

Mathletics

for the New Zealand
Curriculum

2

Mathematics



A 3P Learning Product

Contents

Term 1			
Week	Strand: Element	Topic	Page
1	Number: Number structures	Counting to 100	2
2	Number: Number structures	Place Value to 120	7
3	Number: Operations	Addition to 20	12
4	Measurement: Measuring	Length	17
5	Number: Financial mathematics	Money Checkpoint 1	22 25
6	Number: Operations	Subtract to 20	27
7	Number: Operations	Add and subtract to 100	32
8	Geometry: Shapes	2D shapes	37
9	Number: Number structures	Numbers to 100: te reo Māori Checkpoint 2	42 45

Term 2			
Week	Strand: Element	Topic	Page
1	Number: Operations	Skip counting $\times 2$ s, $\times 5$ s	47
2	Number: Rational numbers	Fractions: Halves and quarters	52
3	Number: Operations	Multiplying by 10s, 2s and 5s	57
4	Measurement: Measuring	Weight (Mass)	62
5	Geometry: Shapes	3D Shapes Checkpoint 3	67 72
6	Number: Operations	2-digit addition Add and subtract 10s	74
7	Number: Rational numbers	Fractions: Thirds	79
8	Measurement: Measuring	Time: O'clock and half-past	84
9	Measurement: Measuring	Capacity Checkpoint 4	89 92

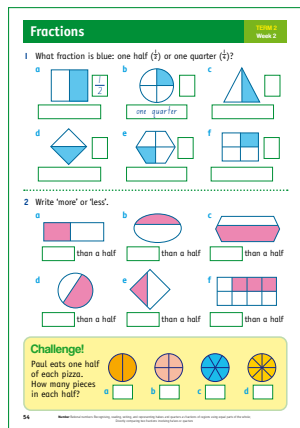
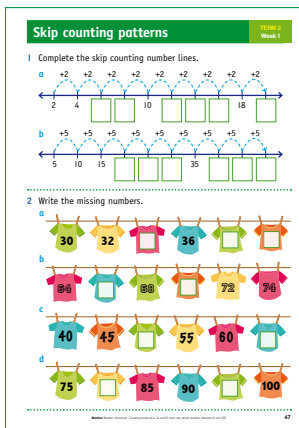
Term 3			
Week	Strand: Element	Topic	Page
1	Number: Number structures	Rounding to add	94
2	Number: Operations	Odd and even numbers Dividing by 2	99
3	Geometry: Spatial reasoning	Flip, slide and turn	104
4	Number: Operations	Dividing by 5 and 10	109
5	Measurement: Measuring	Time to the quarter hour Checkpoint 5	114 117
6	Measurement: Measuring	Area and perimeter	119
7	Statistics: Develop knowledge, Visualise and interpret data	Graphs and data	124
8	Geometry: Shapes and Pathways	Prisms Following directions	129
9	Algebra: Equations and relationships	Repeating patterns Checkpoint 6	134 137

Term 4			
Week	Strand: Element	Topic	Page
1	Algebra: Equations and relationships	Comparing numbers: are they equal?	139
2	Number: Financial mathematics	Equivalent money amounts	144
3	Number: Operations	2-digit addition Two step problems	149
4	Geometry: Pathways	Position and directions	154
5	Statistics: Develop knowledge, Visualise and interpret data	Dot plots, tables and graphs Checkpoint 7	159 162
6	Number: Operations	Problem solving $+$ $-$ $\times$ $\div$	164
7	Measurement: Measuring	Months and seasons	169
8		Revision	174
9	Number: Operations	Number fact practice Checkpoint 8	179 182

