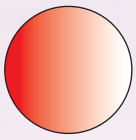
b. 

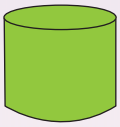
c. 

d. 

2. Name the following objects:

a. 

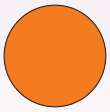
b. 

c. 

3. Colour the correct word or words.

a. 

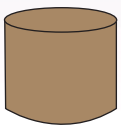
Straight edges	Curved edges

b. 

Straight edges	Curved edges

c. 

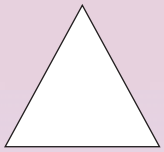
Round surfaces	Flat surfaces

d. 

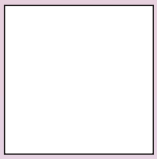
Round surfaces	Flat surfaces

4. Draw a line of symmetry.

a.



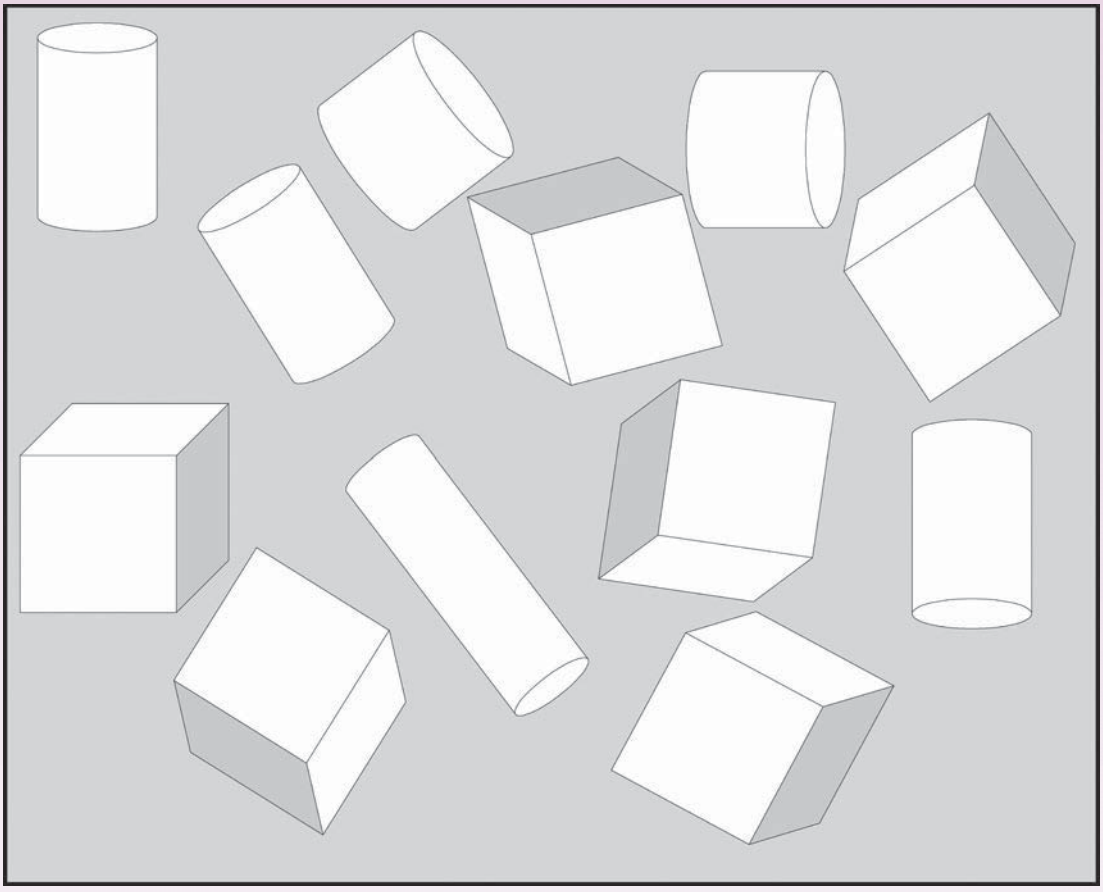
b.



c.



5. Colour all the cylinders blue.



Find pictures ...

What to do:

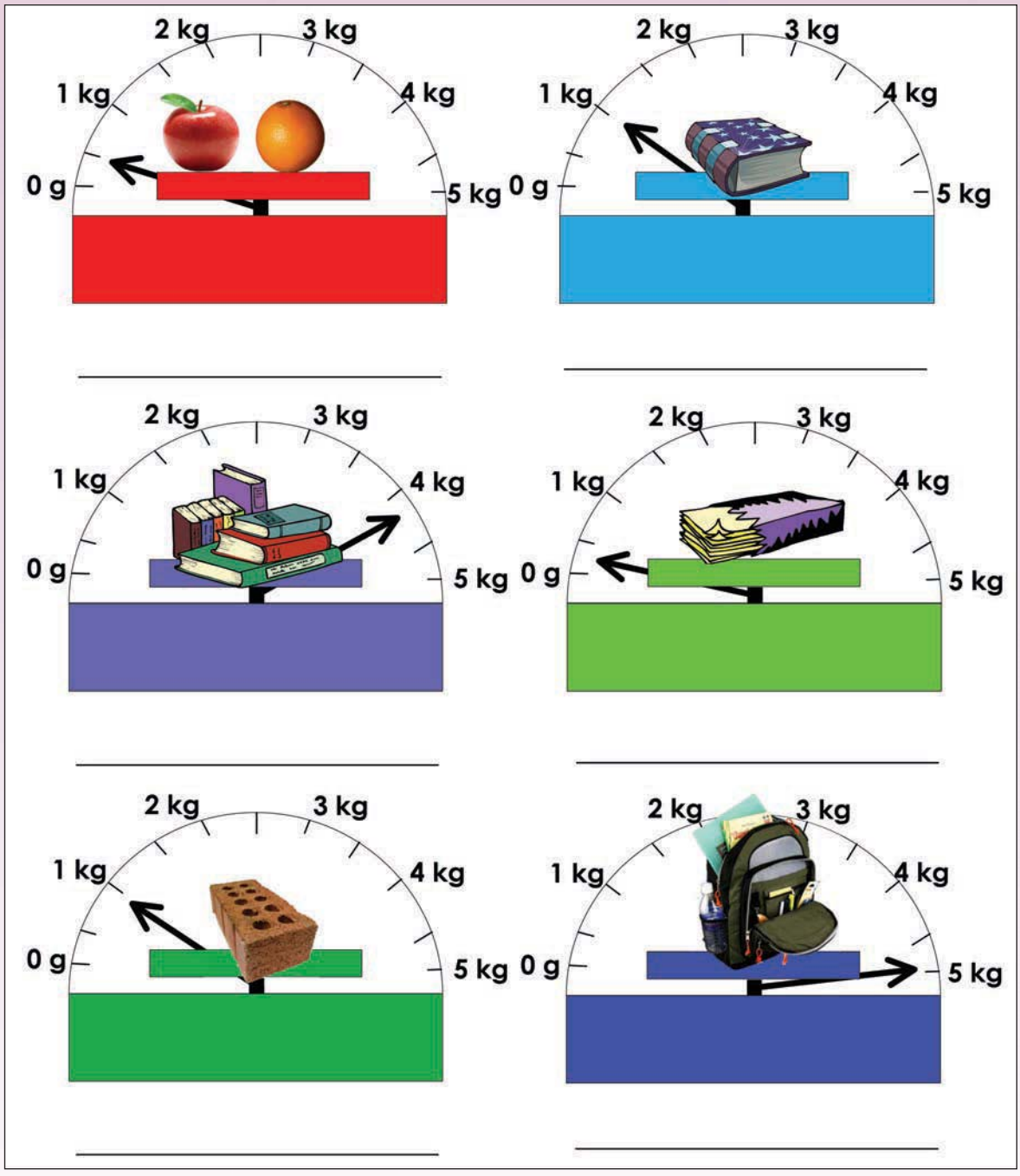
- Go through a magazine, newspaper or an advertisement.
- Find pictures of five things that look like a:
  - cylinder
  - cube
  - ball (sphere)



Which object was the easiest to find? Which object was the most difficult to find?



3. Say if the object (or objects) weigh more, less or the same as 1 kilogram.



Mass fun …

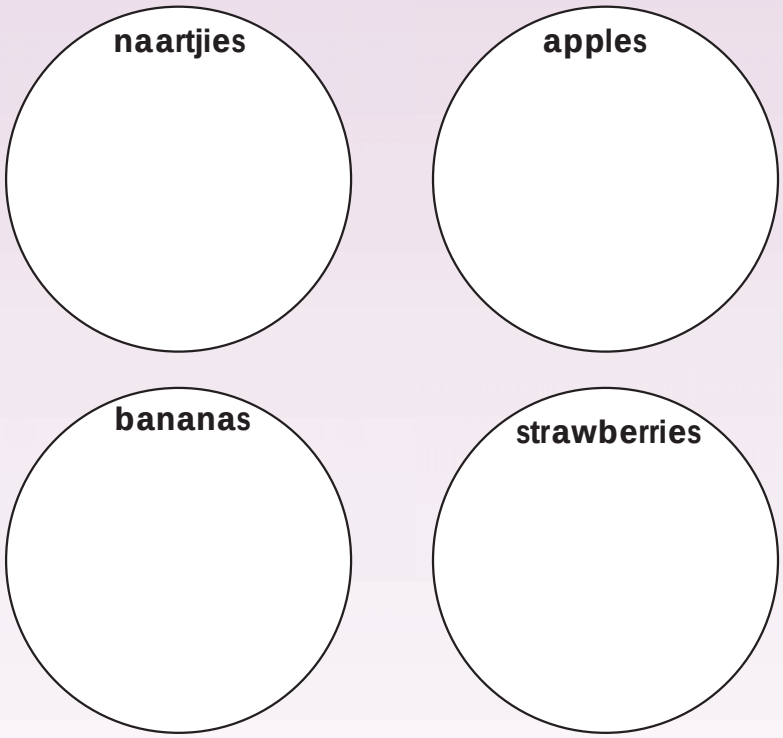
What to do:

– Make a list of 10 things in your house that weigh about 1 kilogram each.

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30



1. Sort the fruit using the circles below. Make drawings:



a. How many naartjies are there? _____

b. How many apples are there? _____

c. How many bananas are there? _____

d. How many strawberries are there? _____

2. Draw a pictograph.

Our favourite fruit

a. Do children like bananas or apples more? _____

b. Do children like strawberries or naartjies more? _____

c. What is the most popular fruit? _____

d. What is the least popular fruit? _____

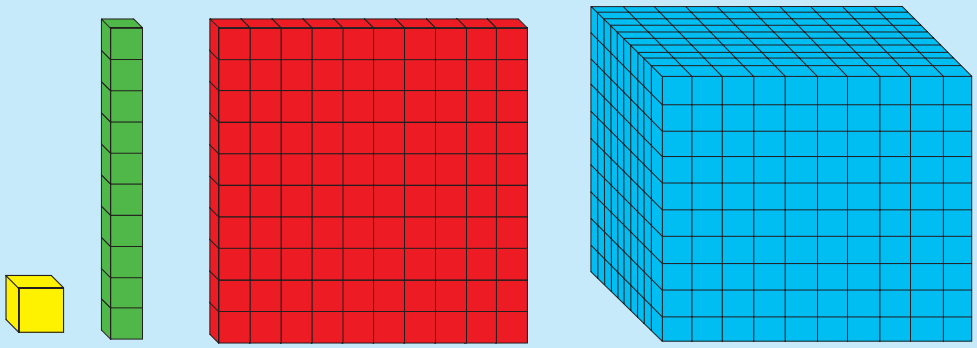
Find a graph

Search through a newspaper for graphs. Bring one example of a graph to the classroom.



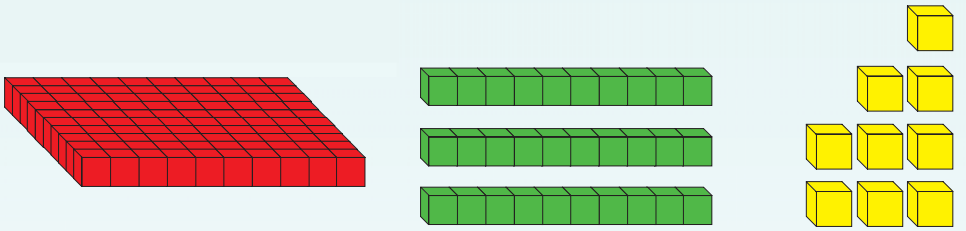
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

How many cubes are there in total?

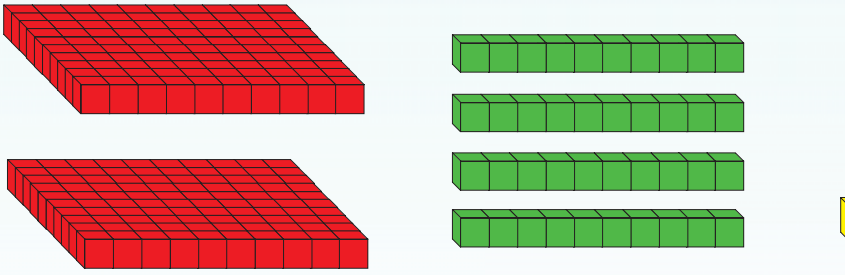


1. Count the cubes.

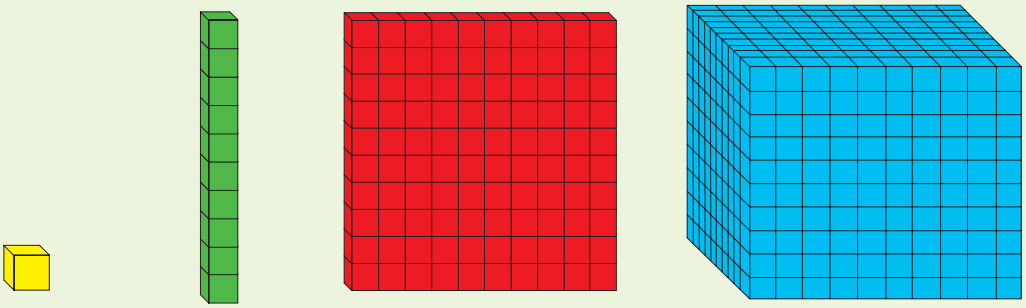
a.



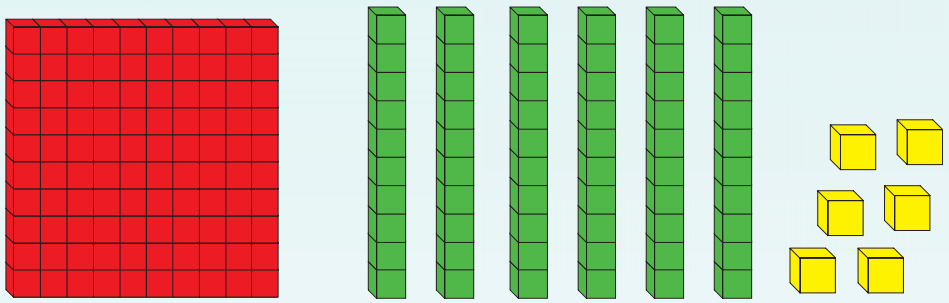
b.



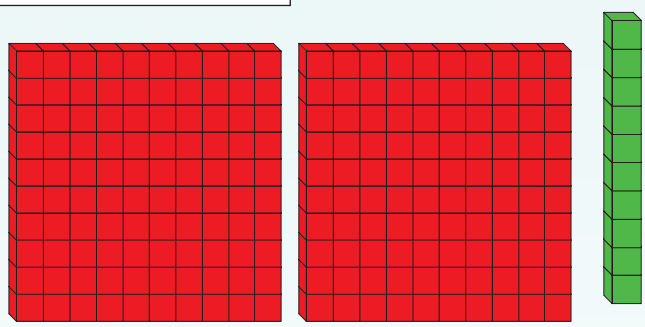
2. How many cubes are there in total?



a.

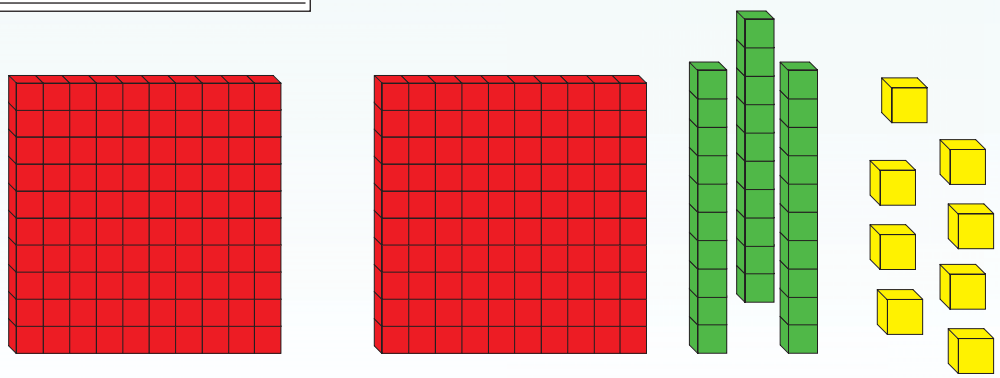


b.





c.

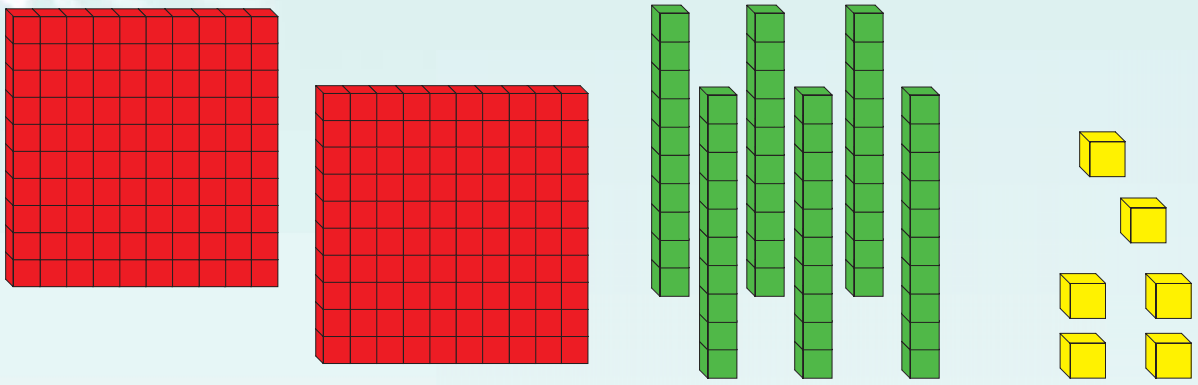


continued ☛

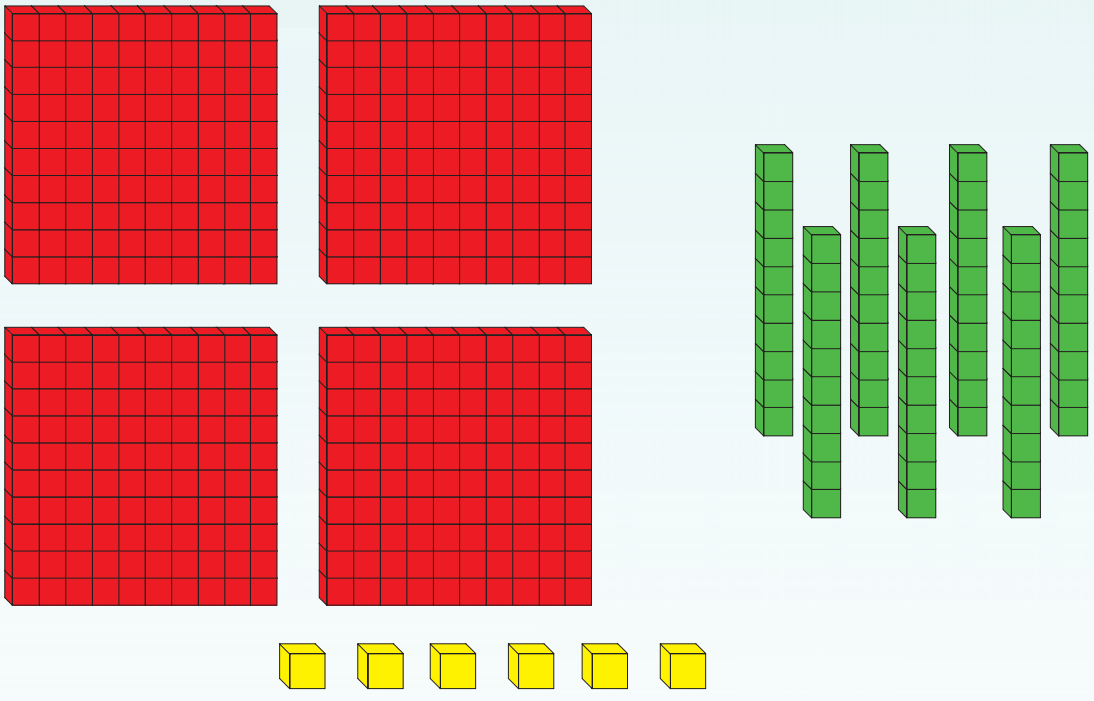
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Numbers to 1 000 continued

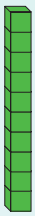
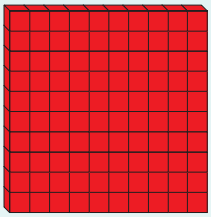
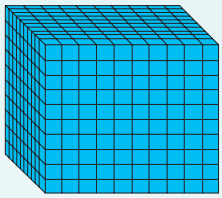
d.



e.



3. Match column A with column B

A	B
a. 	1 0 0
b. 	1
c. 	1 0
d. 	1 0 0 0

4. Calculate the following:

a. 1 0 + 1 = 1 1 = 11

b. 1 0 + 1 0 0 + 1 = 1 1 1 = 111

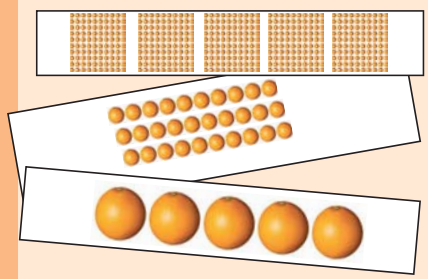
c. 1 0 0 + 1 0 0 + 1 0 0 + 1 0 + 1 0 + 1 0 + 1 + 1 =

d. 1 + 1 + 1 + 1 0 + 1 0 + 1 0 + 1 0 + 1 0 + 1 0 0 =

e. 1 0 + 1 0 + 1 0 + 1 0 0 + 1 0 0 + 1 0 0 + 1 0 0 + 1 =

How quick are you?

What you need:
- Cut-out 1.

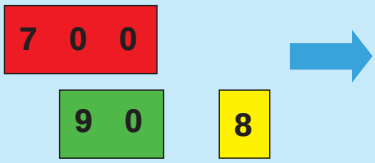


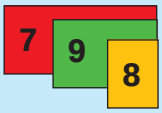
What to do:
- Play in pairs.
- Cut out the cards from the back of your books.
- Place them face down on your desk.
- You choose five cards and your partner chooses five.
- See who can give the total the quickest.
- Add 100 to your answer.
- Check your partner's answer.
- Do the same with 6/7/8/9/10 cards. Remember to add 100.
- The person with the most correct answers is the winner.

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

18 Number 0 – 1 000

What number will these cards make?





798



In words it is

Seven hundred and ninety-eight

Seven hundred and ninety-eight

1. Complete the following:

a. 600 + 40 + 3 = _____

b. 300 + 80 + 5 = _____

c. 400 + 10 + 9 = _____

d. 100 + 20 = _____

e. 800 + 6 = _____

2. Complete the following:

a. 100 + 60 + 4 = _____

b. 200 + 10 + 8 = _____

c. 900 + 90 + 9 = _____

d. 600 + 20 = _____

e. 700 + 7 = _____

3. Write the number in the correct column:

		Hundreds	Tens	Units
a.	923	**9**	**2**	**3**
b.	113			
c.	204			
d.	580			
e.	600			

4. You need some coloured pencils do complete this question.

Complete the following using the first question to guide you.

a. 247 = **2 hundreds** + **4 tens** + **7 units**

b. 892 = _____

c. 384 = _____

d. 566 = _____

e. 201 = _____

5. Complete the table below:

		Expanded notation	Words
a.	493		
b.	900		
c.	187		
d.	349		
e.	420		

6. What is the value of the underlined digit?

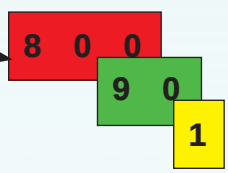
a. 8<u>9</u>1 _____

b. 32<u>0</u> _____

c. <u>5</u>54 _____

d. 6<u>3</u>2 _____

e. 0<u>4</u>7 _____



Find the number.