Mathletics Student Book

New Zealand Curriculum Alignment

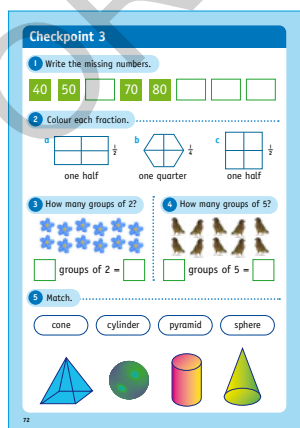
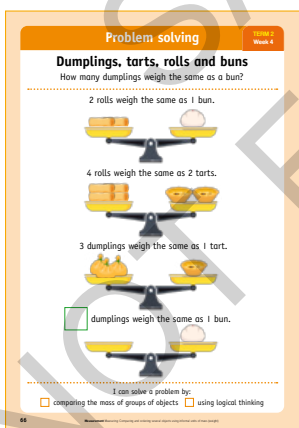
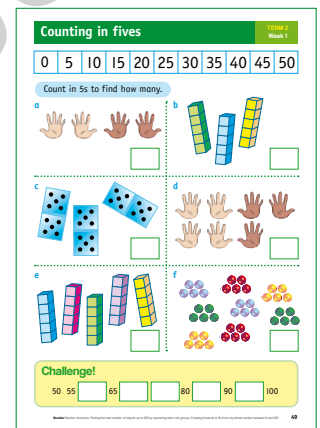
This edition fully aligns each student page with the refreshed New Zealand Curriculum: Mathematics and Statistics Years 0–8, 2025. The New Zealand Curriculum teaching sequence statements appear on each student page.



Knowledge and Practices

The **Mathletics Programme** develops the **knowledge** students need to build a deep understanding of mathematics and statistics — including number structures, algebraic thinking, measurement, geometry and statistics.

Students build their **practices** by focusing on key facts, concepts and procedures, such as patterns, place value and the structure of the base-10 system. They develop the **skills, strategies and processes** required to reason, model and solve problems. Through these practices, students apply what they know to connect ideas, identify patterns and relationships, and explain their reasoning with confidence.



Integrated Problem-Solving

Includes problem-solving that actively builds students' problem-solving capabilities.

Regular Checkpoints

Checkpoints appear both at mid-term and end of each term to review and assess key concepts.

Hands-on Activities

Various hands-on activities are included in each term, asking students to measure and make, count and compare, using objects from around the classroom or home.