What to do:

- Bring a newspaper to class.
- Find five 3-digit numbers.
- Write them down.
- Share with the class what each number means.

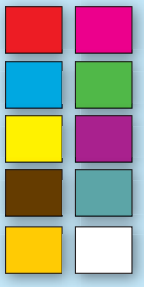
What you need:
- A newpaper



15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

19 More numbers 0 – 1 000

Choose a colour on the left. Find the matching colour on the right. Choose 5 numbers smaller and 5 numbers bigger than the number (where possible).



235 235 10 235 361 487 145 599 985 701

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

a. 896, 689, 888, 698, 986 _____

b. 426, 626, 642, 264, 269 _____

c. 735, 365, 373, 335, 533 _____

d. 400, 404, 304, 340, 430 _____

e. 999, 292, 922, 902, 920 _____

2. Fill in < or >.

a. 623 ____ 263

b. 196 ____ 916

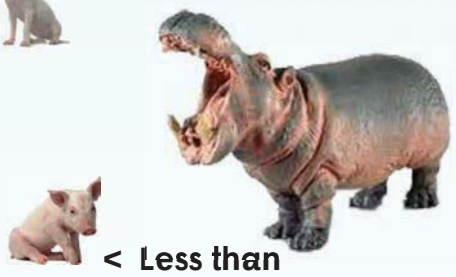
c. 505 ____ 500

d. 334 ____ 344

e. 829 ____ 892



Greater than >



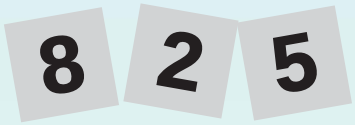
< Less than

3. What is the value of the digit 4 in these numbers?

a. 964 ____ b. 204 ____ c. 468 ____

d. 459 ____ e. 341 ____

4. Complete the following:



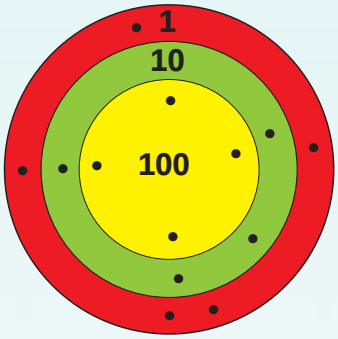
a. Use each digit once. Make the smallest 3-digit number: _____

b. Use each digit once. Make the largest 3-digit number: _____

c. You can use a digit twice. Make the smallest 3-digit number: _____

d. You can use a digit twice. Make the largest 3-digit number: _____

5. Complete the following:



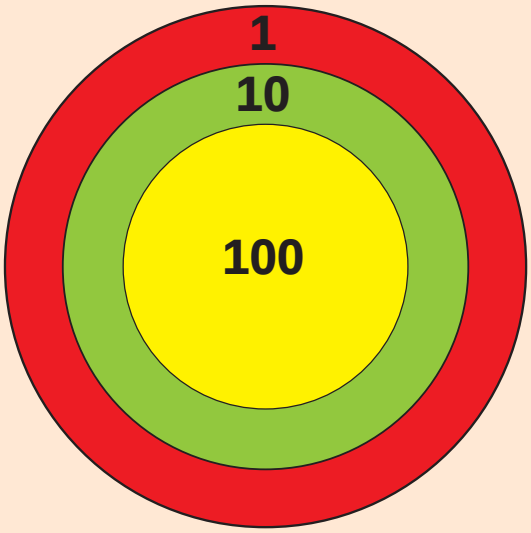
You tossed some stones on a game board. This were your result. If you add the numbers, what is the total?

_____

Who can get the largest number?

What you need:
- The game board on the right.
- Small stones.

What to do:
- Toss your stone on the board.
- Write down the number it lands on.
- Do this ten times.
- Add the numbers.
- The winner in a group is the person with the biggest number.



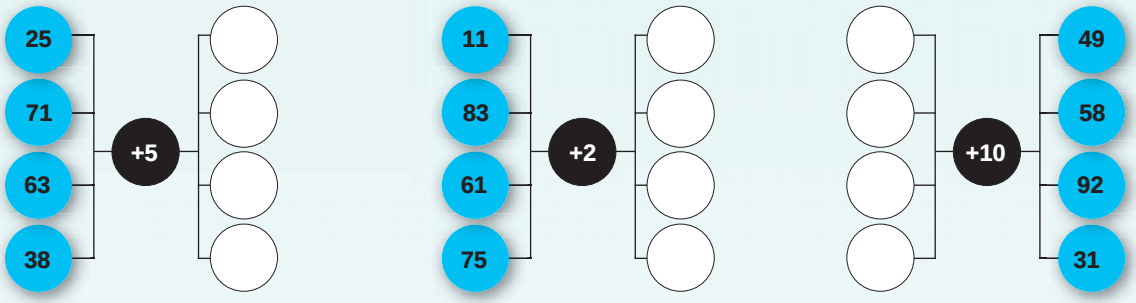
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

20 Number Patterns

Quick recall: how fast can you answer the following?

1 + 4 =	1 x 5 =	1 x 4 =	4 + 5 =
4 x 7 =	4 + 6 =	1 + 5 =	6 + 5 =
3 x 5 =	4 x 5 =	3 x 4 =	5 x 5 =
4 + 8 =	6 x 5 =	9 x 5 =	2 + 4 =
7 + 5 =	4 + 4 =	3 + 5 =	2 x 5 =

1. Complete the spider diagram.



2. Extend the following patterns.

a. 6, 8, 10, ____, ____, ____

b. 12, 15, 18, ____, ____, ____

c. 30, 35, 40, ____, ____, ____

d. 80, 70, 60, ____, ____, ____

e. 4, 7, 10, ____, ____, ____

f. 12, 22, 23, ____, ____, ____

g. 31, 29, 27, ____, ____, ____

h. 10, 14, 18, ____, ____, ____

i. 49, 44, 39, ____, ____, ____

j. 29, 26, 23, ____, ____, ____

3. Identify the rule in each case.

a. 44, 49, 54, 59 _____

b. 67, 77, 87, 97 _____

c. 65, 68, 71, 74 _____

d. 92, 89, 86, 83 _____

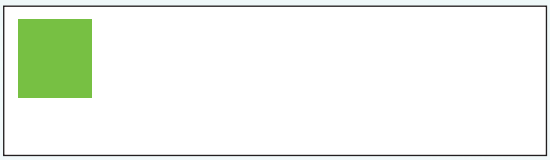
4. Patterns are shown here. Explain each one in words.

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









Puzzles on a number board

Look at the patterns on the number board. Describe each one in your own words.

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

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

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

What is the difference between the numbers?

1	2	3	4	5	6	7	8	9	10
11	21	31	41	51	61	71	81	91	101
110	120	130	140	150	160	170	180	190	200
100	200	300	400	500	600	700	800	900	1 000
90	190	290	390	490	590	690	790	890	990

1. What number comes next?

a. 8, 9, 10, _____

b. 20, 30, 40, _____

c. 55, 65, 75, _____

d. 95, 195, 295, _____

e. 645, 745, 845, _____

f. 912, 922, 932 _____

2. Complete the table: Add to the given number.

Number	Add 100	Add 10	Add 1
233			
98			
478			
399			
862			

3. Fill in the missing number:

a. $3 + \square = 10$

b. $17 + \square = 20$

c. $90 + \square = 100$

d. $85 + \square = 100$

e. $78 + \square = 100$

f. $325 + \square = 350$

g. $312 + \square = 400$

h. $350 + \square = 525$

i. $238 + \square = 400$

j. $564 + \square = 800$

4. Complete the table.

		Complete up to the next 10.	Complete up to the next100.
a.	35	$35 + \boxed{5} = 40$	$35 + \boxed{65} = 100$
b.	265	$265 + \square = 270$	$265 + \square = 300$
c.	342	$342 + \square = 350$	$342 + \square = 400$
d.	486	$486 + \square = 490$	$486 + \square = 500$
e.	964	$964 + \square = \square$	$964 + \square = \square$

continued ☛

Addition continued

Examples:

Example 1:

134 + 123

100	30	4	+	100	20	3

= 100 + 100 + 30 + 20 + 4 + 3

= 200 + 50 + 7

= 257

Example 2:

468+ 274

400	60	8	+	200	70	4

= 400 + 200 + 60 + 70 + 8 + 4

= 600 + 130 + 12

= 600 + 100 + 30 + 10 + 2

= 700 + 40 + 2

= 742

5. Use both methods above to calculate the following.

a. 644 + 120

			+			

= 600 + 100 + 40 + 20 + 4

= _____

= _____

b. 143 + 152

			+			

= _____

= _____

= _____

c. 268 + 324

= _____

= _____

= _____

= _____

= _____

d. 374 + 287

= _____

= _____

= _____

= _____

= _____

e. 394 + 468

= _____

= _____

= _____

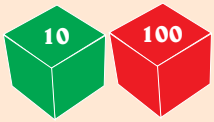
= _____

= _____

What is the size of your number:

What you need:

- Use the 10s, and 100s dice you made before.
- Piece of paper.



What to do:

- Individual game against a group or the class.
- Roll the 10s dice.
- Add the number landed on, to the first number on the blue card. Write your additon sum on a piece of paper.
- Do the same with the 2nd to the 5th number.

115
127
138
149
192

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

22 Addition Problems

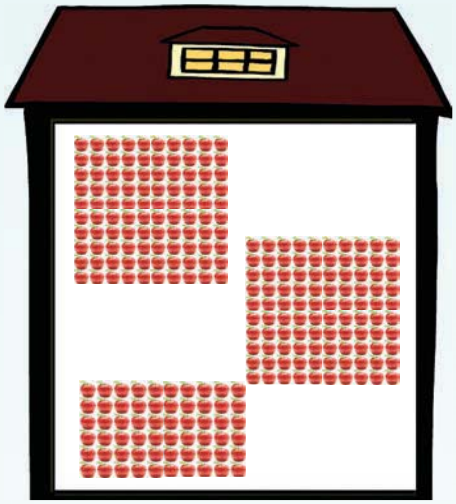
How fast can you answer this?

- **Add** 800 + 30 + 5.
- What is the **sum of** 300 and 400?
- How many do 100 and 500 make **altogether** ?
- What three numbers have **a total of** 200?
- Add 25 **and** 18.
- What is **the sum of** 100 and 52?
- How many **altogether** are 42 and 59?
- Which three numbers have **a total of** 80?

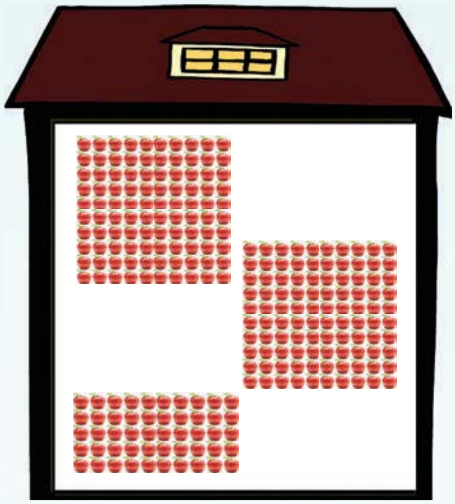


1. Solve the following problems. The pictures may guide you. Also use the blue word.

a. A juice company has 260 apples. They get another 250 apples. How many apples do they have now?



and



200 + 200 + ____ + 50

= _____

= _____

= _____

= _____



b. Mandla had 975 oranges. He bought another 155 oranges.
How many oranges does he have?

i. What picture do you see when you think about this problem? Draw it.



ii. What operation should you use? _____

iii. Solve the problem. Write it down in your writing book.

Continue on an extra sheet of paper.

c. Our class collected 421 empty plastic bottles to recycle. The other class collected 375 bottles. How many empty plastic bottles did the two classes collect altogether?

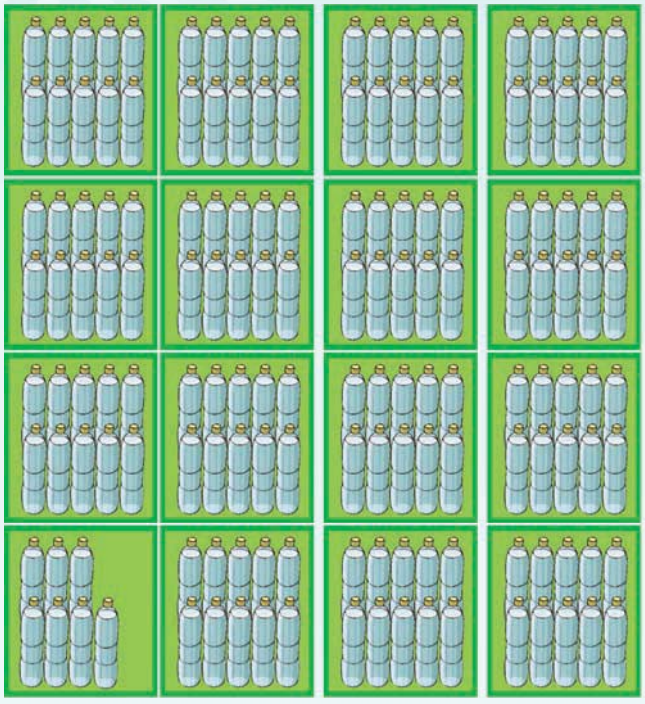
Continue on an extra sheet of paper.

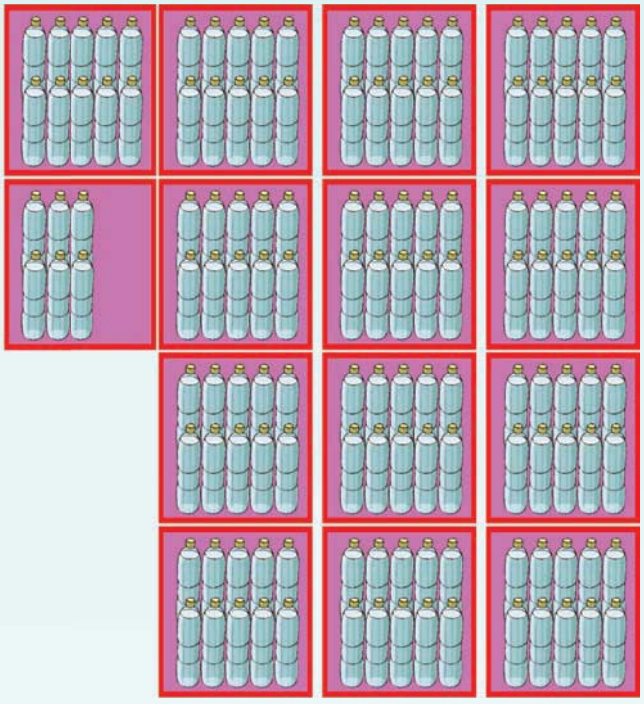
continued ☛

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

22b Addition Problems continued!

2. Look at the pictures below and write an interesting addition word sum.





Continue on an extra sheet of paper.

3. Write an appropriate and interesting word sum for: 439 and 514. Solve it.

Continue on an extra sheet of paper.

Counting houses ...

There were 700 + 10 + 4 houses in Extension 4. Then

400 + 80 + 9 extra houses were built in Extension 4.

How many houses are there now in Extension 4?

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

23 Subtraction

What is the difference between the numbers?

1	2	3	4	5	6	7	8	9	10
18	28	38	48	58	68	78	88	98	108
20	30	40	50	60	70	80	90	100	110
100	200	300	400	500	600	700	800	900	1 000
990	1 990	2 990	3 990	4 990	5 990	6 990	7 990	8 990	9 990

1. What number comes next?

a. 5, 6, 7, _____

b. 10, 20, 30, _____

c. 135, 235, 335, _____

d. 284, 294, 304, _____

e. 416, 516, 616, _____

f. 574, 674, 774, _____

2. Complete the table: Subtract from the given number.

Number	Subtract 1	Subtract 10	Subtract 100
165			
124			
367			
519			
893			



3. Fill in the missing number:

a. 4 – ☐ = 0

b. 13 – ☐ = 10

c. 75 – ☐ = 70

d. 72 – ☐ = 70

e. 113 – ☐ =100

f. 140 – ☐ = 100

g. 341 – ☐ = 300

h. 945 – ☐ = 800

i. 864 – ☐ = 800

j. 985 – ☐ = 850

continued ☛

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Examples:

Example 1:

913 – 458

900	10	3	+	400	50	8

= (900 – 400) + (10 – 50) + (3 – 8)

= (500) + (0 – 50) + (13 – 8)

= (400) + (100 – 50) + (13 – 8)

= 400 + 50 + 5

= 455



4. Complete the following using the method above:

a. 798 – 164

= (700 – 100) + (90 – 60) + (8 – 4)

= _____

= _____

b. 683 – 241

= _____

= _____

= _____

c. 929 – 174

= _____

= _____

= _____

= _____

= _____

d. 872 – 384

= _____

= _____

= _____

= _____

= _____

e. 946 – 597

= _____

= _____

= _____

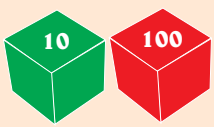
= _____

= _____

What is the size of your number:

What you need:

- Use the 10s and 100s dice previously made.
- Piece of paper.



What to do:

- Individual game against a group or the class.
- Roll the 10s dice.
- Subtract the number landed on, to the first number on the blue card. Write your subtraction sum on a piece of paper.
- Do the same with the 2nd to the 5th number.
- Repeat the activity with the 100s and 1 000s dice.
- Learners check each other's subtraction sums.
- The winner is the person with the most correct answers.

984
421
843
577
659

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

24 Subtraction Problems

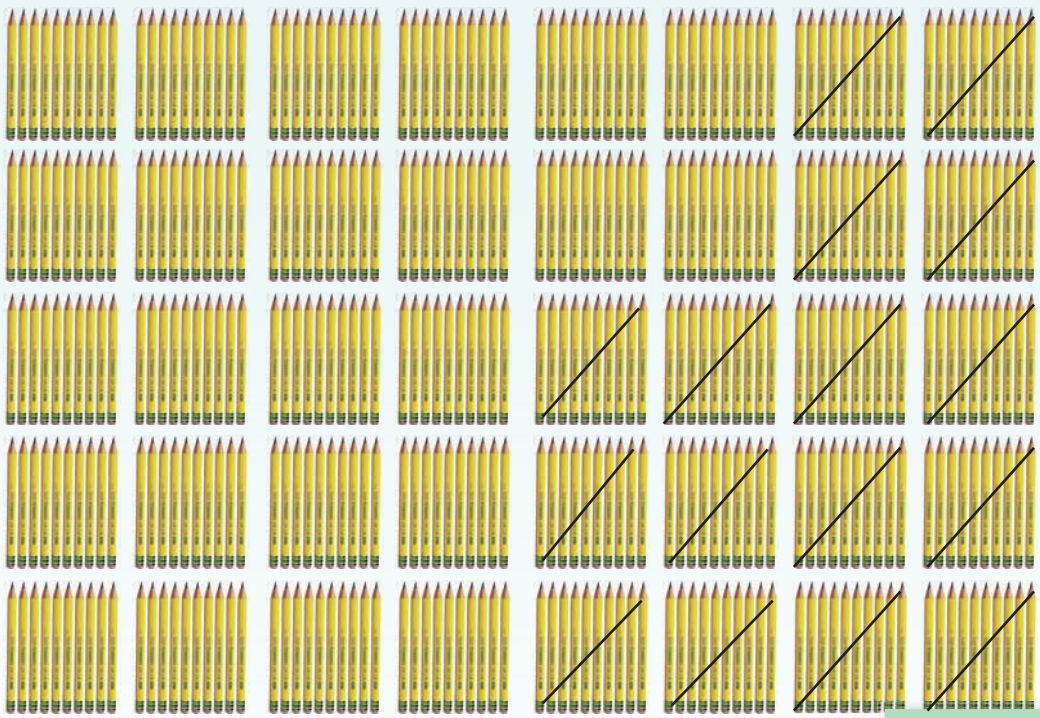
How fast can you answer these?

- **Subtract** 7 000 from 8 000.
- What is the **difference between** 650 and 370?
- **Minus** 700 and 85.
- **Decrease** 100 000 by 10 000.
- **Subtract** 9 000 **and** 820.
- **Reduce** 755 by 102.
- **Take** 150 **from** 1 003.
- **Take away** 37 **from** 2 000.



1. Solve the following problems. The pictures may guide you. Also use the blue word.

a. Our school bought 420 pencils. We used 180 pencils. How many pencils are left?





420 - 180

=

=

=

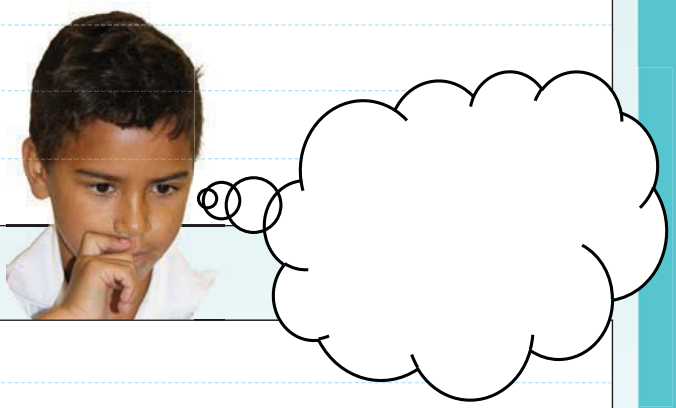
=



b. Mpo is selling pencils. She had 800 pencils. She sold 257 pencils.
How many pencils does she have left?

i. What picture do you see when you think about this problem? Draw it.

Continue on an extra sheet of paper.



ii. What operation should you use?

Continue on an extra sheet of paper.

iii. Solve the problem. Write it down in your workbook.

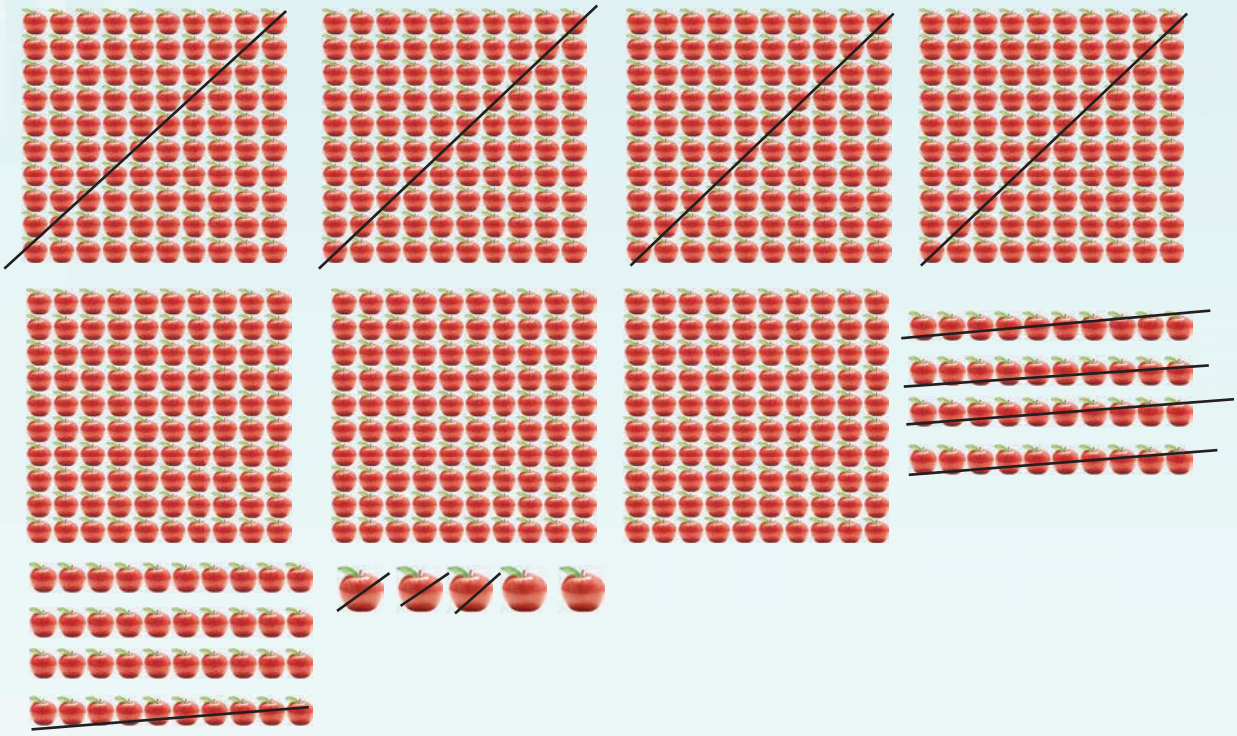
Continue on an extra sheet of paper.

continued ☛

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Subtraction Problems continued!