Year 2 Knowledge and Practices

The New Zealand Curriculum Mathematics and Statistics 2025

Knowledge	Practices	Pages
Number – Number structures		
The whole numbers from 0 to 120 form a sequence. The base 10 number system is organised by place value (hundreds, tens, and ones for three-digit numbers). The names of numbers between 101 and 120 use 'one hundred and –' phrasing. The place value of digits helps with comparing and ordering.	Reading and writing whole numbers up to 120, and representing them using base 10 structure	2, 3, 5, 7, 8, 9, 10, 33, 76, 149, 177
	Comparing and ordering whole numbers up to 120	3, 5, 6, 11, 147
	Using te reo Māori for numbers up to 100	42, 43, 44
	Recognising the place value of each digit in a two-digit number, and a three-digit number up to 120	2, 10, 33
	Approximately locating numbers up to 120 on a partially labelled number line	3, 5, 9
Arranging objects into groups can help when finding their total. Groups of 10s are used to structure and count larger collections. Ten 10s can be renamed as one 100.	Finding the total number of objects up to 120 by separating them into groups	4, 42, 43, 49, 143
Rounding to the nearest 10 depends on the value of the ones place; a number line supports this.	Rounding numbers up to 120 to the nearest 10	95, 96, 97
Sequences generated by counting can overlap (e.g. counting in 2s and counting in 5s overlap for numbers that are multiples of 2 and 5). Counting in 3s produces alternating patterns of odd and even numbers. Numbers ending in the digits 0, 2, 4, 6, and 8 are even and numbers ending in 1, 3, 5, 7, and 9 are odd.	Counting forwards in 3s from multiples of 3s	174, 175
	Counting forwards and backwards in 2s, 5s, and 10s from any whole number between 0 and 120	7, 8, 9, 11, 47, 49, 51, 57, 58, 76, 77, 78, 111
	Identifying odd and even numbers up to 120	99
Number – Operations		
Number facts can be derived from known facts using place value (e.g. $70 + 20 = 90$ can be derived from $7 + 2 = 9$). Addition and subtraction are inverse operations. Numbers can be added and subtracted using representations, mental strategies, known facts, and place value.	Memorising addition and subtraction facts up to 20 (e.g. $17 + 3 = 20$)	14, 27, 31, 94, 179, 181
	Memorising doubles and halves to 20	15, 16, 31, 94, 103
	Adding and subtracting numbers up to 100 (e.g. $32 + 20$ or $32 + 2$)	12, 13, 29, 30, 32, 33, 34, 35, 36, 74, 76, 77, 78, 97, 149, 150, 177
	Adding and subtracting 3 one-digit numbers (e.g. $7 + 3 + 6$).	13, 167, 177
	Adding 100 to a one-digit number	151
	Solving one-step addition and subtraction problems involving numbers up to 100	75, 98, 147, 151, 168, 177
	Solving multi-step addition and subtraction problems involving numbers up to 20	152, 153, 165, 167, 168, 176
Arrays and groups can be used to represent and solve multiplication and division problems. Multiplying and dividing by 1 gives the same number (the identity property of multiplication). Multiplying by zero always results in zero (the zero property of multiplication). Two numbers can be multiplied in either order without changing the result; the same is not true when dividing (the commutative property of multiplication). Multiplication and division are inverse operations.	Identifying the relationship between skip counting and multiplication facts for 2s, 5s, and 10s	48, 50, 51, 58, 61, 111, 143
	Memorising multiplication and corresponding division facts for 2s, 5s, and 10s	48, 50, 51, 58, 59, 60, 61, 100, 101, 102, 103, 109, 110, 111, 112, 113, 166, 180, 181
	Multiplying and dividing with products and dividends up to 100	60, 61, 164, 166
Number – Rational Numbers		
The denominator of a fraction shows the total number of equal parts a whole is divided into. The numerator of a fraction shows the number of parts being counted or considered. Fractions can be named (e.g. half) or written using words and symbols.	Recognising, reading, writing (using symbols and words), and representing halves, thirds, and quarters as fractions of sets, quantities, and regions, using equal parts of the whole	52, 53, 54, 55, 56, 79, 80, 83
	Recognising the equivalence of $\frac{3}{4}$ and $\frac{1}{2}$	81
Equivalent fractions represent the same amount of the whole value (e.g. two quarters vs a half). A half is 1 of 2 equal parts, a third is 1 of 3 equal parts, and a quarter is 1 of 4 equal parts. Halves are larger than thirds, which are larger than quarters (when comparing fractions of the same whole).	Directly compare two fractions involving halves, thirds, or quarters	54, 81
The size of the whole can be determined if a fractional part is known (e.g. if $12 = 5$, then the whole is 10).	Finding a half, quarter, or third of a set by identifying groups and patterns (rather than sharing by ones)	55, 56, 79, 80, 82, 83
	Finding a whole when given a $\frac{1}{2}$, $\frac{1}{3}$, or $\frac{1}{4}$ of a length, shape, or set of objects or quantities	80
Number – Financial mathematics		
New Zealand coins and notes can be ordered and grouped to find the total value.	Recognising and ordering New Zealand denominations according to their value, making groups of 'like' denominations, and calculating their value	22, 23, 24, 29, 30, 144, 145, 146, 148
	Combining denominations of currency (either all notes or all coins) to make a particular value	22, 144, 145, 146, 147, 148
Algebra – Equations and relationships		
The symbols $\times$ and $\div$ represent multiplication and division in number sentences. Numbers can be compared using "greater than" ($>$), "less than" ($<$), and equals ($=$).	Checking the truth of number sentences involving direct comparisons of whole numbers up to 120 (e.g. $16 > 60$, true or false?)	139
	Checking the truth of number sentences and completing open number sentences involving addition, subtraction, multiplication, or division using tens frames, discrete materials, or number lines (e.g. $18 + \underline{\quad} = 17 + 6$, $6 \div \underline{\quad} = 2$, $2 + 2 + 2 = 3 \times 2$, true or false?)	14, 16, 28, 94, 140, 141, 142

Year 2 Knowledge and Practices

The New Zealand Curriculum Mathematics and Statistics 2025

Knowledge	Practices	Pages
Algebra – Equations and relationships		
Patterns are made up of elements (including numeric or spatial elements) in a sequence governed by a rule, and they arise in a range of situations (e.g. cultural patterns, patterns in the local environment, patterns on everyday objects). Ordinal numbers (e.g. 1st, 2nd, 3rd) can be used to describe the elements in a sequence. Repeating patterns have a repeating group of elements called the unit of repeat. A missing element can be predicted from other elements in the pattern.	Recognising and describing the unit of repeat in a repeating pattern, and using the unit of repeat and ordinal position in a repeating pattern to predict further elements (e.g. ACDC in the pattern ACDCACDCACDC)	52, 134, 135, 136
Measurement – Measuring		
Standard measuring units are universally agreed and commonly used units for making measurements that enable people to communicate clearly. Measuring tools are usually marked with standard units to ensure consistent measurements of properties such as length, mass (weight) and capacity.	Estimating and using an informal unit repeatedly to measure the length, mass (weight) or capacity of an object	19, 20, 85, 87, 90
	Comparing and ordering several objects using informal units of length, mass (weight), or capacity	17, 18, 20, 84, 85, 86, 87, 88, 89, 91
	Estimating and measuring length (cm), mass (g) and capacity (mL), using tools with labelled markings and whole-number metric units	17, 18, 21, 86, 91, 176
The distance around the boundary of a 2D shape gives its perimeter. A polygon is a 2D straight-edged shape where the sides connect to form a closed shape.	Measuring the perimeter of polygon using metric units	120, 121, 122, 123
A turn is a rotation around a point. A turn can be directional and is described using clockwise (to the right) and anticlockwise (to the left).	Turning an object or person and describing how far they have turned, using full, half, quarter, and three-quarter turns as benchmarks	106, 107
Duration is the length of time between the start and end of an event. There are 60 minutes in an hour. There are 30 minutes in half an hour.	Naming and ordering the months and seasons	169, 170, 171
	Describing durations of familiar events using years, months, weeks, and days, or hours, minutes and seconds	172, 173
	Telling the time on analogue and digital clocks to the hour, half-hour and quarter-hour, using the language of 'past' and 'o'clock'	62, 63, 64, 65, 66, 114, 115, 116, 178
	Naming the month before and the month after	169, 170
	Using ordinal numbers to identify months of the year	169, 170, 171
Geometry – Shapes		
Te reo Māori supports identifying shape attributes (e.g. triangle / tapatoru, square / tapawhā rite, same / ōrite, different / rerekē).	Identifying, describing, visualising and sorting 2D and 3D shapes, including ovals, semicircles, polygons (e.g. hexagons, pentagons), rectangular prisms (cuboids), pyramids, and cones, using the attributes of shapes	37, 38, 39, 40, 41, 67, 68, 69, 70, 71, 122, 123, 124, 125, 126, 178
Geometry – Spatial reasoning		
Shapes can flip (reflect), turn (rotate), slide (translate), and be used to create patterns.	Flipping, sliding and turning 2D shapes to make a pattern or compose a shape	104, 105, 106, 108
Geometry – Pathways		
Paths can be described using sequenced instructions for moving or locating an object (e.g. for moving to another part of the school).	Following and giving instructions to move to a different location, using direction, distances (e.g. number of steps), and half and quarter turns	127, 128, 154, 155, 156, 157, 158
Maps are 2D representations of places in the world showing the view from above with symbols to show locations and landmarks.	Interpreting diagrams to describe the positions of objects and places in relation to other objects and places	154, 155, 156, 157, 158
Statistics – Developing knowledge from data		
Data is information collected about the world. A variable refers to an attribute being studied (e.g. colour, height, age of children). A categorical variable (e.g. colour, brand) classifies objects into groups (categories). Categorical data can be counted.	Collecting categorical data for an investigative question with limited categories (e.g. What are the favourite pets of students in our class?)	131, 161
	Sorting categorical data into categories and considering if 'other' should be a category for sorting rare responses	129, 130, 161
	Recording data using tally charts	131, 132, 133, 161
Statistics – Visualisation of data		
Data visualisations are representations (including picture graphs and dot plots) of all available values for a variable that show the frequency for each value. Dot plots represent each data point with a dot of the same size.	Creating data visualisations for categorical data	129, 130, 132, 133, 159, 160, 161
Statistics – Interpretation of data		
Data visualisations are representations that help reveal the story of a set of data.	Describing data visualisations using the variable name and the context and giving the frequency for each category	129, 131, 133, 159, 160
	Answering questions about data visualisations, including which category has the most or least items	129, 131, 133, 159, 160

Dictionary

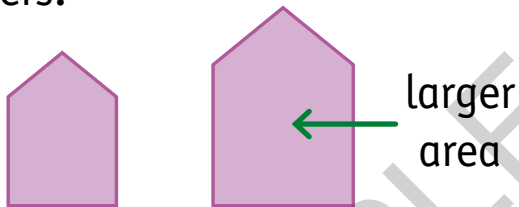
addition (+)

Six balls and two balls makes eight balls.


$$6 + 2 = 8$$

area

The amount of space something covers.



capacity

The amount it can hold.