2. There were 785 apples at the fruit shop. They sold 453. How many apples were left?



Continue on an extra sheet of paper.

3. Write an appropriate and interesting subtraction word sum for: 723 and 189. Solve it.

Continue on an extra sheet of paper.

Your own story

Look at the picture and make your own subtraction story.



15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

25 Addition and Subtraction

How fast can you answer these?

- **Add** 500 and 90.
- **Subtract** 70 from 300.
- 400 **plus** 46 is .....
- The **sum** of 350 **and** 420 is ....
- **Take** 500 **from** 800.
- **Decrease** 950 by 230.
- **Increase** 150 by 370.
- 225 **and** 385 are ....



Use the colours to help you to solve the word sums.



1. Complete the table below:

	Add 80	Subtract 40	Add 200	Subtract 300
420				
510				
690				
730				
555				

2. Answer the following questions:

a. What is the opposite of + ? _____

b. What is the opposite of − ? _____

3. Calculate the following. Do the calculations in your workbook.

a. 452 + 336 =

b. 289 + 574 =

Continue on an extra sheet of paper.

c. 967 – 153 =

d. 710 – 538 =

Continue on an extra sheet of paper.

4. Check your answers for each of the above calculations, using the opposite operation.

Continue on an extra sheet of paper.

continued ☛

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

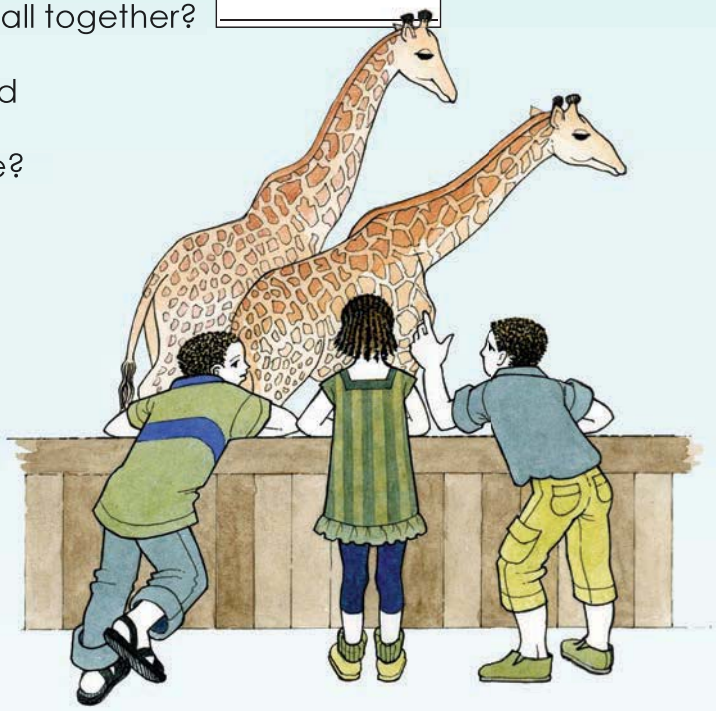
5. Solve the following problems:

a. Thabo and his sisters were counting animals at the zoo. Thabo counted 234 animals, his sister, Susan counted 1 004 birds, and their younger sister, Lindy, counted 538 animals.

i. How many animals did they count all together? _____

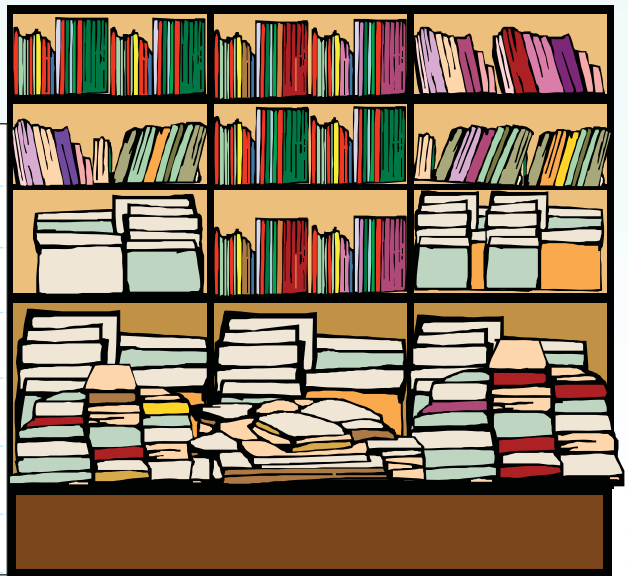
ii. The guide told them that they could expect to see 2 000 animals. How many animals did they not see?

_____



b. The book store bought 1200 new books and there were already 1250 on the shelves. They were all put on sale and 1 625 books were sold.

i. How many books were on the shelves before the sale?



Continue on an extra sheet of paper.

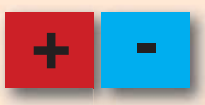
ii. How many books were left after the sale?

Continue on an extra sheet of paper.

iii. If the bookshop sells another 500 books, how many books are left?

Continue on an extra sheet of paper.

Coloured numbers



200	500	75	175
10	450	800	20
325	250	120	350
15	150	700	400

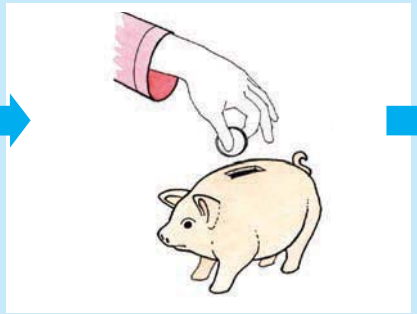
What to do:
Play in pairs.

- The first player will say: 'Add green numbers'
- The second player can take any two green numbers and add them. If the player is correct, he or she will get one point.
- The second player will say: 'Subtract yellow numbers'. The first player makes a subtraction sum with any two yellow numbers.
- Carry on playing. The first person with a score of 10 is the winner.

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

26 Let's talk about money

Talk about money. Look at the picture and make your own story.


1. Colour the combination that will give you:

a. **R5** — R1 | R2 | R2 | R1

b. **R2** — R1 | 50c | R1 | 50c

c. **R1** — 20c | 50c | 20c | 10c | 10c | 5c

d. **R1,50** — R1 | R1 | 50c | 50c

e. **R1,75** — R1 | R10 | 20c | 50c | 10c | 5c

2. How much money will I have if I save the following amounts?

a. R2 + R 1 = _____

b. R5 + R 20 = _____

c. R10 + 20c = _____

d. R20 + 50c = _____

e. R1 + 5c = _____

3. How much money will I have left if I spend the following amounts:

a. R 5 – R 2 = _____

b. R 15 – 50c = _____

c. 50 c – 2c = _____

d. R12 – R 1,50c = _____

e. R5 – 0,70c = _____

4. Calculate the following:

a. R12 + R 2 – R 5 = _____

b. R2,50 + 50c – 20c = _____

c. R15 + 5c – 20c = _____

d. R5 + R 1 – R 2 = _____

e. R7,25 – R1,05 + 20c = _____

5. How many combinations can you make to get R1,00 ?

Continue on an extra sheet of paper.

Big five ....

What does it mean if I pay with "buffalos"?



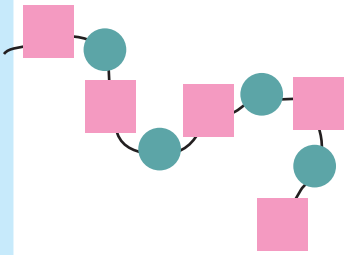
What do the big five and money notes have in common?



15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

27 More Patterns

What is a pattern? Look at the examples to guide you.



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

2 4 6 8 10

1. Which of these are patterns? Answer with reference to what you said a pattern is.

a. 2, 4, 6, 8, ... _____

b. 1, 9, 2, 7, 3, 4,... _____

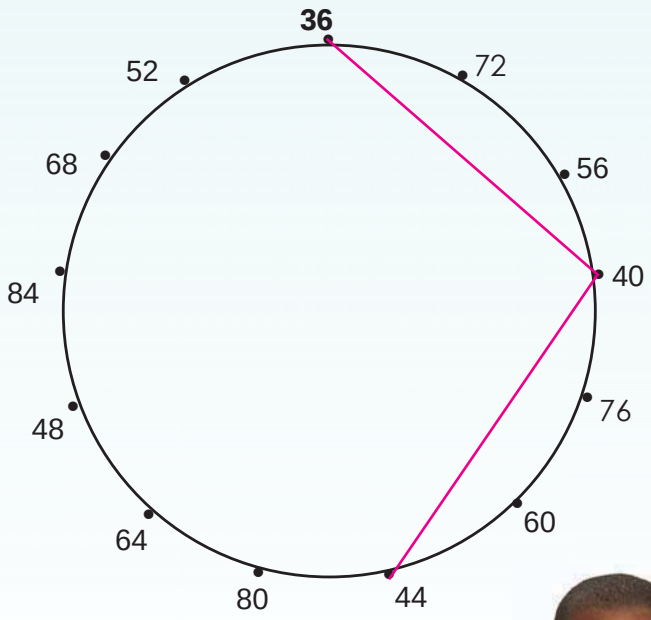
c. 4, 7, 10, 13, 14, 17, 20, ... _____

d.  _____

e.  _____

f.  _____

2. Complete the pattern on the circle. We have started it for you.



a. Describe the pattern.

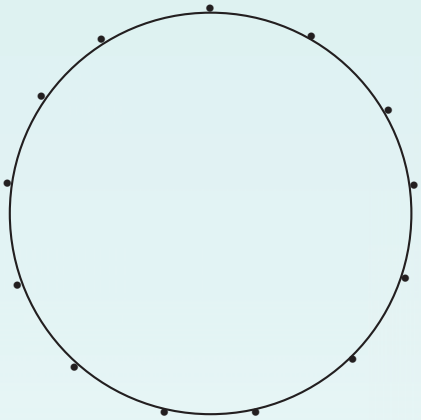


Use colour pencils to make your pattern even more beautiful.

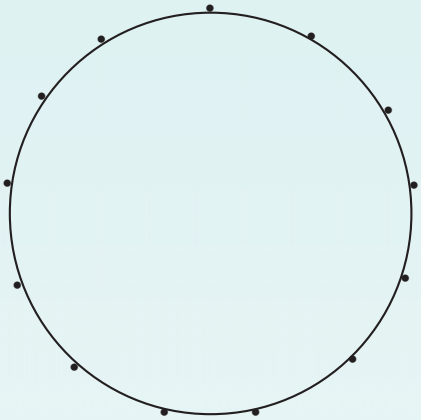
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14

3. Make two of your own patterns. They should be similar to the pattern in question 2.

a.



b.



Describe your pattern:

Describe your pattern:

4. What is the next number:

a. 1, 3, 5, 7, 9, _____

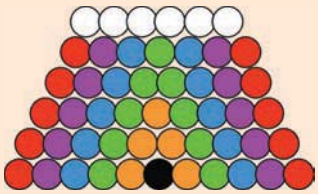
b. 81, 72, 63, 54, _____

c. 1, 3, 6, 10, _____

d. 98, 88, 79, 71, 64, _____

Pattern fun

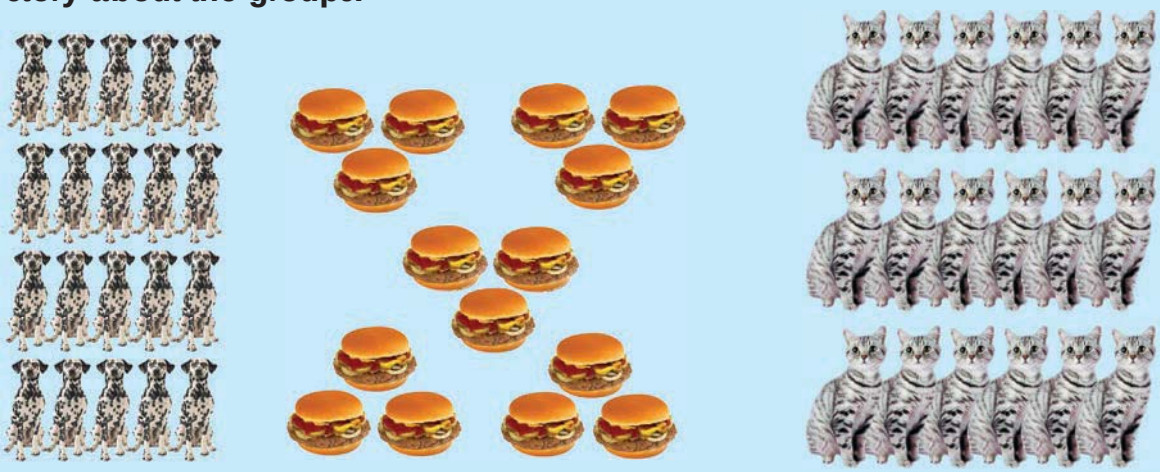
Complete the pattern until you have only one circle at the top.



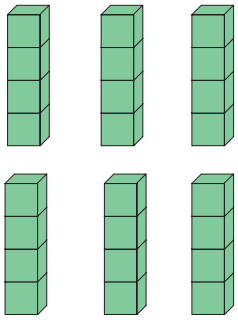
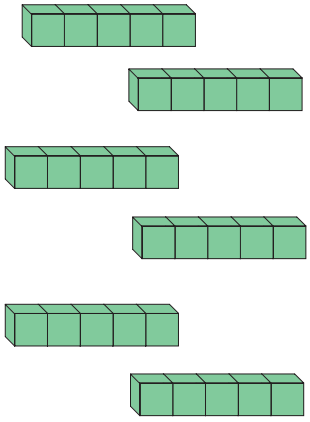
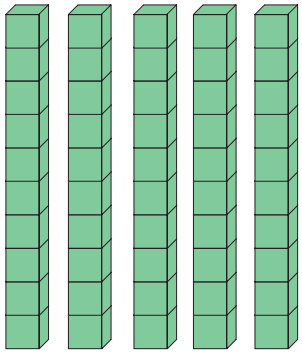
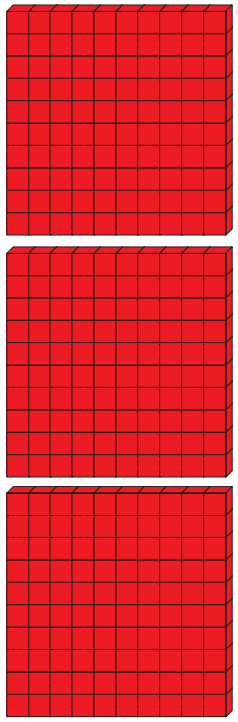
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

28 Grouping problems

Tell a story about the groups.



1. How many groups are there?

☐ groups of ☐	☐ groups of ☐	☐ groups of ☐	☐ groups of ☐
			
Addition sum: _____	Addition sum: _____	Addition sum: _____	Addition sum: _____
Multiplication sum: _____	Multiplication sum: _____	Multiplication sum: _____	Multiplication sum: _____

2. Complete drawings and multiplication sums of the following:

4 groups of 2 each Multiplication sum: _____	5 groups of 3 each Multiplication sum: _____	6 groups of 10 each Multiplication sum: _____
4 groups of 10 each Multiplication sum: _____	2 groups of 100 each Multiplication sum: _____	6 groups of 100 each Multiplication sum: _____

How fast can you add these?

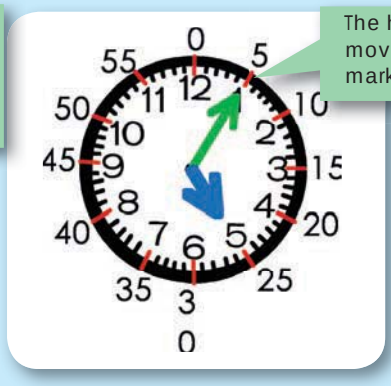
Follow the path and add the coins.

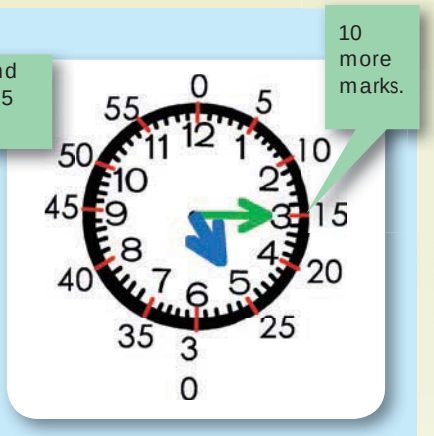


15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

What is the time? Give your answer in hours and minutes.







5:00 → 5 minutes later → 5:05 → 10 minutes later → 5:15

1. Draw a line from the clock face to the digital clock with the same time.

a.



7:50

b.



7:15

c.



7:05

d.



6:45

2. Write the following as digital time.

a.



b.



c.



3. Write down the times shown on the clock:



a. _____ b. _____ c. _____ d. _____ e. _____



f. _____ g. _____ h. _____ i. _____ j. _____

4. Draw in the following times on the clocks:



a. 1 o'clock b. 3 o'clock c. 8 o'clock d. 11 o'clock e. 6 o'clock



f. 3:45 g. 5:20 h. 9:30 i. 10:40 j. 12:10

How many ...

... hours do you sleep each night? _____

... hours do you go to school each day? _____

... minutes do you take to eat your lunch? _____

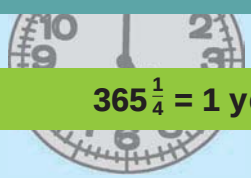
... minutes do you take to get dressed in the morning? _____

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

30 More time

What is the time?

60 seconds = 1 minute



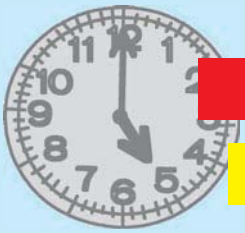
$365\frac{1}{4}$ = 1 year

+/- 4 weeks = 1 month

24 hours = 1 day



12 months = 1 year



60 minutes = 1 hour

7 days = 1 week

1. Answer these questions on seconds, minutes and hours.



a. The red hand on the clock shows us _____.

b. It takes _____ seconds to complete one circle.

c. _____ seconds = 1 minute.

d. The green hand on the clock shows us _____.

e. It takes _____ minutes to complete one circle.

f. _____ minutes = 1 hour.

g. The blue hand on the clock shows us _____.

h. It takes _____ hours to complete one circle.

i. _____ hours = one day, _____ hours = $\frac{1}{2}$ a day.

j. If the red hand moves from 12 to 1, it moves _____ seconds.

k. If the green hand move from 12 to 2, it moves _____ minutes.

l. If the blue hand move from 12 to 5, it moves _____ hours.

2. Complete the following:

a.

Minutes	1	2	3	4
Seconds	60			

b.

Hours	1	2	3	4
Minutes				

c.

Day	1	2	3	4
Hours				

3. Complete the questions on days, weeks, months and years.

a. Complete the table below filling in the number of days in each month.

Month	January	February	March	April	May	June	July	August	September	October	November	December
Days												

b. Will February always have the same number of days? _____ Why or why not?

_____

c. Complete the table and then answer the questions below.

Month	January	February	March	April	May	June	July	August	September	October	November	December	Total
Days													
Days left													

i. How many months are there in a year? _____

ii. How many days are there in a year? _____

iii. Will we have the same number of days each year? _____

Why or why not? _____

Note that the number of days left depends on when you do this.

Calendar art

Make a calendar for the month of your birth.

Decorate it with a photograph or a drawing of yourself.

Give it to someone special.

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

31 Data

Write your name as a code.

Decode. What is my name?

22 5 **18** 15 **14** 9 **3** **1**



A	B	C	D	E	F	G	H	I	J	K	L	M
1	2	3	4	5	6	7	8	9	10	11	12	13
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
14	15	16	17	18	19	20	21	22	23	24	25	26

1. Complete the following:

a. Write down your name. _____

b. How many letters do you have in your name? _____

c. Write down a friend's name. _____

d. How many letters does her or his name have? _____

Names in my class

Peter	Palesa	Sue	Thabo	Jabu
Gugu	Jonathan	Ann	Musa	Zander
Liesel	William	Jolene	Sipho	Lucy
Veronica	John	Lee	Sam	Nomsa
Mpho	Andile	Steven	Mbali	Bongi

2. Use the table above to complete this table.

Names with ____ letters	Tally
3	////
4	
5	
6	
7	
8	



3. Answer the questions using your tally.

a. How many children have 6 letters in their name?

_____

b. How many children have 4 letters in their name?

_____

c. How many children have 7 letters in their name?

_____

d. How many children have 8 letters in their name?

_____

e. How many children have 3 letters in their name?

_____

f. How many children have 6 letters in their name?

_____

g. How many children have 5 letters in their name?

_____

Tally competition ...

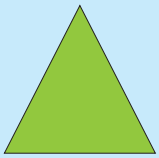


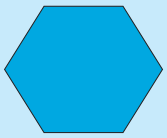
In pairs see who can count the tallies the fastest.

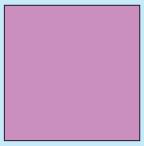
32 Polygons

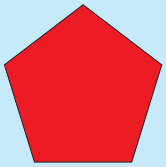
A polygon is a shape formed by three or more straight lines. Identify the polygons.