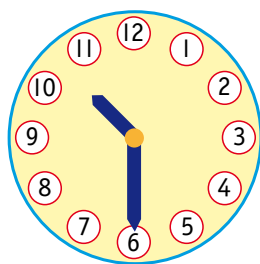
The jug holds more.

clocks

half-past ten



digital



analogue

days

Sunday

Monday

Tuesday

Wednesday

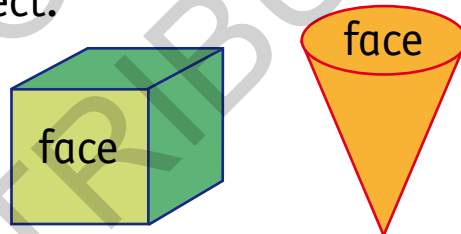
Thursday

Friday

Saturday

face

The flat surface of a solid object.

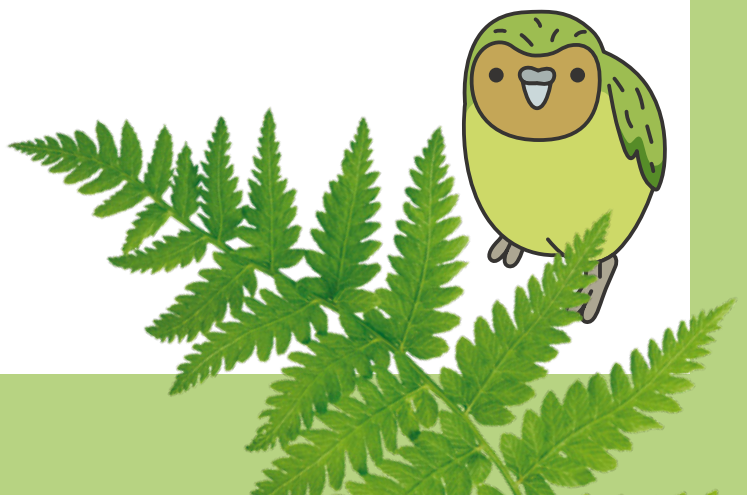


fractions

halves = two equal parts



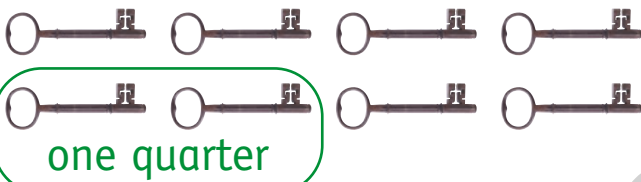
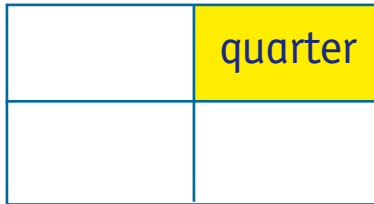
half a length



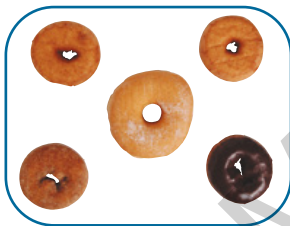
Dictionary

fractions

quarters = four equal parts



groups

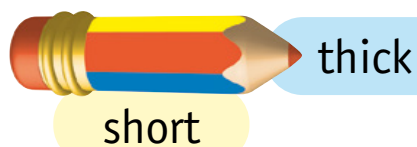


1 group of 5



3 groups of 7

length



mass



light



heavy

money

coins



notes



Dictionary

months

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

Seasons

Summer

December
January
February

Autumn

March
April
May

Winter

June
July
August
Spring
September
October
November

numbers

Even numbers can be grouped in pairs evenly.