Rectangle


Triangle

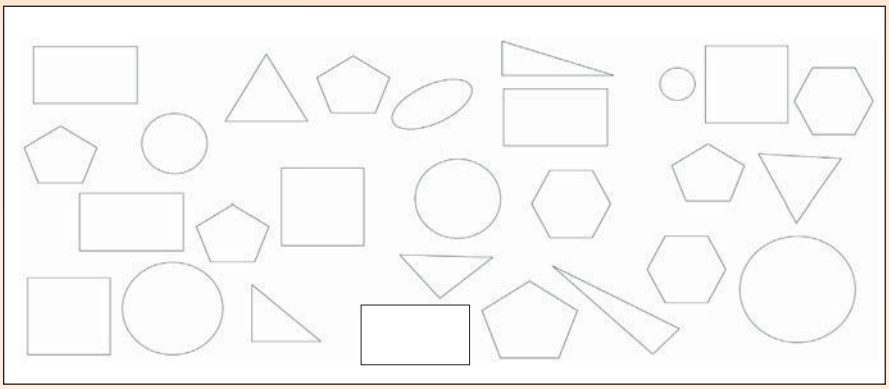

Hexagon


Square


Pentagon


Circle

1. Colour all the circles:



2. Each of the following words or phrases comes from the same root as the word "circle" (cycle). Explain how each word is related to a circle:

a. This is the life cycle of a frog. _____

_____

b. Aeroplanes can circumnavigate the earth. _____

_____

c. Please circulate this letter among the whole class. _____

_____

d. Walk the circumference of the dam. _____

_____

3. What is a polygon?

_____

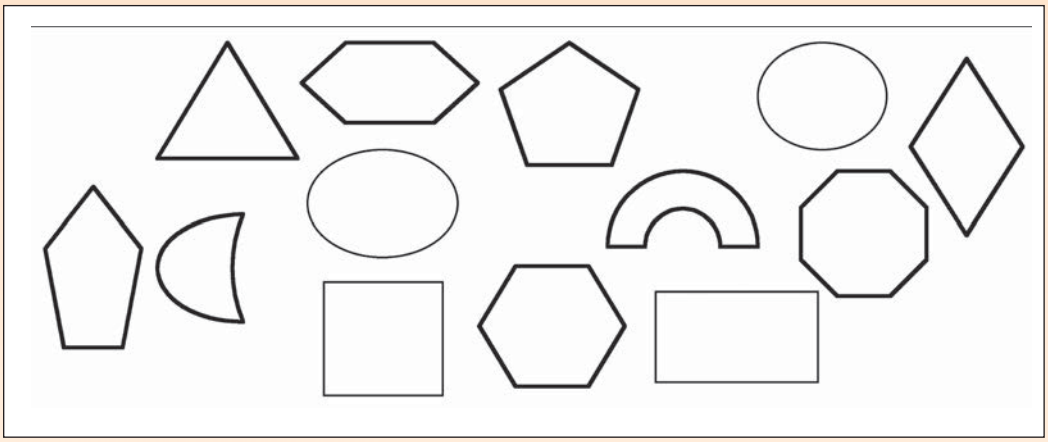
_____

4. What do you call a polygon with:

a. 6 sides? _____ b. 3 sides? _____

c. 5 sides? _____ d. 4 sides? _____

5. Colour in the polygons.



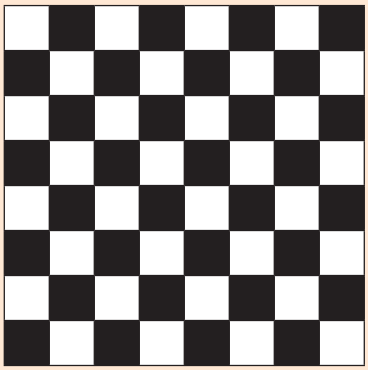
6. Identify which of the ones you have coloured in are regular polygons. Tick them.

7. Draw 4 different kinds of triangles. Explain how they are different to each other by writing a descriptive sentence or phrase under each one.

8. Visualise (imagine) a square which has been cut in half. What shapes would you have now?

_____

Just remember ...

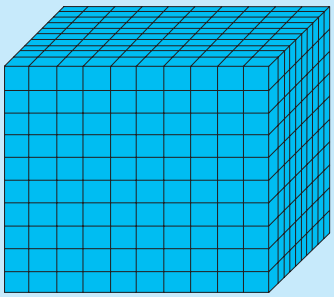


How many squares are there on a chessboard?

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

33 Numbers 0-2 000

How many of these blocks do you need in order to get a total of 2 000 small cubes?



1. Complete the following:

a. 1 000 + 500 + 90 + 3 = 1593	1 000	500	90	3
b. 1 000 + 900 + 10 + 6 =	1 000	900	10	6
c. 1 000 + 200 + 9 =	1 000	200		9
d. 1 000 + 30 + 5 =	1 000		30	5
e. 1 000 + 2 =	1 000			2

2. Write the number in the correct column:

		Thousands	Hundreds	Tens	Units
a.	1 234				
b.	948				
c.	1 028				
d.	1 607				
e.	1 060				



3. Write the numbers in question 2 in words.

4. Complete the following using the first question to guide you.

a. 1 456 = 1 thousand + 4 hundreds + 5 tens + 6 units

b. 1 234 = _____

c. 1 845 = _____

d. 1 304 = _____

e. 1 003 = _____

continued ☛

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

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

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

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

c. 1 436 , 1 346 , 1 634 , 1 364 , 1 654 , _____

d. 1 050 , 1 005 , 1 500 , 1 505 , 1 055 , _____

e. 1 414 , 1 441 , 1 411 , 1 144 , 1 444 , _____

6. Fill in < or >.

a. 589 [<] 598

b. 948 [ ] 849

c. 1 030 [ ] 1 003

d. 1 540 [ ] 1 504

e. 1 418 [ ] 1 518

f. 1 356 [ ] 1 299

g. 1 988 [ ] 1 898

h. 1 767 [ ] 1 766

i. 1 847 [ ] 1 784

j. 1 414 [ ] 1 441

7. What is the value of the underlined digit?

a. 84<u>9</u> _____ b. <u>1</u> 954 _____

c. 1 <u>4</u>89 _____ d. 1 <u>7</u>77 _____

e. 1 8<u>4</u>1 _____ f. <u>1</u> 847 _____

8. Complete the following:



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

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

c. You can use a digit twice, make the smallest 4-digit number: _____

d. You can use a digit twice, make the largest 4-digit number: _____

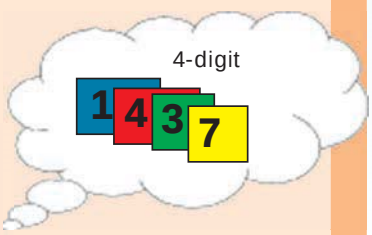
All about numbers

What you need:
Newspaper.



- Find at least five, 4-digit numbers in a newspaper.
- What is the meaning of the 4-digit number?





15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

34 Rounding off to 10

Look at the symbols below and describe them.



When we want to write 4 + 5 is equal to 9, we use the symbol

=

=



When we want to write 8 rounded off to the nearest 10 we use the symbol

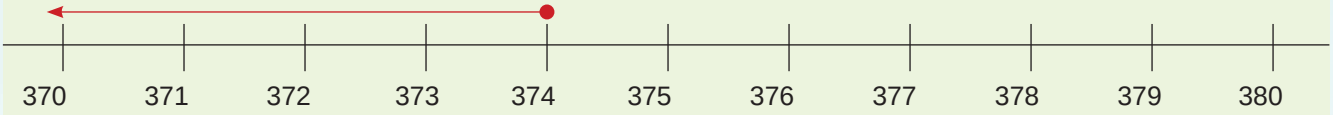
≈

≈

Rounding off to the nearest ten.

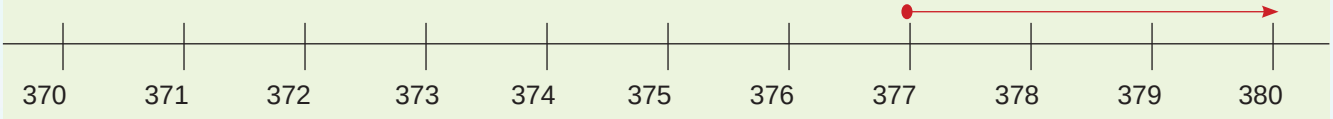
Round off the numbers that end in a digit from **1** to **4** to the previous (lower) ten.

Example: 374 rounded off to the nearest ten would be 370.



Round off numbers that end in a digit from **5** to **9** to the next (higher) ten.

Example: 377 rounded off to the nearest ten would be 380.



1. Round the following numbers off to the <u>nearest ten</u> using the number lines provided.

a. 8 ≈ ☐



b. 3 ≈ ☐



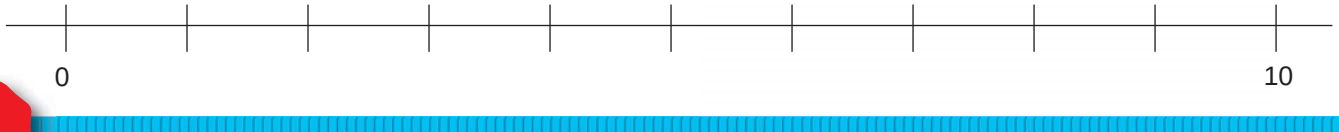
c. 2 ≈ ☐



d. 9 ≈ ☐

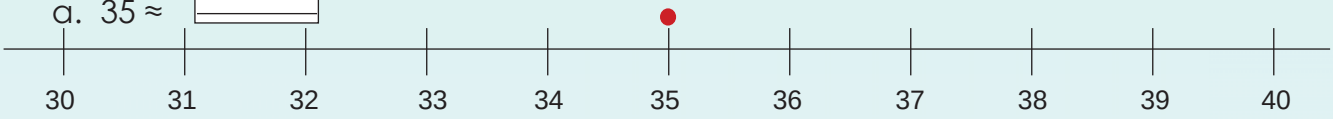


e. 4 ≈ ☐

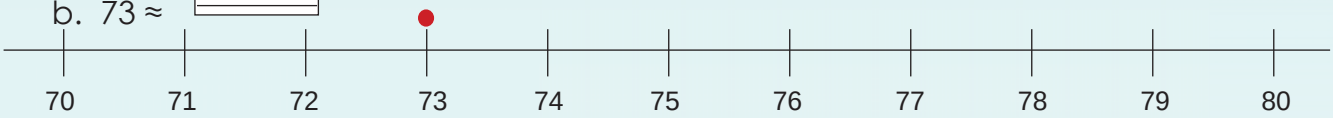


2. Round the following numbers off to the nearest ten using the number lines provided.

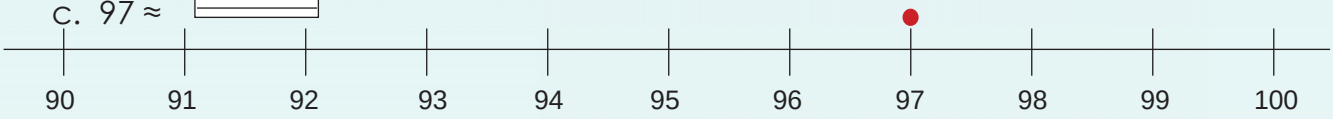
a. 35 ≈ ☐



b. 73 ≈ ☐

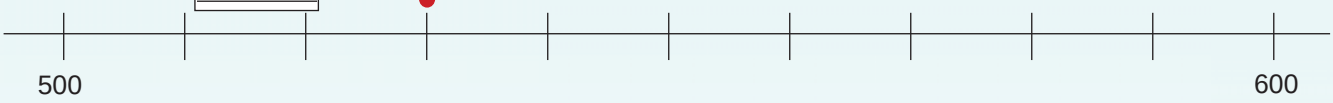


c. 97 ≈ ☐

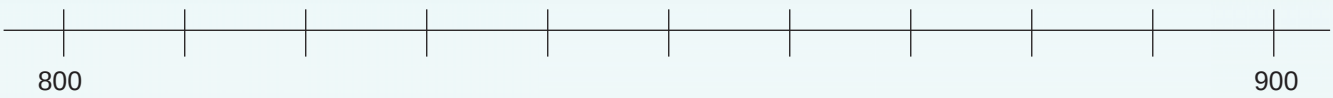


3. Round the following numbers off to the <u>nearest hundred</u> using the number lines.

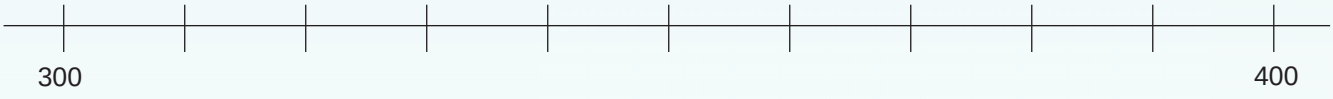
a. 530 ≈ ☐



b. 880 ≈ ☐



c. 360 ≈ ☐



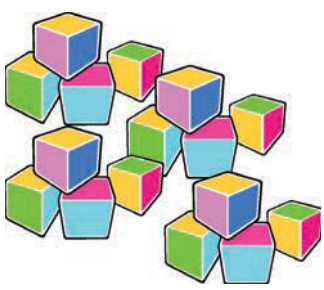
Round up and down

Round off each of these to the nearest 10.

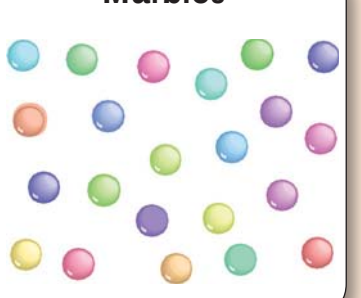
Flowers



Blocks



Marbles



15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

35 Rounding off to 100

Look at the symbols below and describe them.



When we want to write 30 + 60 is equal to 90, we use the symbol

=

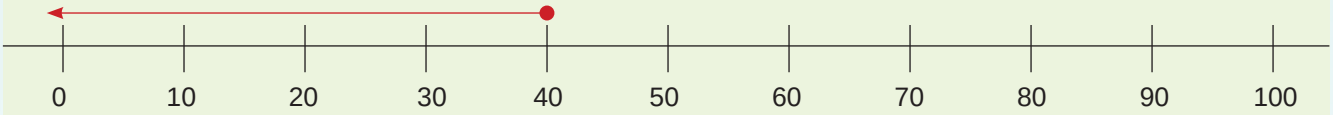


When we want to write 60 rounded off to the nearest 100 we use the symbol

≈

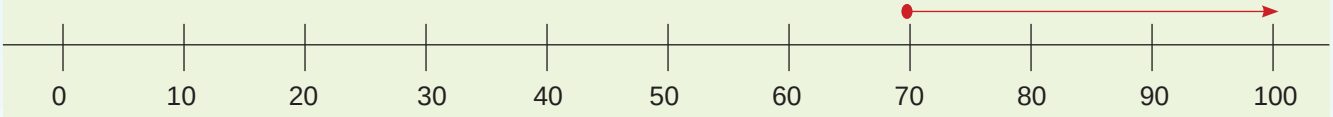
Rounding off to the nearest hundred.

Round off the numbers that start with a digit from **1** to **4** to the previous (lower) hundred. *Example:* 40 rounded off to the nearest hundred would be 0.



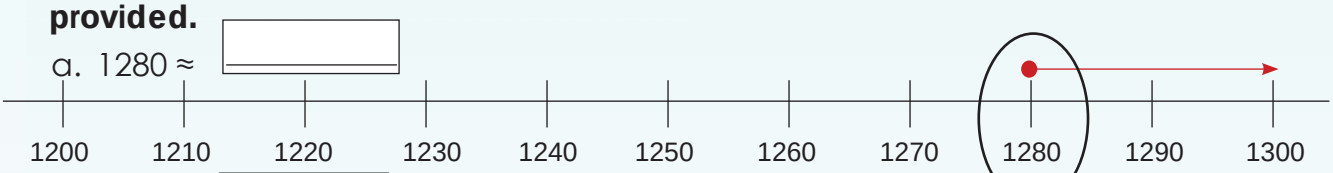
Round off numbers that end in a digit from **5** to **9** to the next (higher) hundred.

Example: 70 rounded off to the nearest hundred would be 100.

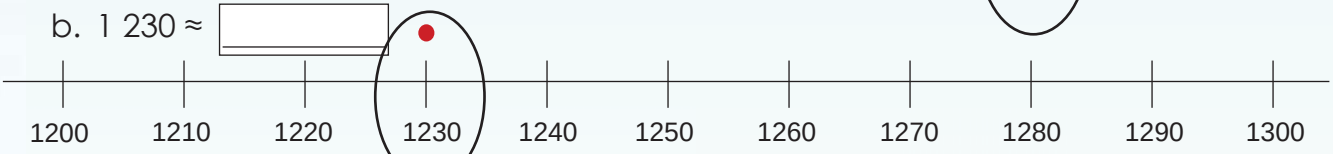


1. Round the following numbers off to the nearest hundred using the number lines provided.

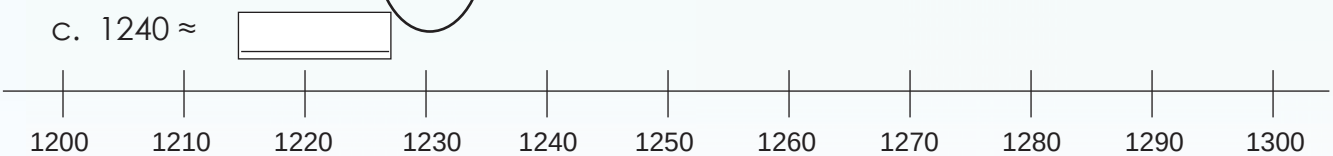
a. 1280 ≈ _____



b. 1 230 ≈ _____



c. 1240 ≈ _____



d. 1250 ≈ _____



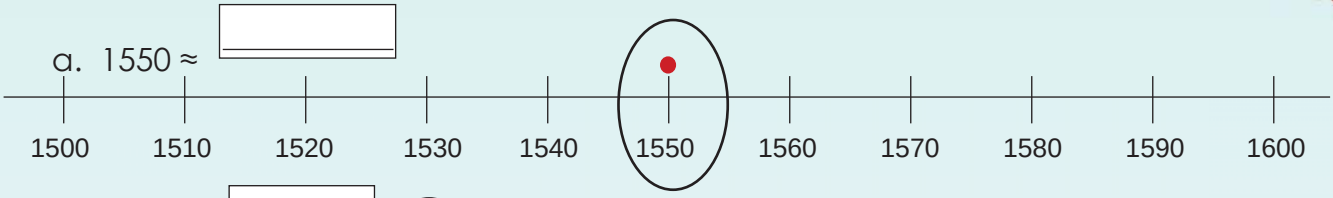
e. 1256 ≈ _____



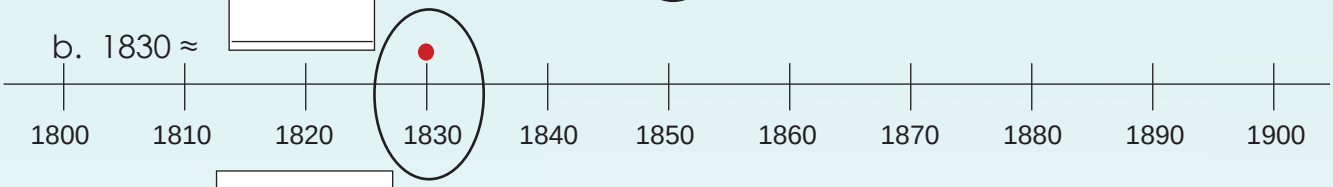


2. Round the following numbers off to the nearest hundred using the number lines provided.

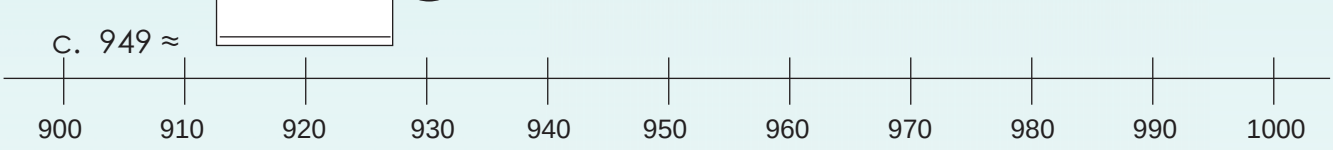
a. 1550 ≈ ____



b. 1830 ≈ ____

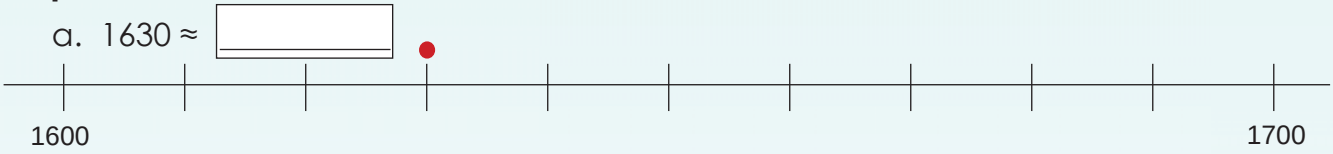


c. 949 ≈ ____

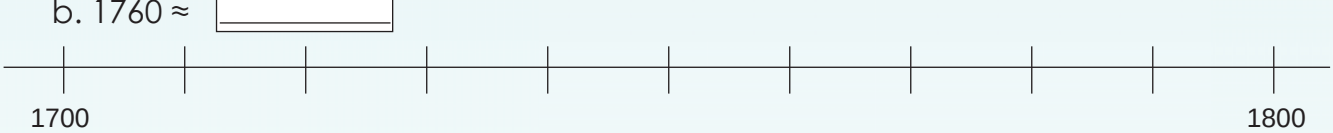


3. Round the following numbers off to the nearest hundred using the number lines provided.

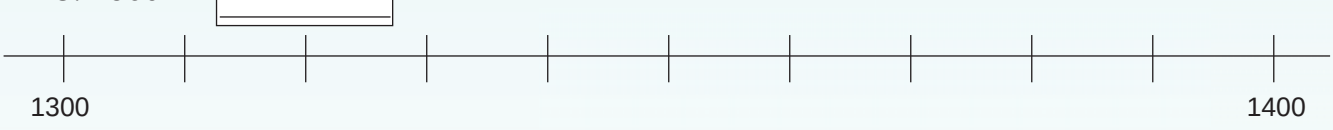
a. 1630 ≈ ____



b. 1760 ≈ ____

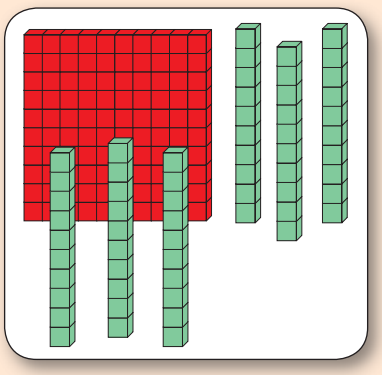


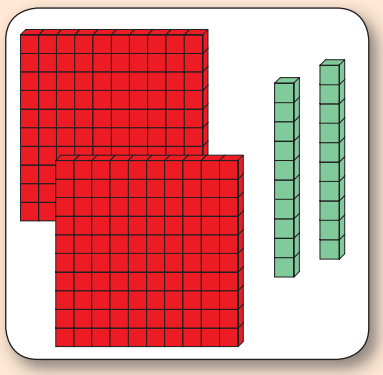
c. 1360 ≈ ____

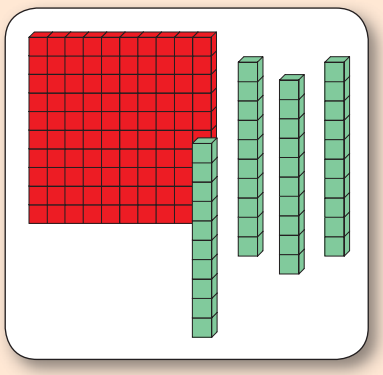


Rounding off

– Round each off to the nearest 100.







15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

36 Completing numbers

Quick recall.

28 + ☐ = 30	72 + ☐ = 80	56 + ☐ = 60	54 + ☐ = 60
42 + ☐ = 50	37 + ☐ = 40	91 + ☐ = 100	62 + ☐ = 80
95 + ☐ = 100	27 + ☐ = 50	51 + ☐ = 100	61 + ☐ = 90
36 + ☐ = 50	25 + ☐ = 50	38 + ☐ = 70	21 + ☐ = 50
17 + ☐ = 50	29 + ☐ = 80	55 + ☐ = 90	17 + ☐ = 100

1. Fill in the missing number.

a. 46 + ☐ = 50
b. 15 + ☐ = 20
c. 23 + ☐ = 30
d. 29 + ☐ = 40
e. 55 + ☐ = 60
f. 74 + ☐ = 80
g. 86 + ☐ = 90
h. 45 + ☐ = 60
i. 91 + ☐ = 100
j. 75 + ☐ = 100

2. Fill in the missing number.

a. 45 + ☐ = 100
b. 32 + ☐ = 50
c. 51 + ☐ = 80
d. 56 + ☐ = 90
e. 15 + ☐ = 50
f. 95 + ☐ = 120
g. 69 + ☐ = 100
h. 44 + ☐ = 150
i. 75 + ☐ = 150
j. 31 + ☐ = 120

3. Fill in the missing number.

a. 122 + ☐ = 150
b. 102 + ☐ = 150
c. 135 + ☐ = 180
d. 141 + ☐ = 200
e. 156 + ☐ = 200
f. 115 + ☐ = 200
g. 120 + ☐ = 250
h. 200 + ☐ = 325
i. 215 + ☐ = 320
j. 250 + ☐ = 550

4. Fill in the missing number.

a. 540 + ☐ = 600 b. 230 + ☐ = 500

c. 650 + ☐ = 1 000 d. 320 + ☐ = 1000

e. 880 + ☐ = 1 000 f. 470 + ☐ = 800

g. 550 + ☐ = 1 000 h. 600 + ☐ = 850

i. 490 + ☐ = 1 000 j. 500 + ☐ = 890

5. Fill in the missing number.

a. 1 560 + ☐ = 1 700 b. 1 250 + ☐ = 1 500

c. 1 380 + ☐ = 1 500 d. 1 820 + ☐ = 1 900

e. 1 190 + ☐ = 1 500 f. 1 080 + ☐ = 1 500

g. 1 230 + ☐ = 1 800 h. 1 500 + ☐ = 1 980

i. 1 370 + ☐ = 1 500 j. 1 400+ ☐ = 2 000

6. Fill in the missing number.

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

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

e. 1 431 + ☐ = 1 600 f. 1 677 + ☐ = 2 000

g. 1 697 + ☐ = 2 000 h. 1 244 + ☐ = 2 000

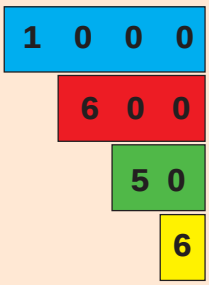
i. 1 009 + ☐ = 1 500 j. 1 314 + ☐ = 2 000

Number card fun ....

In this game we will only play with the 1 000 flard card, not 2 000 to 9 000.



What you need:
Number (flard) cards.



What to do:
- Play in pairs.
- The first player chooses a one thousand card and then one of each: hundreds, tens and unit flard card, and displays them as a number.



- The first player that fills the number up to the nearest 2 000, gets a point.
- Do the same, but player two chooses the cards. Repeat five times.
- The player with the highest score is the winner.

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

What is the difference between the numbers?

850	900	950	1 000	1 050	1 100	1 150	1 200	1 250	1 300
203	303	403	503	603	703	803	903	10 03	1103
1 050	1 080	1 110	1 140	1 170	1 200	1 230	1 260	1 290	1 320
40	160	280	400	520	640	760	880	1 000	1 120
550	700	850	1 000	1 150	1 300	1 450	1 600	1750	1 900

1. What number comes next?

a. 1 000, 1 120, 1 240, _____

b. 900, 950, 1 000, _____

c. 150, 180, 210, _____

d. 207, 307, 407, _____

2. Complete the table:

Number	Add 10	Add 100	Add 1 000
808			
32			
450			
752			
990			

Example:

732 + 614

700	30	2	+	600	10	4

= 700 + 30 + 2 + 600 + 10 + 4

= 1 300 + 40 + 6

= 1 000 + 300 + 40 + 6

= 1 346

3. Use both methods above to calculate the following. Write down the steps.

a. 1 002 + 487 =

Continue on an extra sheet of paper.

b. 295 + 1 703 =

Continue on an extra sheet of paper.

c. 321 + 902 =

Continue on an extra sheet of paper.

d. 800 + 706 =

Continue on an extra sheet of paper.

e. 816 + 174 =

Continue on an extra sheet of paper.

f. 110 + 836 =

Continue on an extra sheet of paper.

continued ☛

4. Solve the following word problems.

a. There were 1 450 spectators at the game. Another 325 arrived. What was the total number of spectators who saw the game?

Continue on an extra sheet of paper.

b. Lindi walked 1 265 m on the first day. On the second day she was a bit tired and walked 650 m? How far did she walk in two days.

Continue on an extra sheet of paper.

5. Write an appropriate and interesting word sum for: 1 500 and 300. Solve it.

Continue on an extra sheet of paper.

What is the size of your number?

What you need:
- Use the 100s dice you made before (Cut-out 3).
- Piece of paper.



What to do:
- Individual game against a group or the class.
- Roll the 100s dice.
- Add the number landed on, to the first number on the blue card. Write your sum on a piece of paper.
- Do the same with the 2nd to the 5th number.

1 100
600
550
1 250
975

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

What is the difference between the numbers?

100	200	300	400	500	600	700	800	900	1 000
208	308	408	508	608	708	808	908	1 008	1 108
1 050	1 150	1 250	1 350	1 450	1 550	1 650	1 750	1 850	1 950
1 350	1 360	1 370	1 380	1 390	1 400	1 410	1 420	1 430	1 440
1 000	1 100	1 200	1 300	1 400	1 500	1 600	1 700	1 800	1 900

1. What number comes next?

a. 1 350, 1 300, 1 250, _____

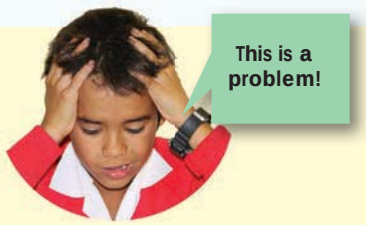
b. 1 800, 1 700, 1 600, _____

c. 1 060 , 1 050, 1 040, _____

d. 990, 890, 790, _____

2. Complete the table:

Number	Subtract 10	Subtract 100	Subtract 1 000
1 847			
1 680			
1 020			
1 006			
1 955			



Examples:

Example 1:

1 598 – 356

= (1 000) + (500 – 300) + (90 – 50) + (8 – 6)

= 1 000 + 200 + 40 + 2

= 1 242

Example 2:

1 642 – 1 268

= (1 000 – 1 000) + (600 – 200) + (40 – 60) + (2 – 8)

= 0 + 400 + (40 – 60) + (2 – 8)

= 0 + 400 + (30 – 60) + (12 – 8)

= 0 + 300 + (130 -60) + (12 – 8)

= 0 + 300 + 70 + 4

= 374

3. Use both methods to solve the subtraction sums.

a. 1 953 – 641

b. 1 784 – 933

Continue on an extra sheet of paper.

c. 1 988 – 1 259

d. 1 204 – 684 =

Continue on an extra sheet of paper.

continued ☛

e. 1 743 – 1 399

Continue on an extra sheet of paper.

4. Solve the following word problems.

a. There are 785 apples at the fruit shop they sell 83 apples. How many apples are left?

Continue on an extra sheet of paper.

b. Thabo had 2 000 litres of milk. He sold 256 litres of milk in the first week and 193 litres in the second week. How many litres did he sell altogether?

Continue on an extra sheet of paper.

What is the size of your number?

What you need:
- Use the 100s dice made before.
- Piece of paper.

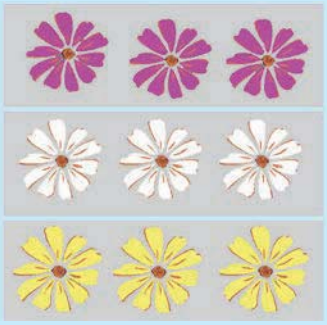


What to do:
- Individual game against a group or the class.
- Roll the 100s dice.
- Subtract the number the dice landed on, from the first number on the blue card. Write your subtraction sum on a piece of paper.
- Do the same with the 2nd to the 5th number.

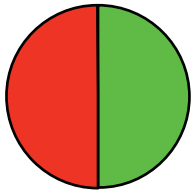
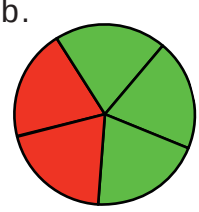
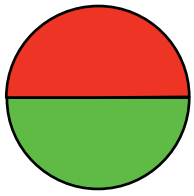
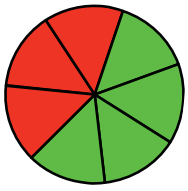
1 940
1 930
1 915
1 936
1 999

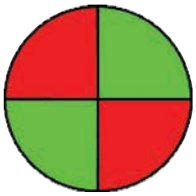
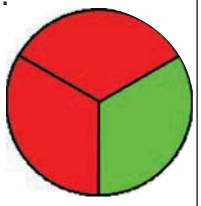
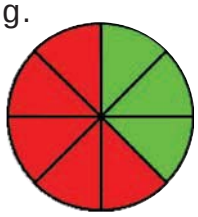
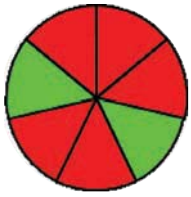
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

What fraction of the flowers is pink?

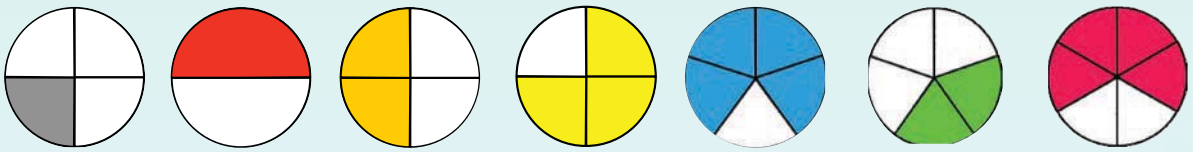




1. Complete the tables below.

Fraction circle	What fraction is red?	What fraction is green?
a. 	$\frac{1}{2}$	$\frac{1}{2}$
b. 		
c. 		
d. 		

Fraction circle	What fraction is red?	What fraction is green?
e. 		
f. 		
g. 		
h. 		

2. Use the fraction circles to say if it is bigger than, smaller than or equal.



Fill in <,> or =

a. $\frac{4}{5}$ [>] $\frac{3}{4}$

b. $\frac{2}{5}$ [ ] $\frac{1}{4}$

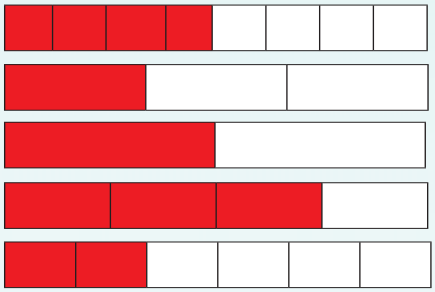
c. $\frac{1}{2}$ [ ] $\frac{3}{4}$

d. $\frac{2}{4}$ [ ] $\frac{1}{2}$

e. $\frac{4}{5}$ [ ] $\frac{4}{6}$

f. $\frac{2}{4}$ [ ] $\frac{4}{6}$

3. Use the fraction strips to answer the questions.



Fill in <,> or =

a. $\frac{4}{8}$ [ ] $\frac{1}{3}$

b. $\frac{2}{6}$ [ ] $\frac{1}{3}$

c. $\frac{1}{3}$ [ ] $\frac{1}{2}$

d. $\frac{2}{6}$ [ ] $\frac{4}{8}$

e. $\frac{1}{2}$ [ ] $\frac{4}{8}$

f. $\frac{3}{4}$ [ ] $\frac{4}{8}$

4. Which fraction comes next if I count forwards?

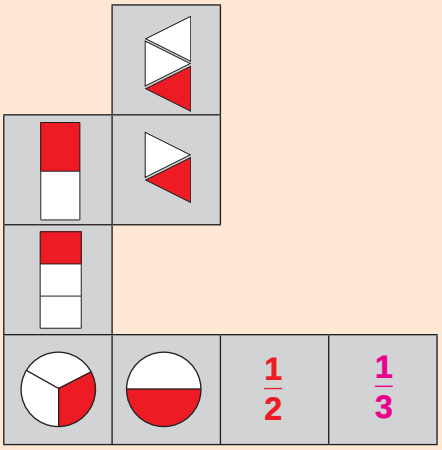
a. $\frac{1}{4}$ $\frac{2}{4}$ $\frac{3}{4}$ [$\frac{4}{4}$]

b. $\frac{1}{6}$ $\frac{2}{6}$ $\frac{3}{6}$ [ ]

c. $\frac{2}{5}$ $\frac{3}{5}$ $\frac{4}{5}$ [ ]

d. $\frac{4}{8}$ $\frac{5}{8}$ $\frac{6}{8}$ [ ]

Fraction Dominoes



- Use Cut-out 6.
- After shuffling the dominoes, each player draws tiles to make up their hand. The number of tiles drawn depends on the number of players.
- The player with the largest fraction starts. Play proceeds to the left (clockwise). Each player adds a domino to an open end of the layout, if possible.
- A player who cannot make a move must pass. The game ends when one player uses the last domino in his or her hand, or when no more plays can be made. If all players still have tiles in their hand, but no more moves can be made, then the game is said to be "blocked".

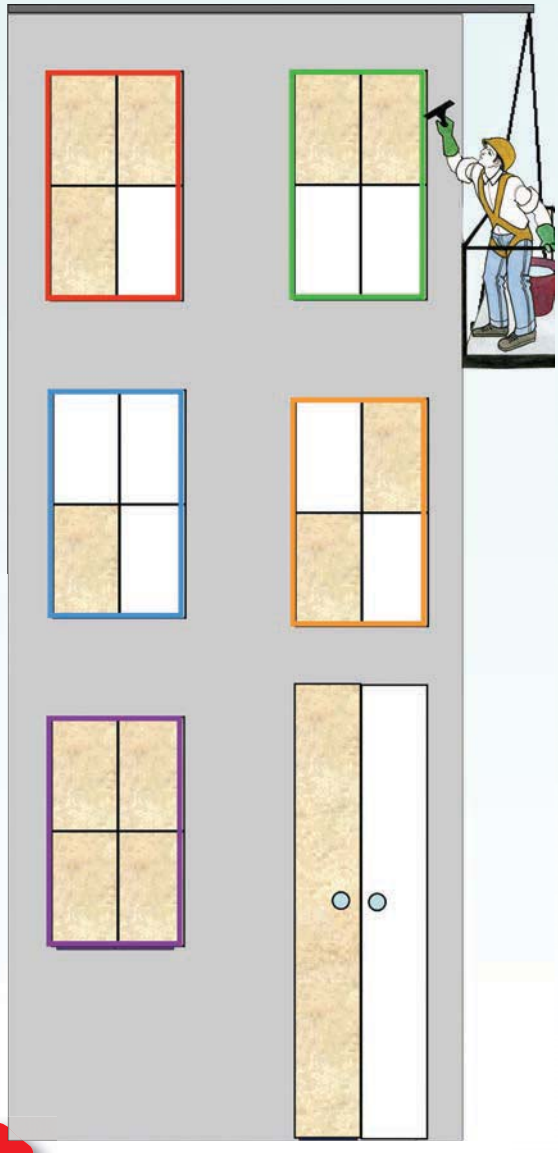
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

40 Grouping and Sharing

Look at the picture below. Each child got 1 slice of pizza. What fraction of a pizza did each child get?



1. Look at the building and answer the questions.



a. What fraction of the red window is:

Washed? _____

Still dirty? _____

b. What fraction of the orange window is:

Washed? _____

Still dirty? _____

c. What fraction of the green window is:

Washed? _____

Still dirty? _____

d. What fraction of the purple window is:

Washed? _____

Still dirty? _____

e. What fraction of the blue window is:

Washed? _____

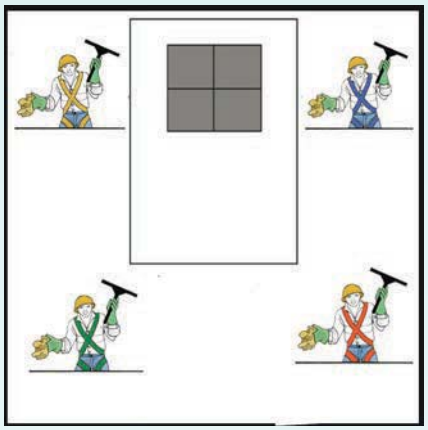
Still dirty? _____

f. What fraction of the door is:

Washed? _____

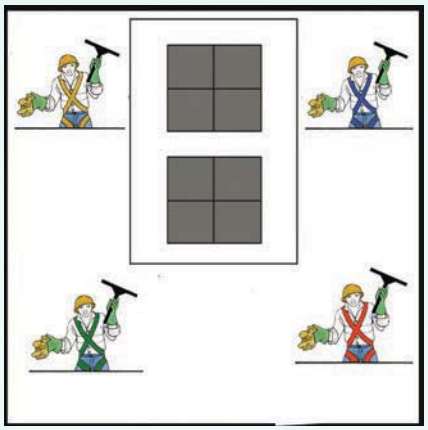
Still dirty? _____

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



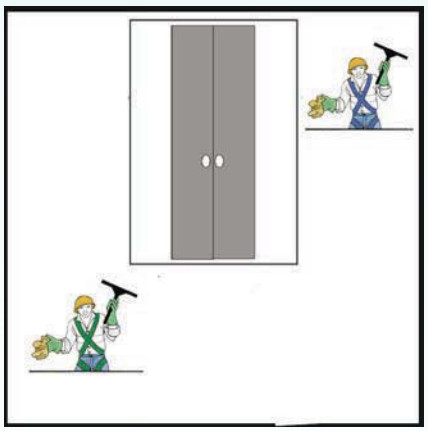
a. What part of the window will each person wash?

b. Write the fraction on the window.



c. What part of the window will each person wash?

d. Write the fraction on the window.



e. What part of the door will each person wash?

f. Write the fraction on the window.

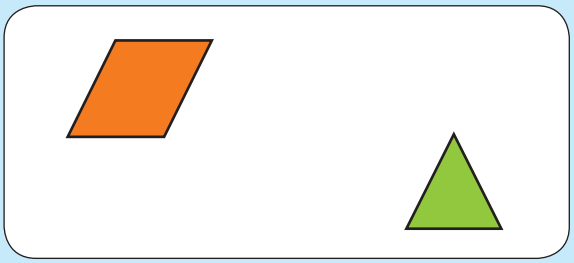
Fraction Dominoes

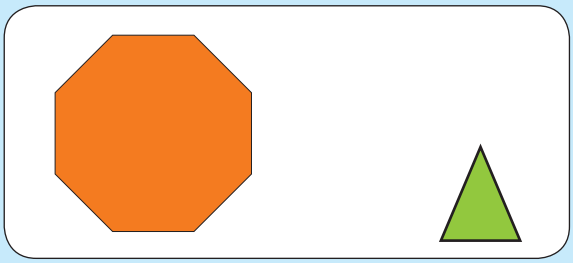
Play fraction dominoes.

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

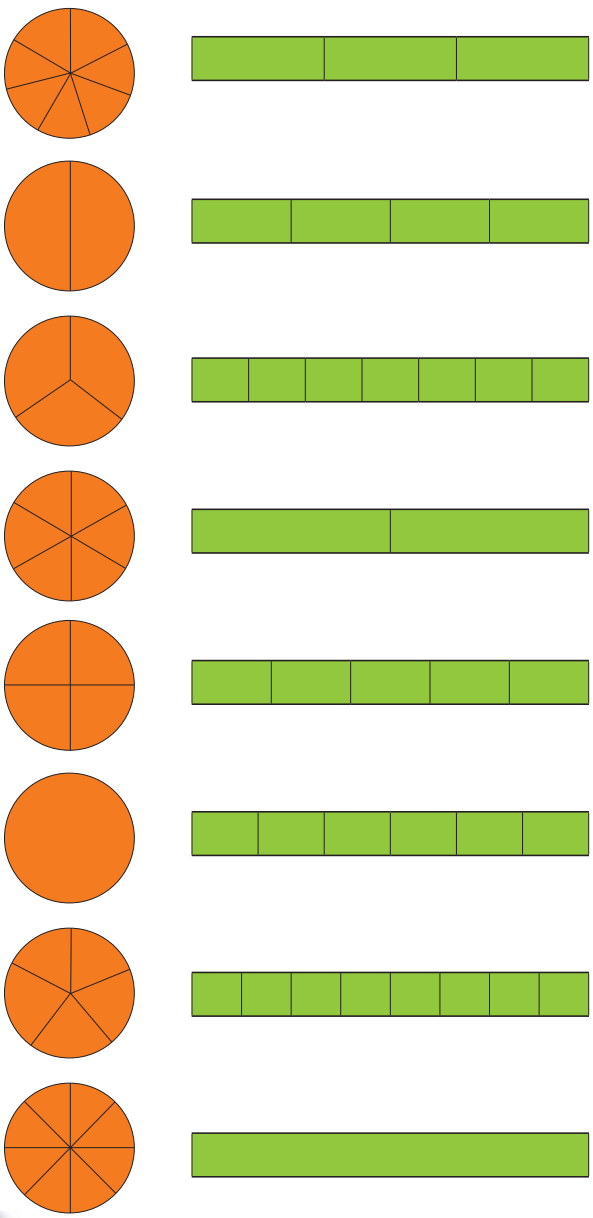
Fractions: Halves to twelfths

How many triangles can you fit onto the orange shape?



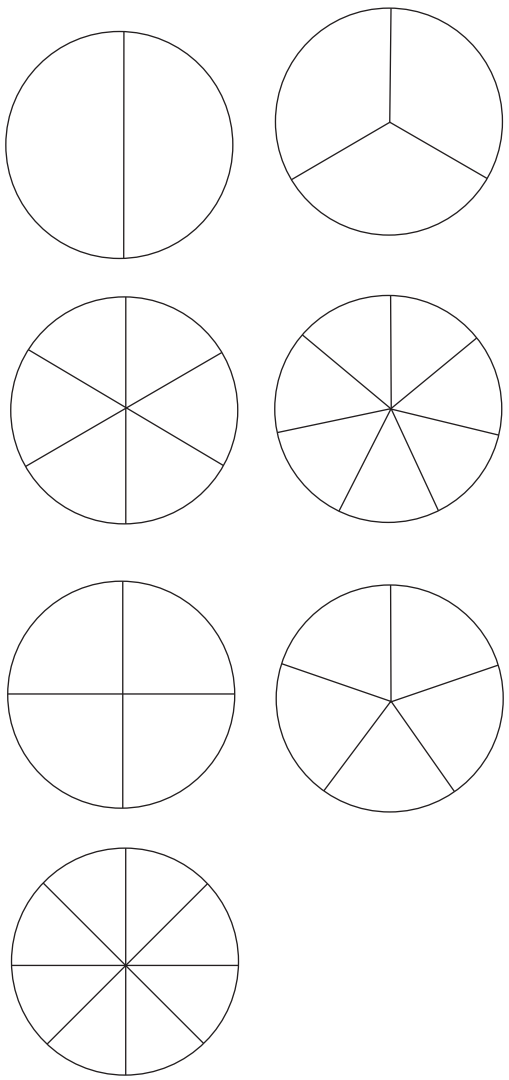


1. Match the fraction strip with the fraction circle on the left.

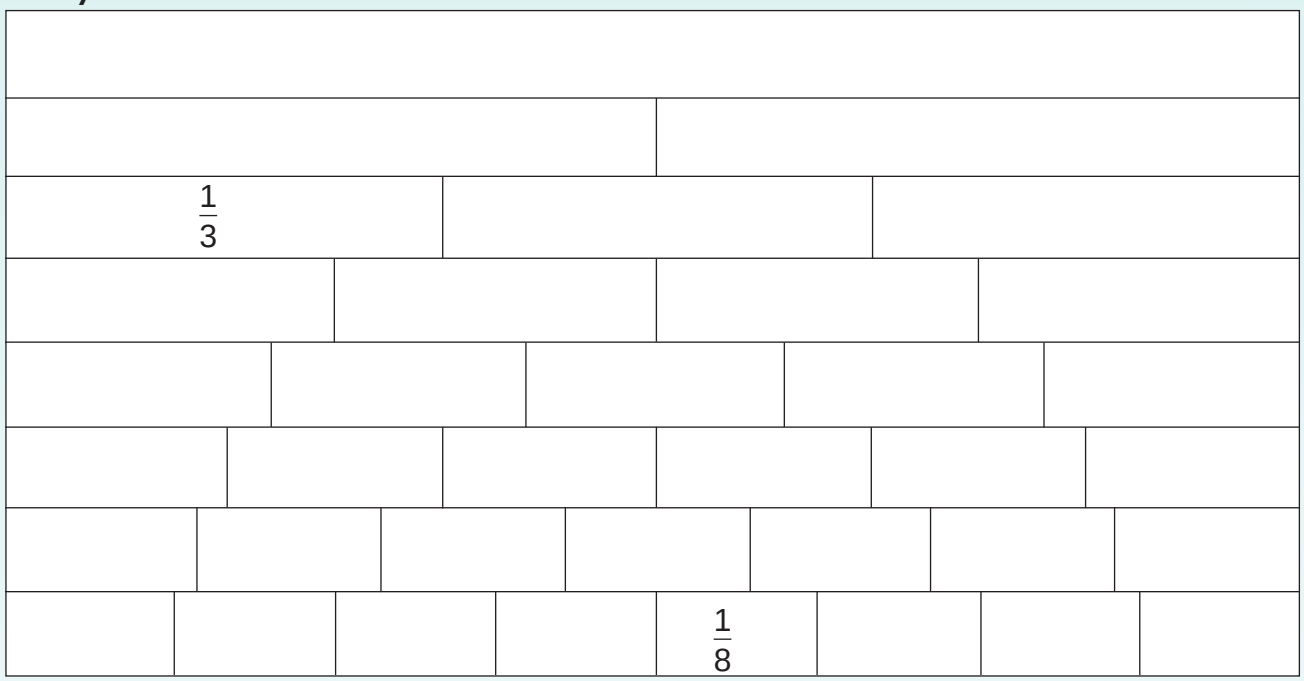


2. Find the fraction and colour in the following.

$\frac{3}{4}$ $\frac{4}{6}$ $\frac{2}{3}$ $\frac{1}{2}$ $\frac{3}{8}$ $\frac{6}{7}$ $\frac{2}{5}$



3. Write the fractions on the fraction diagram. We have done two examples for you.



4. Fill in <, >, or =. Use the fraction strips above to help you.

a. $\frac{1}{2}$ ☐ $\frac{1}{4}$ b. $\frac{1}{3}$ ☐ $\frac{1}{5}$ c. $\frac{1}{6}$ ☐ $\frac{1}{8}$ d. $\frac{1}{8}$ ☐ $\frac{1}{7}$

e. $\frac{1}{2}$ ☐ $\frac{2}{4}$ f. $\frac{2}{3}$ ☐ $\frac{5}{6}$ g. $\frac{3}{5}$ ☐ $\frac{3}{8}$ h. $\frac{2}{7}$ ☐ $\frac{1}{8}$

i. $\frac{4}{6}$ ☐ $\frac{2}{3}$ j. $\frac{5}{8}$ ☐ $\frac{2}{4}$ k. $\frac{3}{5}$ ☐ $\frac{1}{6}$ l. $\frac{1}{2}$ ☐ $\frac{7}{8}$

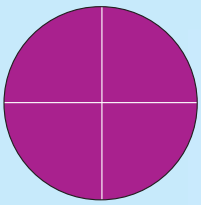
m. $\frac{3}{8}$ ☐ $\frac{2}{3}$ n. $\frac{4}{7}$ ☐ $\frac{4}{5}$ o. $\frac{4}{8}$ ☐ $\frac{1}{2}$ p. $\frac{1}{3}$ ☐ $\frac{2}{6}$

Fractions dice

- Use Cut-out 4.
- Throw the fraction dice.
- Then take a fraction strip that matches the fraction on the face of the dice. If the face is $\frac{1}{4}$, take a quarter strip.
- If you are correct keep the fraction strip.
- At the end count your fraction strips.
- The winner is the person with the most fractions strips.