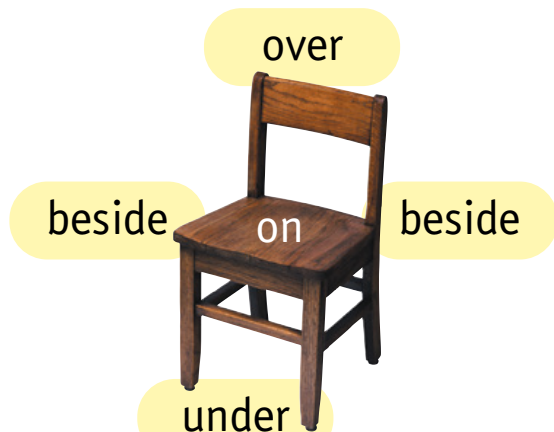
Odd



Ordinal numbers tell position.



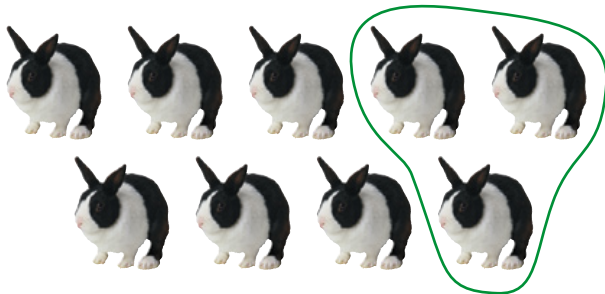
position



Dictionary

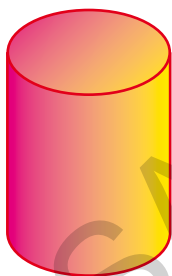
subtraction (-)

Nine rabbits take away three rabbits leaves six rabbits.



$$9 - 3 = 6$$

three-dimensional (3D) objects



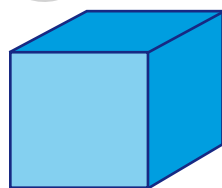
cylinder



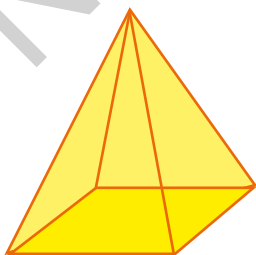
cone



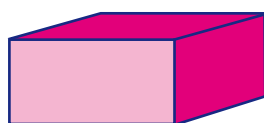
sphere



cube



square pyramid



rectangular prism

two-dimensional (2D) shapes

rectangle
tapawhā hāngai

square
tapawhā rite

circle
porowhita

oval
porotīhaha

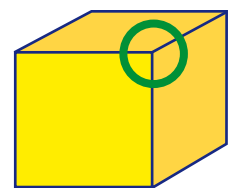
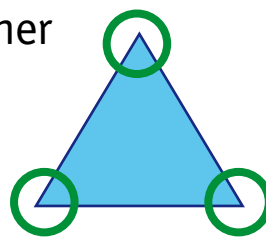
pentagon
taparima

hexagon
tapaono rite

triangle
tapatoru

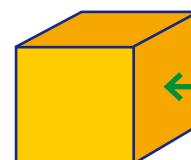
vertex

corner



volume

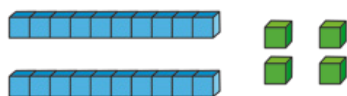
The space it takes up.



bigger
volume

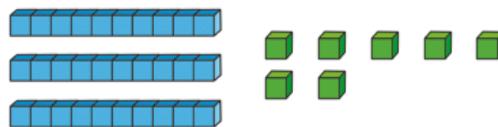
1 How many tens and ones? Write the number.

a



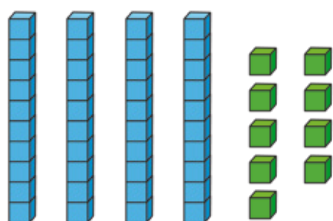
	tens		ones	=	
--	------	--	------	---	--

b



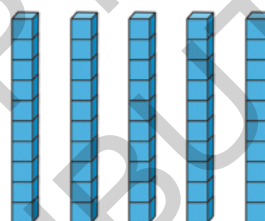
	tens		ones	=	
--	------	--	------	---	--

c



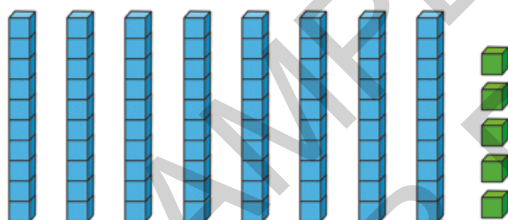
	tens		ones	=	
--	------	--	------	---	--

d



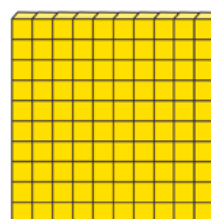
	tens		ones	=	
--	------	--	------	---	--

e



	tens		ones	=	
--	------	--	------	---	--

f



	tens		ones	=	
--	------	--	------	---	--

2 Complete.

$$25 = 20 + 5$$

$$29 = \square + \square$$

$$44 = \square + \square$$

$$49 = \square + \square$$

$$81 = \square + \square$$

$$67 = \square + \square$$

$$50 = \square + \square$$

$$95 = \square + \square$$

1 Fill in the missing numbers on the hundred chart.

1	2	3	4	5	6		8	9	10
11	12	13		15	16		18	19	20
				25	26		28	29	30
	32	33	34		36	37	38	39	40
	42	43	44						
51	52	53	54		56	57	58	59	60
61	62			65			68	69	70
71		73	74	75	76	77	78	79	
81		83	84	85	86	87		89	90
91		93	94	95	96	97	98		100

2 Count by 2.

10	12	14
----	----	----

--	--	--	--	--	--

3 Count by 5s.

10	15	20
----	----	----

--	--	--	--	--	--

4 Count by 10s.

20	30	40
----	----	----

--	--	--	--	--	--

5 Count backwards.

a

90	80	70
----	----	----

--	--	--	--	--	--

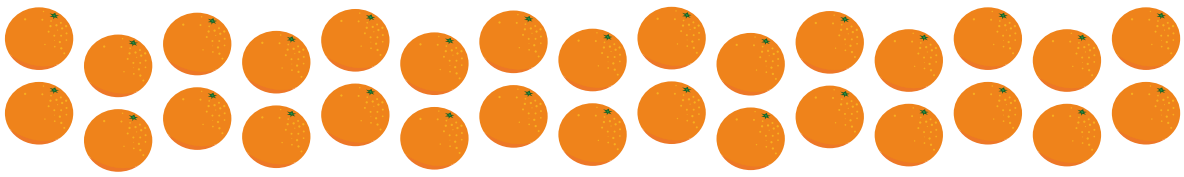
b

86	76	66
----	----	----

--	--	--	--	--	--

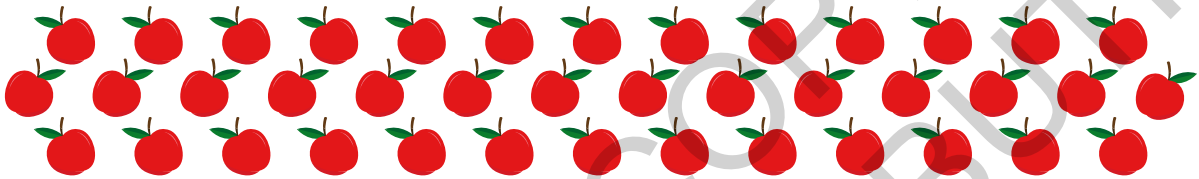
1 Circle groups of ten.

a



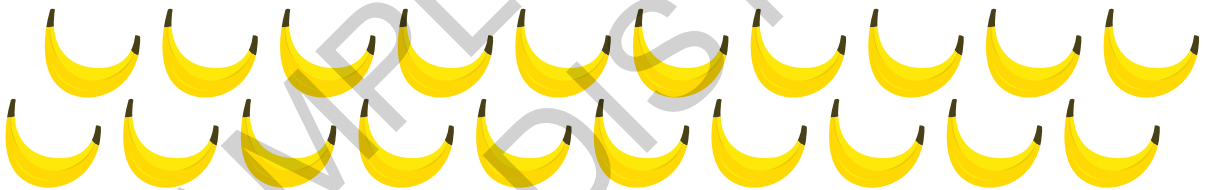
Count by 10s. How many altogether?