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Quick recall. How fast can you answer the following?



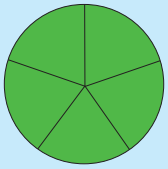


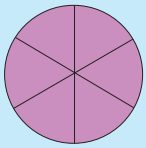
This circle is divided into 4 equal pieces. I can also say 1 divided by 4.

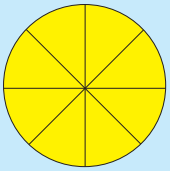
$1 \div 4$



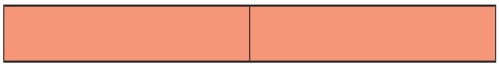
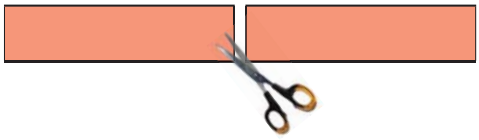
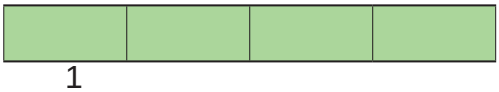
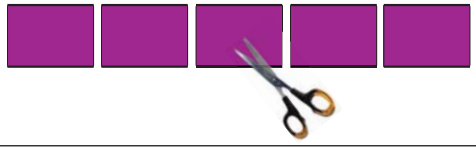
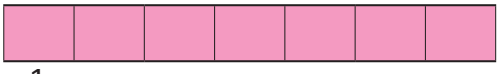
I wonder how I can write these as division sums?



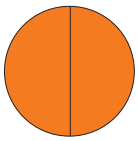
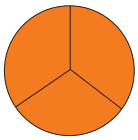
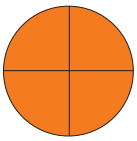
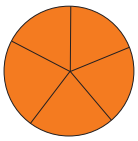
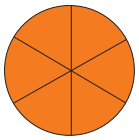
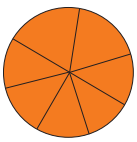
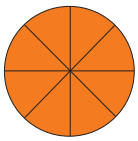




1.

Fraction strip	Fraction pieces. Make your own drawing.	Write a division sum.
 $\frac{1}{2}$		$1 \div 2 =$
 $\frac{1}{3}$		
 $\frac{1}{4}$		
 $\frac{1}{5}$		
 $\frac{1}{6}$		
 $\frac{1}{7}$		
 $\frac{1}{8}$		

2. Complete the table.

Fraction circle	Fraction	Division	Division sum in words
	halves	$1 \div 2 = \frac{1}{2}$	One circle divided by two equals two halves.
			
			
			
			
			
			

Fraction hunt …

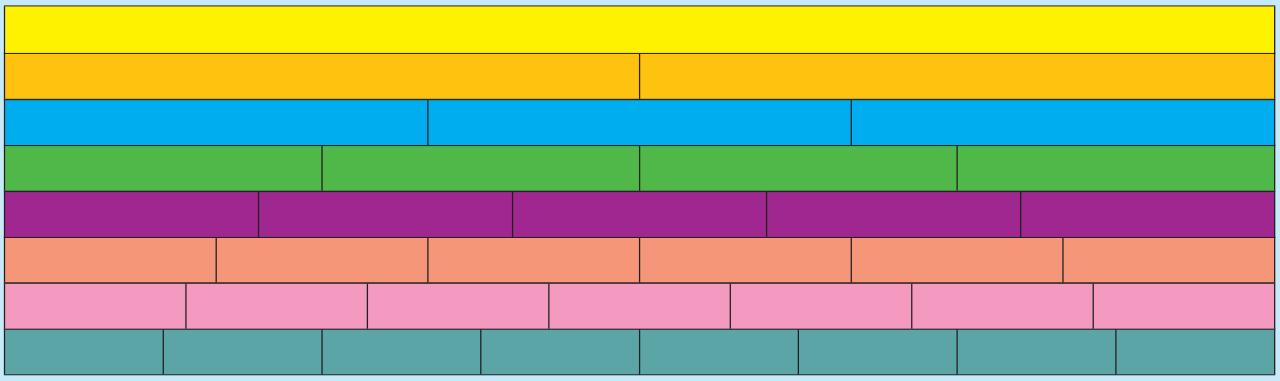
Find in magazines or draw fractions for:

2 ÷ 8 **3 ÷ 6** **2 ÷ 12**

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

43 Equivalent and Comparing Fractions

Write a fraction on each part.



1. Use the fraction strips. Answer the questions below.



a. What fraction is smaller than $\frac{1}{2}$? $\frac{1}{3}$

b. What fraction is bigger than $\frac{1}{2}$? _____

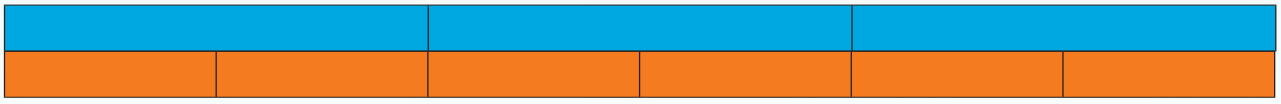
c. What fractions are smaller than $\frac{2}{3}$? _____



d. What fraction is smaller than $\frac{1}{2}$? _____

e. What fraction is bigger than $\frac{1}{2}$? _____

f. What fraction is equal $\frac{1}{2}$? _____



g. What fractions are smaller than $\frac{2}{3}$? _____

h. What fractions are bigger than $\frac{2}{3}$? _____

i. What fractions are smaller than $\frac{2}{6}$? _____

j. What fraction is equal $\frac{1}{3}$? _____

2. Look at the pictures and answer the questions.





a. Four cups = _____ ml.

b. Four cups = _____ litre.

c. One cup is _____ of a litre.

d. Two cups are _____ of a litre.

e. Three cups are _____ of a litre.

f. Four cups are _____ of a litre.

3. Fill in <, > or =

a. 3 cups _____ $\frac{1}{2}$ of a litre.

b. $\frac{1}{4}$ of a litre _____ 4 cups.

c. 4 cups _____ 1 litre.

d. 1 cup _____ $\frac{1}{4}$ of a litre.

e. 2 cups _____ 500ml

f. 2 cups _____ $\frac{1}{4}$ of a litre.

Fraction Dominoes

Play fraction dominoes.

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Decimals through Measurement

Write a decimal fraction for the shaded part of each set of books.



a. _____



b. _____



c. _____

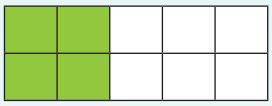
1. Write a fraction and a decimal fraction for:

a.



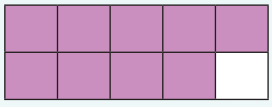
$\frac{6}{10}$ 0,6

b.



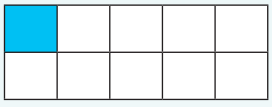
_____ _____

c.



_____ _____

d.



_____ _____

e.



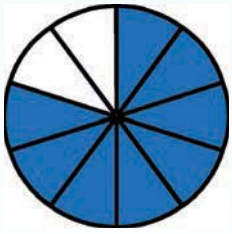
_____ _____

f.



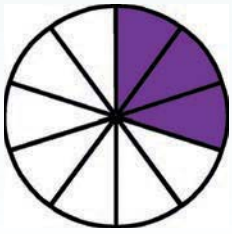
_____ _____

g.



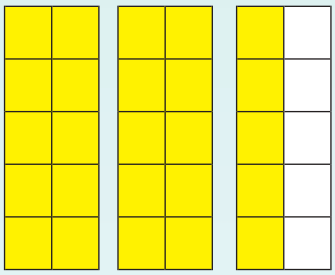
_____ _____

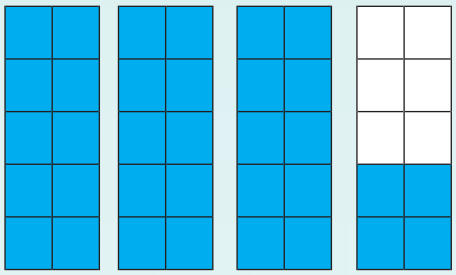
h.

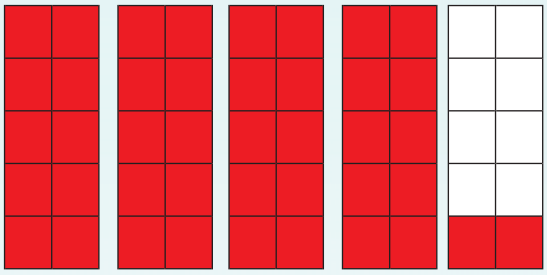


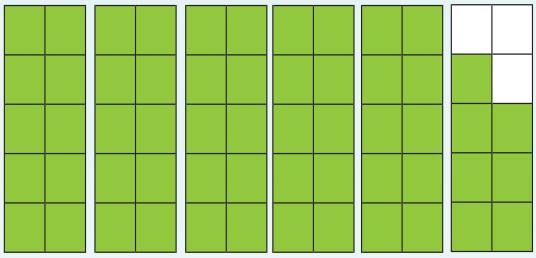
_____ _____

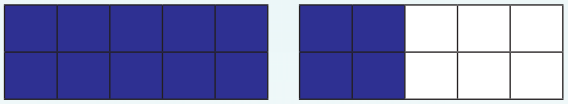
2. Read and write a decimal fraction for each model.

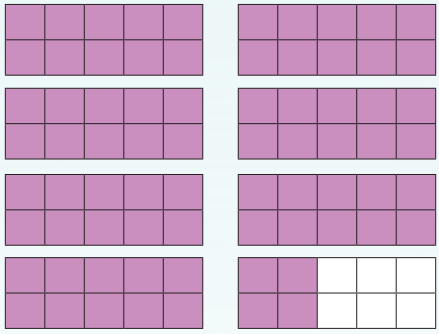
a. 

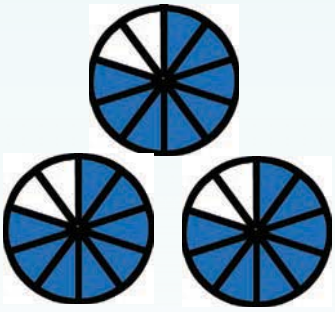
b. 

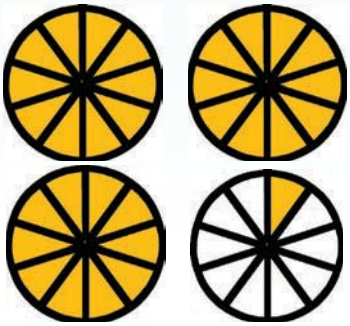
c. 

d. 

e. 

f. 

g. 

h. 

Fraction Dominoes

Play fraction dominoes.

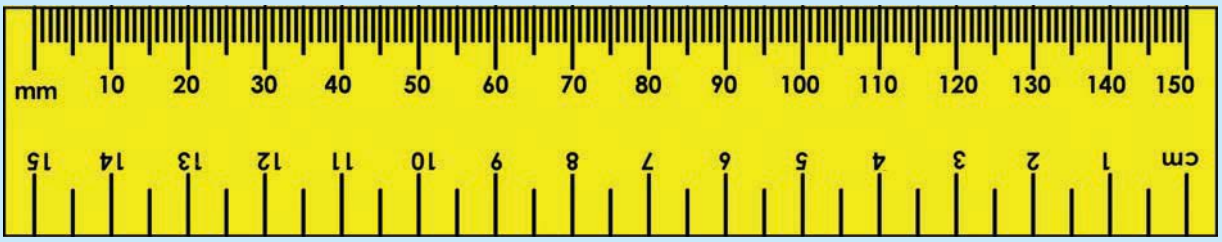
continued

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

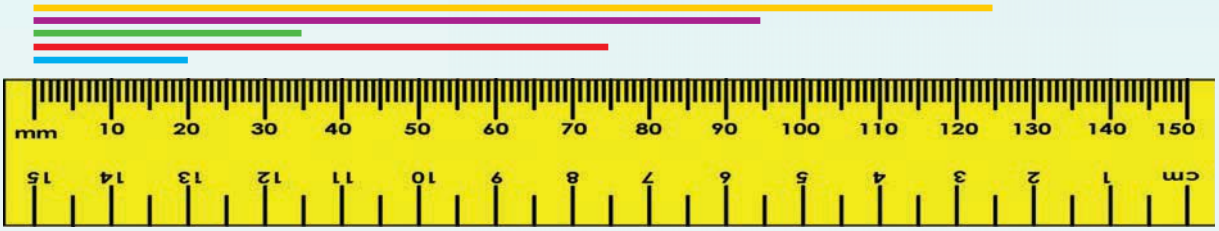
Decimals through Measurement

continued

Look at the ruler.



3. Use the ruler to answer the questions.



What is the length of the:

a. Blue line _____ mm or _____ cm.

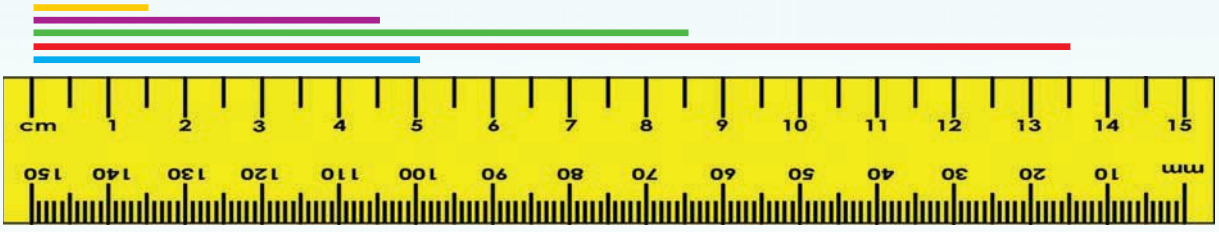
b. Red line _____ mm or _____ cm.

c. Green line _____ mm or _____ cm.

d. Purple line _____ mm or _____ cm.

e. Orange line _____ mm or _____ cm.

4. Use the ruler to answer the questions.



What is the length of the:

a. Blue line _____ mm or _____ cm.

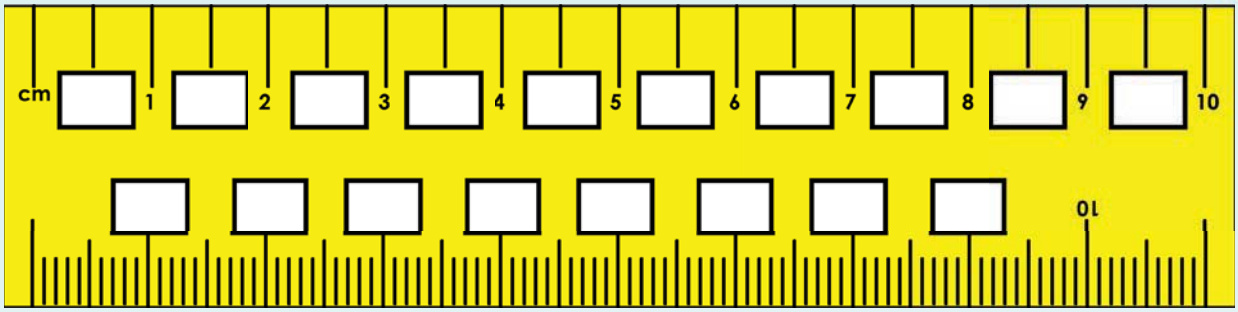
b. Red line _____ mm or _____ cm.

c. Green line _____ mm or _____ cm.

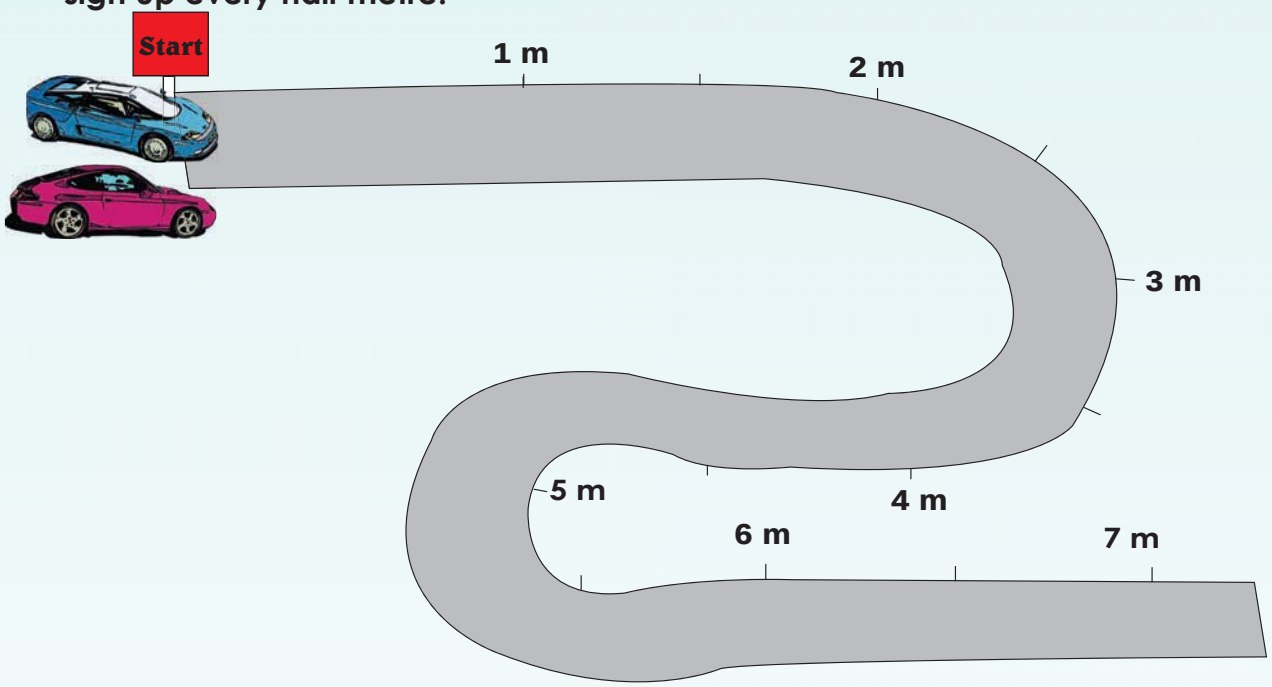
d. Purple line _____ mm or _____ cm.

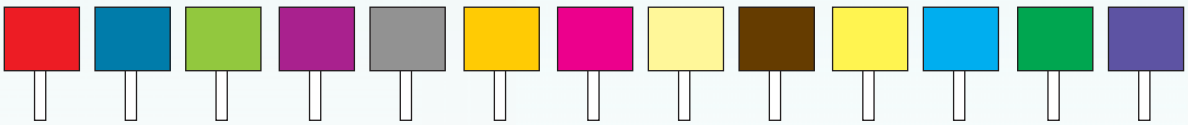
e. Orange line _____ mm or _____ cm.

5. Fill in the empty spaces on the ruler.



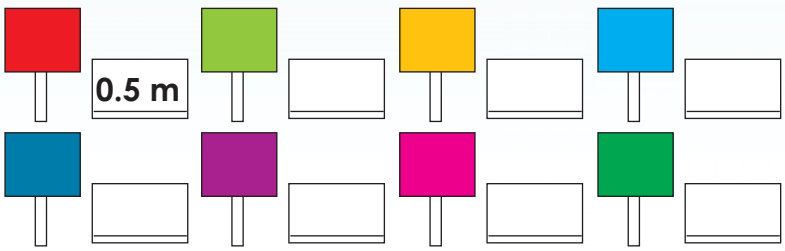
6. My friend and I built a racing track for our cars. It is 7 metres long. We want to put a sign up every half metre.





a. Put (draw) a sign up every $\frac{1}{2}$ metre.

b. Where do all the signs stand? Give your answers in decimals.



Fraction Dominoes

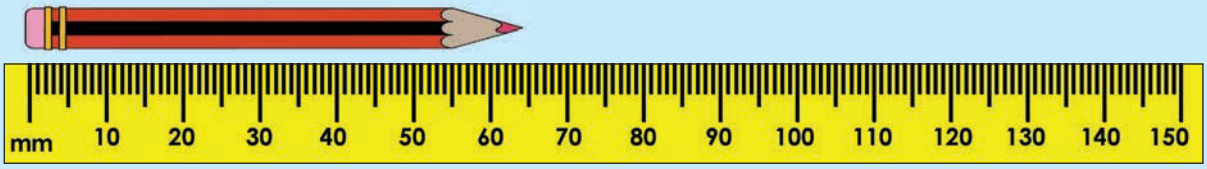
Play fraction dominoes.

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

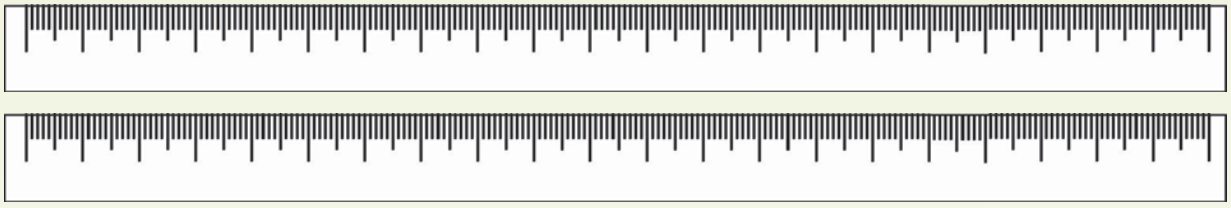
45 Length

Length – using your ruler.

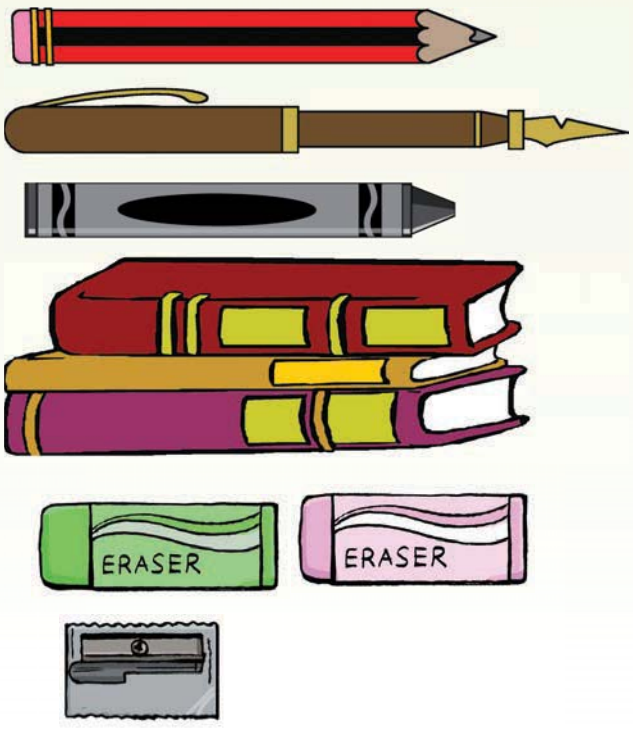
- The pencil starts at zero and measures up to 6,8 cm.
- Each cm is marked but there are unmarked divisions in between.
- These divisions divide each cm into 10 parts.
- Each division is equal to 1 mm because 1cm = 10 mm.
- The pencil measures 6,4 cm or 64 mm.



1. Label the first ruler in cm and the second one in mm.



2. Measure each object and give your answer in cm and mm. Order the objects from shortest to longest.



a. _____

b. _____

c. _____

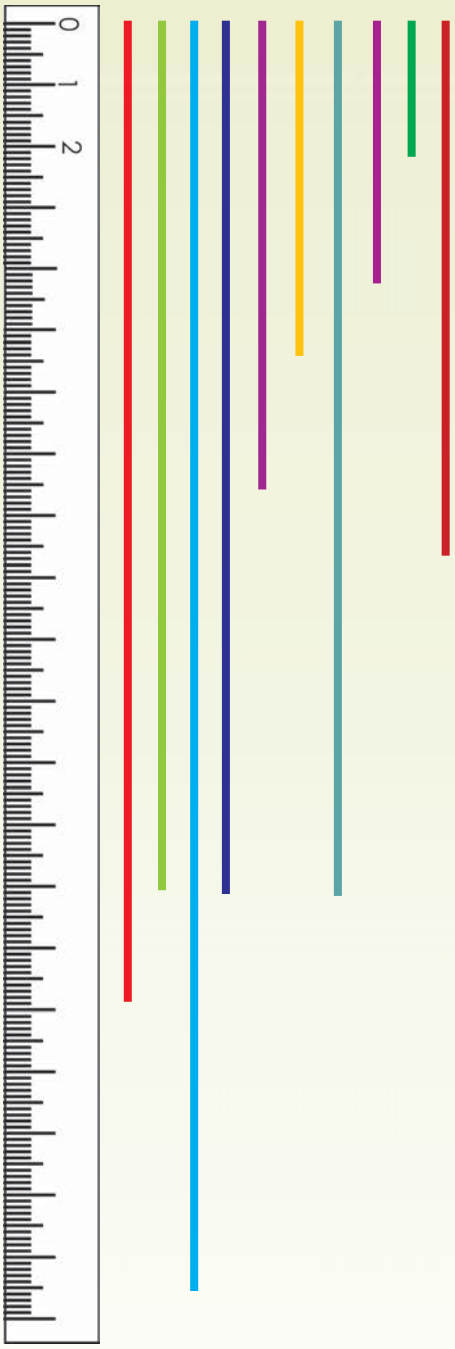
d. _____

e. _____

f. _____



3. Complete the ruler and measure the lines. Then complete the table.



	Answer in mm	Answer in cm

4. Answer the following:

Write your answers in mm and cm.

a. Which line is the longest?

_____

a. Which line is the shortest?

_____

One metre outing …



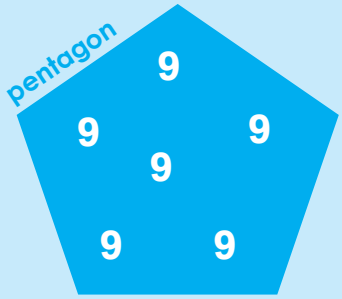
Find 10 things that are 1 metre long.

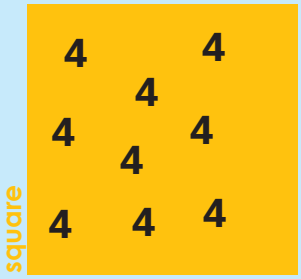


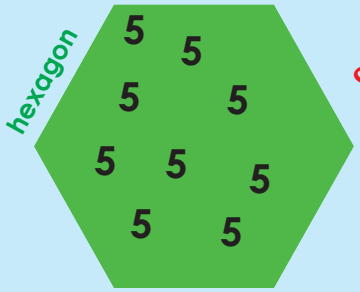
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

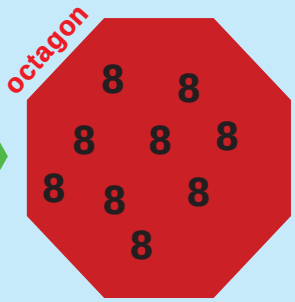
Multiplication: 1-digit by 2-digits

Give the total of the numbers in each shape. Use multiplication.









1. How fast can you complete this grid?

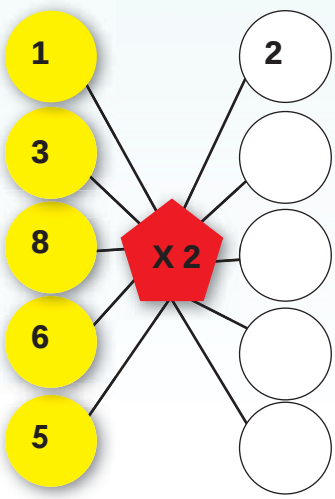
X	1	2	3	4	5	6	7	8	9
1									
2									
3									
4									
5									
6									
7									
8									
9									

2. Describe the pattern shaded in yellow on the previous page.

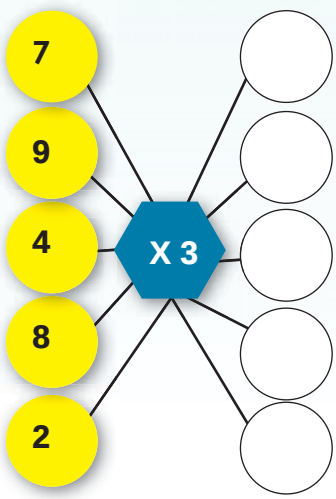
Continue on an extra sheet of paper.

3. Complete the spider diagrams.

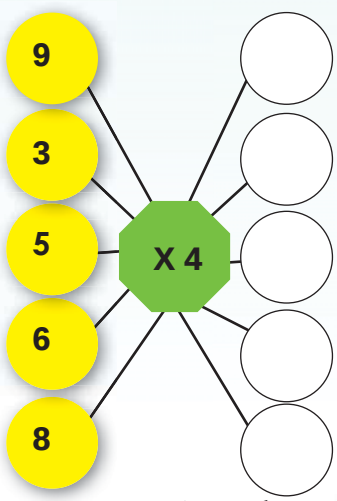
a.



b.



c.



continued

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

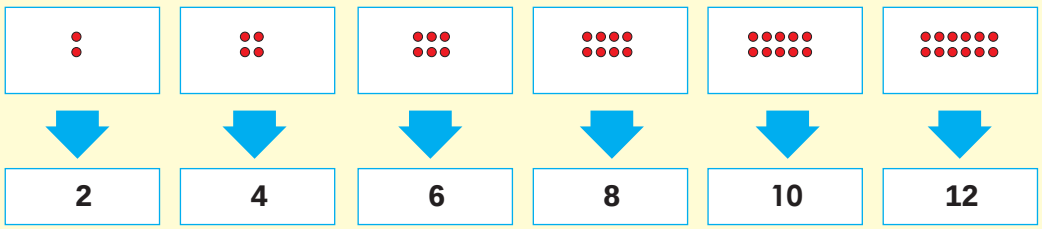
Multiples: 1-digit by 2-digits continued!

d. Draw similar spider diagrams multiplying by 8 and one multiplying by 6.

Continue on an extra sheet of paper. .

4. The example below will help you to complete the other tables.

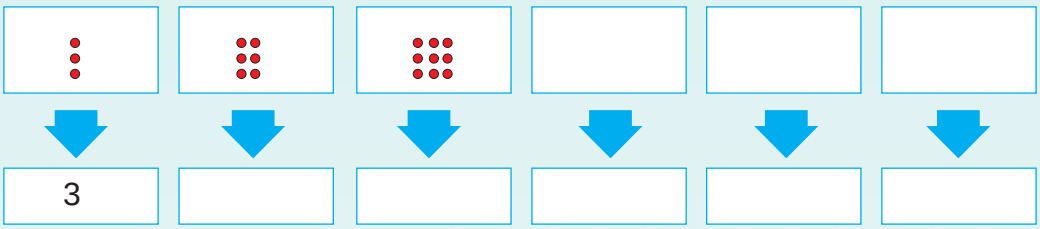
Multiples of 2



The multiples of 2 are 2, 4, 6, 8, 10, 12, ____, ____, ____, ____, ____, ____

a.

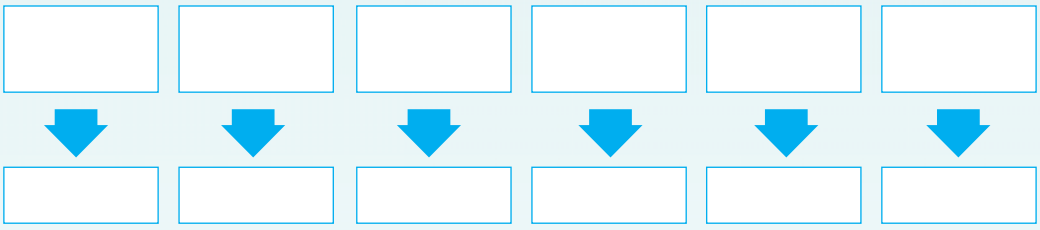
Multiples of 3



The multiples of 3 are 3, 6, 9, ____, ____, ____, ____, ____, ____

b.

Multiples of 5



The multiples of 5 are ____, ____, ____, ____, ____, ____, ____, ____

Competition time

What you need:

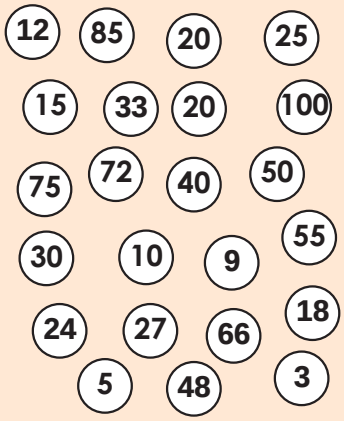
- Coloured pencils.

What to do:

- Colour in the multiples as fast as you can:
- Multiples of 2 in **red**.
- Multiples of 3 in **blue**.
- Multiples of 4 in **green**.
- Multiples of 5 in **purple**.

One circle can have more than one colour.





Check your answers:

- You should have:
- 13 red circles
- 13 blue circles
- 8 green circles
- 13 purple circles

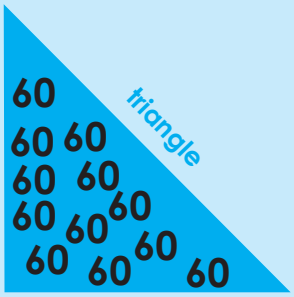
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

47 Multiplication: 2-digits by 1-digit

Give the total of the numbers in each shape. Use multiplication.

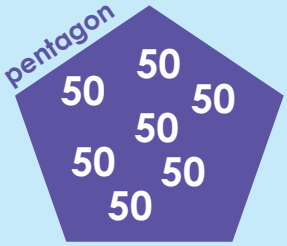
rectangle

30 30 30
30 30 30
30 30



square

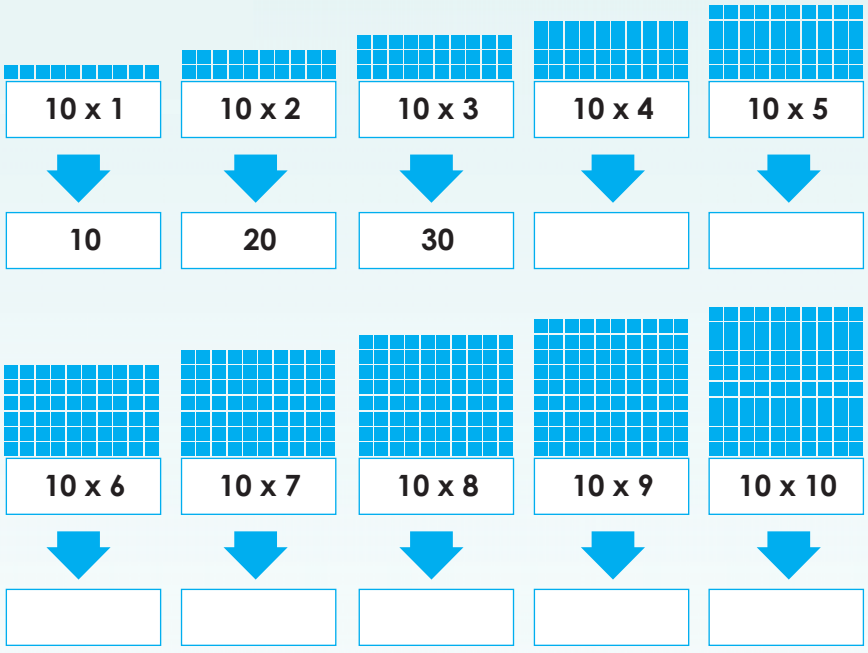
10 10
10
10 10
10 10 10
10 10 10



1. Find the multiples.

a.

Multiples of 10



The multiples of 10 are ____, ____, ____, ____, ____, ____

2. **Use the method below to calculate the multiplication sums. Write the steps in your workbook.**

Example:

16 x 7

= (10 + 6) x 7
= (10 x 7) + (6 x 7)
= 70 + 42
= 70 + 40 + 2
= 110 +2
= 112

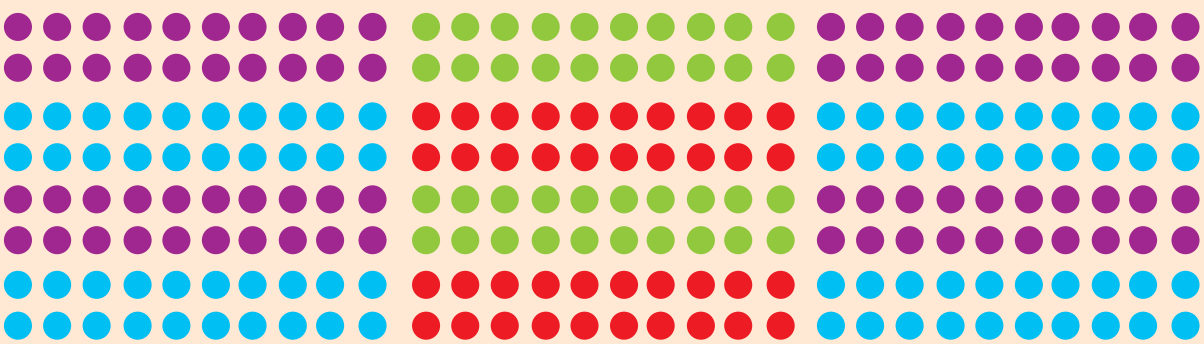
a. 14 x 6

b. 25 x 3

c. 37 x 8

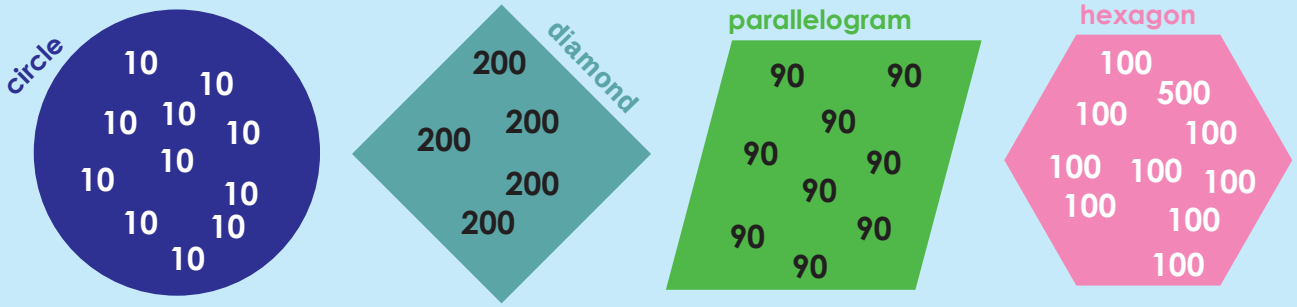
How fast are you?

See how fast can you count the objects.



48 Multiplication: 2-digits by 2-digits

Give the total of the numbers in each shape. Use multiplication.



1. Complete the table below.

Number	x 10	x 20	x 30	x 40	X 50
10					
20					
30					
40					
50					

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

a. **10?** 50, 60, 70, 80, ____ ____ ____ ____ ____

b. **20?** 260, 280, 300, 320, ____ ____ ____ ____ ____

c. **40?** 160, 200, 240, 280, ____ ____ ____ ____ ____

d. **100?** 200, 300, 400, 500, ____ ____ ____ ____ ____

e. **90?** 180, 270, 360, 450, ____ ____ ____ ____ ____



3. Use the method below to solve the multiplication sums on this and the next page.

Examples:

Example 1:

11 x 12
= (10 + 1) x (10 + 2)
= (10 x 10) + (1 x 10) + (10 x 2) + (1 x 2)
= 100 + 10 + 20 + 2
= 100 + 30 + 2
= 132

a. 12 x 13 =

Continue on an extra sheet of paper.

b. 10 x 21 =

Continue on an extra sheet of paper. .

continued ☛

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Multiplication: 2-digits by 2-digits continued!

c. 22 x 14 =

Continue on an extra sheet of paper.

d. 23 x 17 =

Continue on an extra sheet of paper.

e. 19 x 22 =

Continue on an extra sheet of paper.

5. Solve the problem.

Each box has 42 apples. How many apples are there altogether in 12 boxes?
Show all calculations.



Continue on an extra sheet of paper.

How fast are you?



What to do:

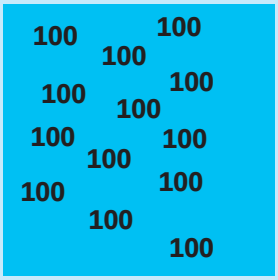
- The aim is to see how fast you can fill in the answers in the white rectangles.
- Multiply each colour number on the circle by the same colour rectangle's to get your answer.

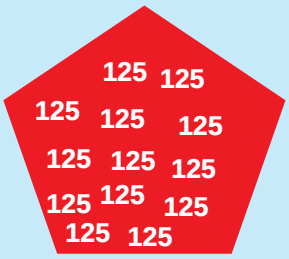
30		80	
10		40	
50		40	
200		90	
90		30	
50		50	
20		10	
30		9	
60		20	
80		60	

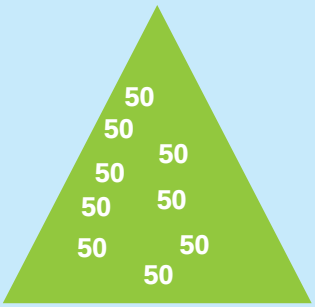
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

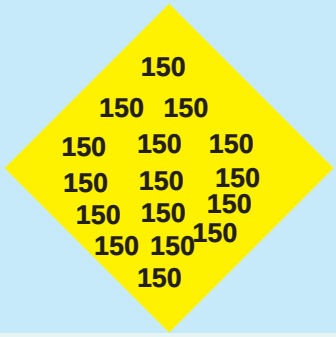
49 Multiplication: 2-digits by 2-digits

Give the total of the numbers in each shape. Use multiplication.









1. Complete the table below.

Number	x 10	x 20	x 30	x 40	x 50	x 60	x 70	x 80	x 90
8									
10									
12									
15									
20									

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

a. **20?** 60, 80, 100, 120, ____ ____ ____ ____ ____

b. **50?** 150, 200, 250, 300, ____ ____ ____ ____ ____

c. **100?** 500, 600, 700, 800, ____ ____ ____ ____ ____

d. **200?** 200, 400, 600, 800, ____ ____ ____ ____ ____

e. **250?** 0, 250, 500, 750, ____ ____ ____ ____ ____

3. Use the method below to solve the sums on the next page.

Examples:

Example 1:

48 x 36
= (40 + 8) x (30 + 6)
= (40 x 30) + (8 x 30) + (40 x 6) + (8 x 6)
= 1 200+ 240 + 240 + 48
= 1 000 + 200 + 200 + 200 + 40 + 40 + 40 +8
= 1 000 + 600 + 120 + 8
= 1 000 + 600 + 100 + 20 + 8
= 1 728

a. 23 x 54 =

Continue on an extra sheet of paper.

b. 28 x 62 =

Continue on an extra sheet of paper.

continued

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

49b Multiplication: 2-digits by 2-digits continued!

c. 35 x 54 =

Continue on an extra sheet of paper.

d. 33 x 39 =

Continue on an extra sheet of paper.

e. 28 x 71 =

Continue on an extra sheet of paper.

4. My friend and I drank 16 glasses of water every day for the month of May. How many glasses of water did we drink altogether?

Continue on an extra sheet of paper.

How fast are you...



What to do:

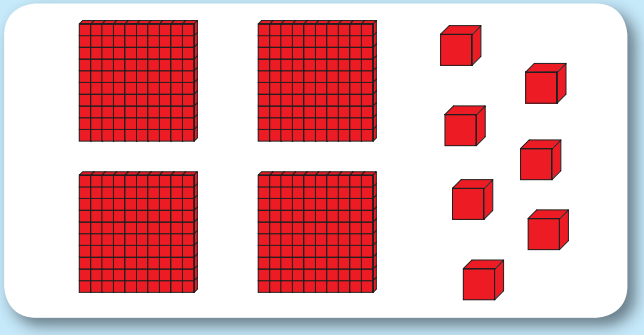
- The aim is to see how fast you can fill in the answers in the white rectangles.
- Multiply each number on the circle by the same colour rectangles to get your answer.

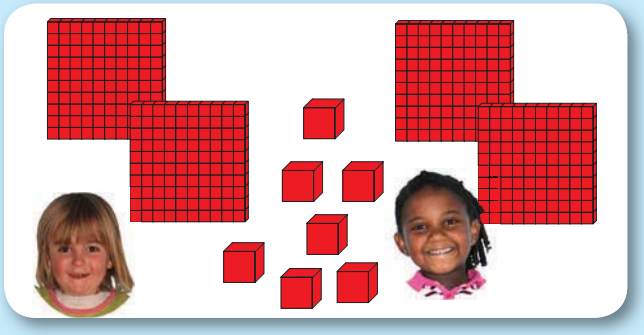
20		50	
30		40	
60		20	
60		10	
10		10	
90		70	
90		80	
50		40	
10		50	
80		50	

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

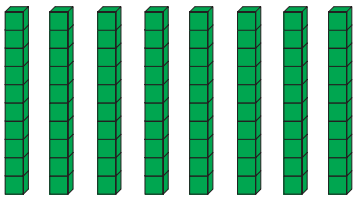
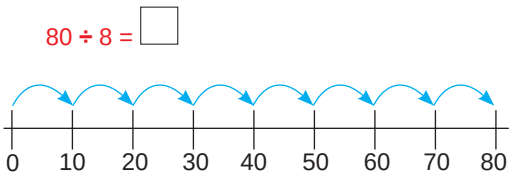
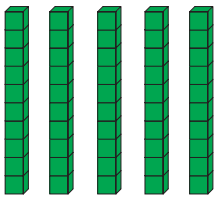
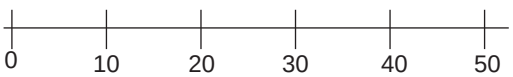
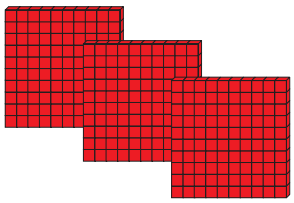
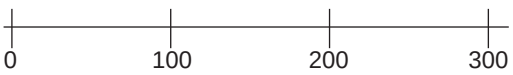
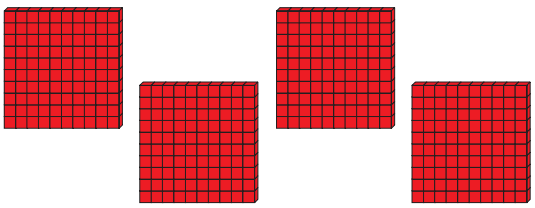
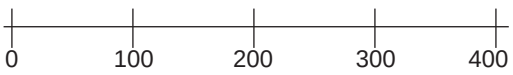
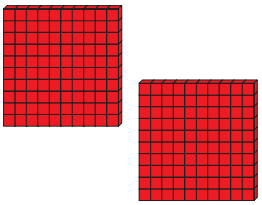
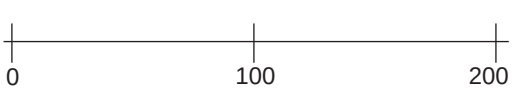
50 Sharing and Grouping Problems

Look at the two pictures below. Use the words 'group' and 'share' to describe it.





1. Complete the table using the example in the first row to guide you:

	Share between	Division sum
	8	
	5	
	3	
	4	
	2	

Describe the picture you see when you do these division sums.



2. Complete the following:

2

20 ÷ 2 = ☐	200 ÷ 2 = ☐
18 ÷ 2 = ☐	180 ÷ 2 = ☐
16 ÷ 2 = ☐	160 ÷ 2 = ☐
14 ÷ 2 = ☐	140 ÷ 2 = ☐
12 ÷ 2 = ☐	120 ÷ 2 = ☐
10 ÷ 2 = ☐	100 ÷ 2 = ☐
8 ÷ 2 = ☐	80 ÷ 2 = ☐
6 ÷ 2 = ☐	60 ÷ 2 = ☐
4 ÷ 2 = ☐	40 ÷ 2 = ☐

3

30 ÷ 3 = ☐	300 ÷ 3 = ☐
27 ÷ 3 = ☐	270 ÷ 3 = ☐
24 ÷ 3 = ☐	240 ÷ 3 = ☐
21 ÷ 3 = ☐	210 ÷ 3 = ☐
18 ÷ 3 = ☐	180 ÷ 3 = ☐
15 ÷ 3 = ☐	150 ÷ 3 = ☐
12 ÷ 3 = ☐	120 ÷ 3 = ☐
9 ÷ 3 = ☐	90 ÷ 3 = ☐
6 ÷ 3 = ☐	60 ÷ 3 = ☐

4

40 ÷ 4 = ☐	400 ÷ 4 = ☐
36 ÷ 4 = ☐	360 ÷ 4 = ☐
32 ÷ 4 = ☐	320 ÷ 4 = ☐
28 ÷ 4 = ☐	280 ÷ 4 = ☐
24 ÷ 4 = ☐	240 ÷ 4 = ☐
20 ÷ 4 = ☐	200 ÷ 4 = ☐
16 ÷ 4 = ☐	160 ÷ 4 = ☐
12 ÷ 4 = ☐	120 ÷ 4 = ☐
8 ÷ 4 = ☐	80 ÷ 4 = ☐

5

50 ÷ 5 = ☐	500 ÷ 5 = ☐
45 ÷ 5 = ☐	450 ÷ 5 = ☐
40 ÷ 5 = ☐	400 ÷ 5 = ☐
35 ÷ 5 = ☐	350 ÷ 5 = ☐
30 ÷ 5 = ☐	300 ÷ 5 = ☐
25 ÷ 5 = ☐	250 ÷ 5 = ☐
20 ÷ 5 = ☐	200 ÷ 5 = ☐
15 ÷ 5 = ☐	150 ÷ 5 = ☐
10 ÷ 5 = ☐	100 ÷ 5 = ☐

How fast are you?

Colour any two numbers that will give you an answer of 2.

2

8, 4, 5, 13, 12, 22, 6, 3, 20, 30, 2, 11, 1, 7, 9, 32, 10

Colour any two numbers that will give you an answer of 3.

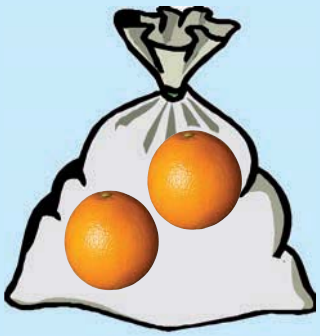
3

8, 33, 23, 12, 13, 9, 6, 5, 9, 30, 10, 3, 15, 88, 99, 7, 11, 61, 90

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

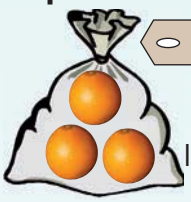
51 Rate

Bag with 2 oranges.

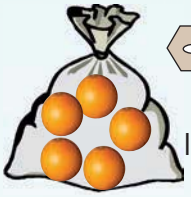




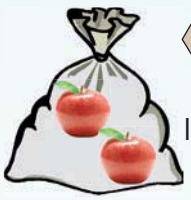
1. Complete the following:

a. 

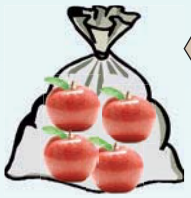
It is R _____ per orange

b. 

It is R _____ per orange

c. 

It is R _____ per apple

d. 

It is R _____ per apple

e. 

It is R _____ per banana

The symbol we use for rate is /
Example: R2/orange.

2. Write number 1 a, b, c, d and e, above, with the "/" symbol

a. R _____

b. R _____

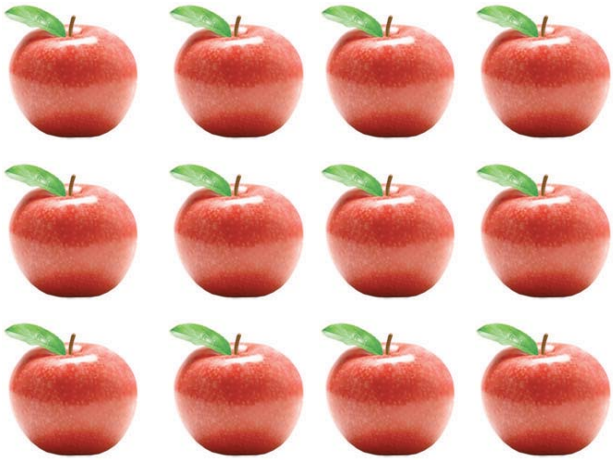
c. R _____

d. R _____

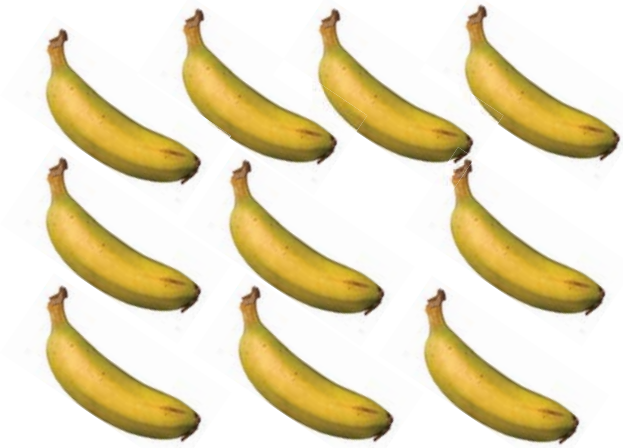
e. R _____

3. Complete the following:

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



How much do these bananas cost if each banana costs R1,50?



The milk costs R10/litre. How much does this milk cost?

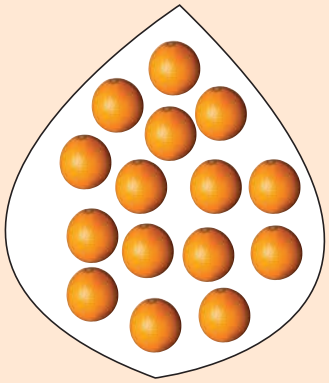


The chicken is on special for R25/kg. How much will 2 kg cost?





Quick counting ...

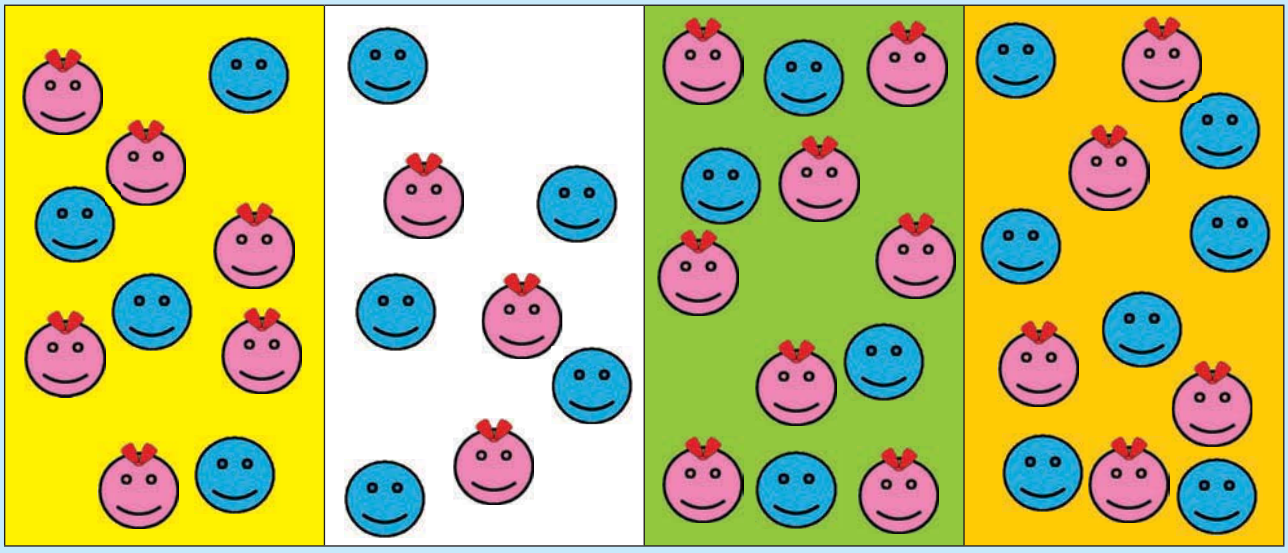


Quickly count the oranges in the bag. All of them cost R15.
How much does one orange cost?

Remember: always do this activity when you go to a shop.
This will sharpen your mental maths skills.

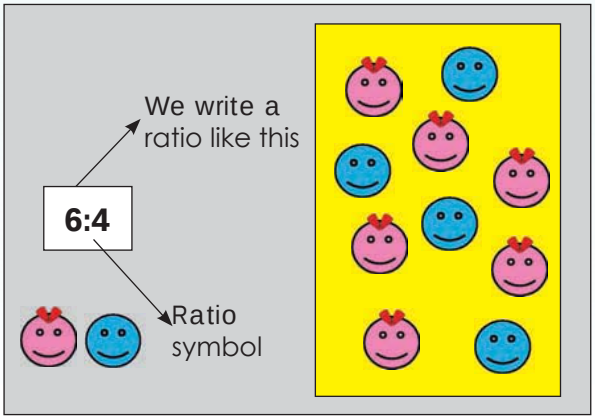
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

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

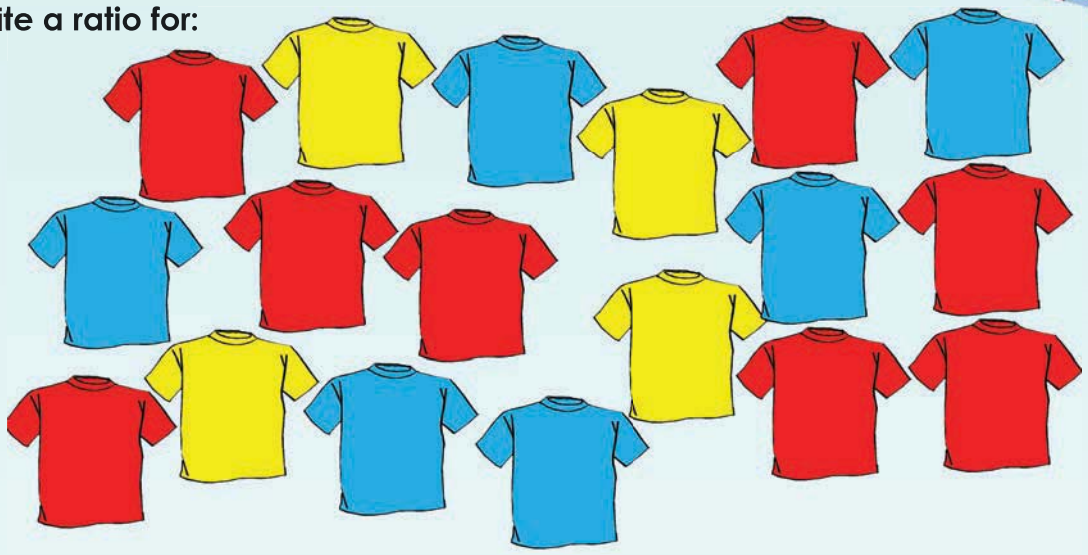


1. Complete the following:

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



2. Write a ratio for:



a. Blue and red shirts. _____

b. Blue and yellow shirts. _____

c. Red and yellow shirts. _____

3. Draw the following:

Red and yellow flowers **4:5**	**Dogs and cats** **8:6**
Boys and girls **8:10**	**Apples and bananas** **7:8**

I love my teacher ...

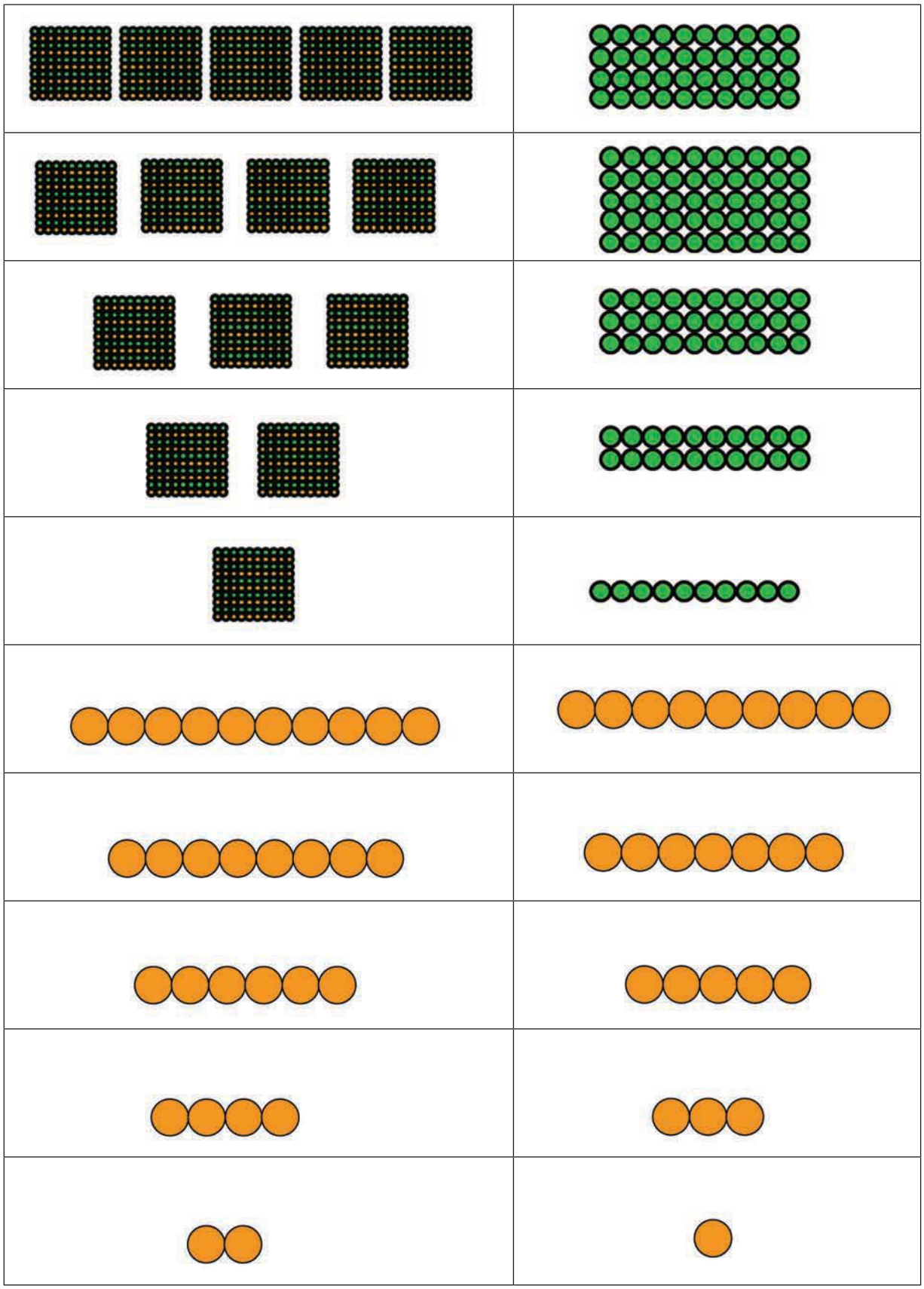


You have written this message for your teacher. What will the ratios be between:

- Red and blue jelly tots?
- Green and black jelly tots?
- Oranges and blue jelly tots?

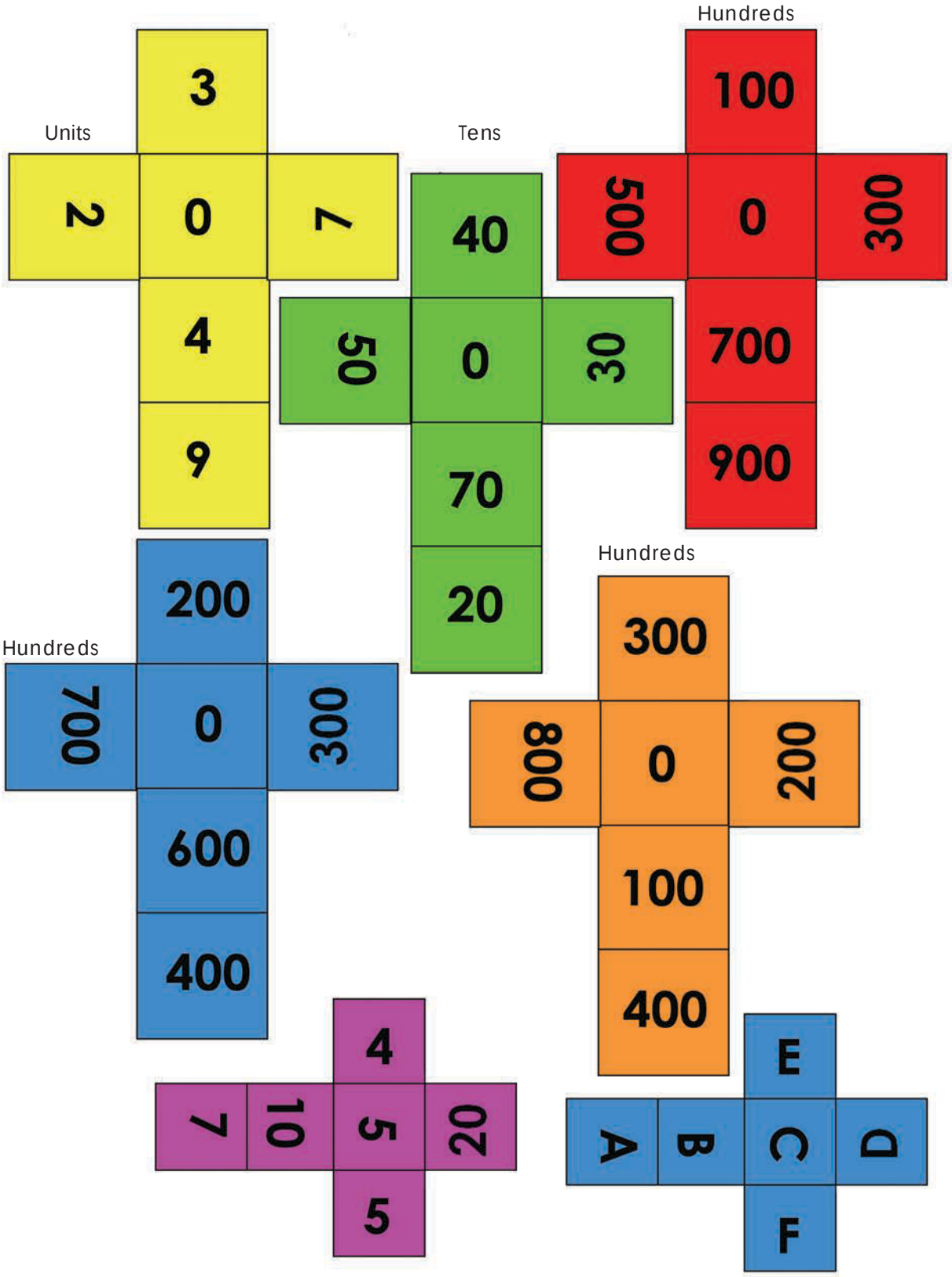
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Notes

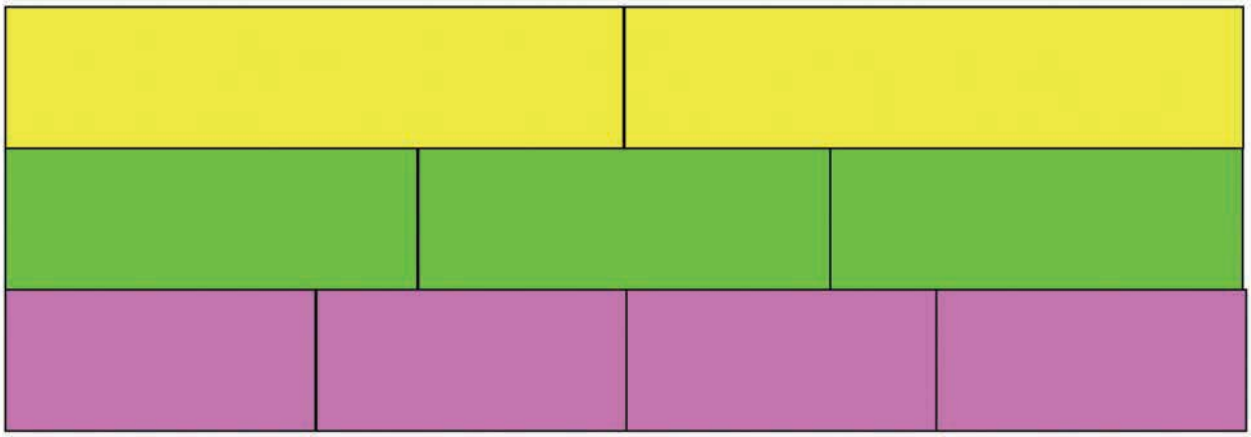


1	10	100	1000
2	20	200	2000
3	30	300	3000
4	40	400	4000
5	50	500	5000
6	60	600	6000
7	70	700	7000
8	80	800	8000
9	90	900	9000

Note: Make dice from these Cut-outs. After assembling the dice, keep them in a safe place because you will use them throughout the year.



Fraction strips



Fraction dice