b



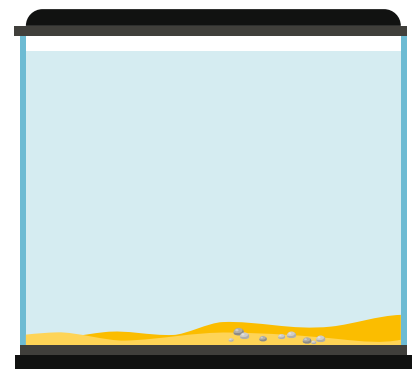
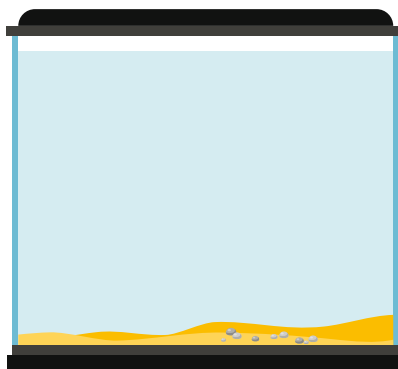
Count by 10s. How many altogether?

c



Count by 10s. How many altogether?

2 Draw 10 fish  in each tank.



Count by 10s. How many altogether?

1 Write the number before.

	80
----------------------	-----------

	72
----------------------	-----------

	91
----------------------	-----------

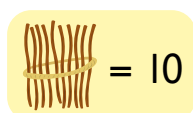
2 Write the number after.

99	
-----------	----------------------

55	
-----------	----------------------

90	
-----------	----------------------

3 How many?



4 Make 61 ●.

●	●	●	●	●			
●	●	●	●	●			
●	●	●	●	●			
●	●	●	●	●			
●	●	●	●	●			
●	●	●	●	●			
●	●	●	●	●			
●	●	●	●	●			
●	●	●	●	●			
●	●	●	●	●			
●	●	●	●	●			

5 Make 76 ▲.

▲	▲	▲	▲	▲	▲		
▲	▲	▲	▲	▲	▲		
▲	▲	▲	▲	▲	▲		
▲	▲	▲	▲	▲			
▲	▲	▲	▲	▲			
▲	▲	▲	▲	▲			
▲	▲	▲	▲	▲			
▲	▲	▲	▲	▲			
▲	▲	▲	▲	▲			
▲	▲	▲	▲	▲			
▲	▲	▲	▲	▲			

Order and compare numbers

TERM 1
Week 1

1



smallest

largest



smallest

largest



smallest

largest



smallest

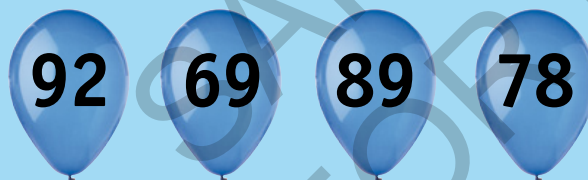
largest

2 Order from smallest to largest.



smallest

largest



smallest

largest



smallest

largest



smallest

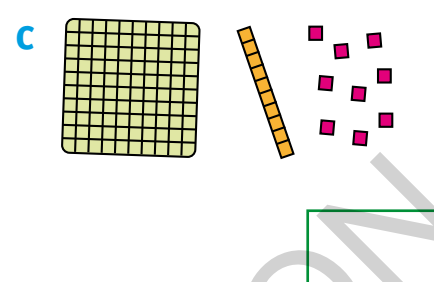
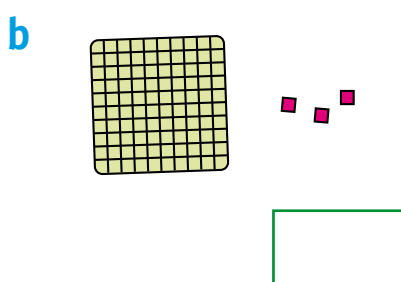
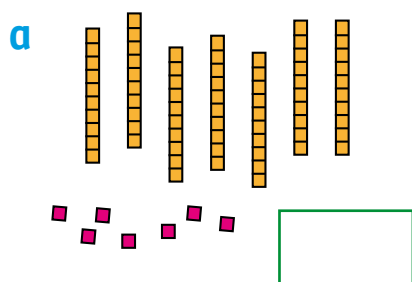
largest

Challenge! Write the numbers on this page from smallest to largest.

Hundreds, tens and ones

TERM 1
Week 2

1 How many?



2 Complete.

a $54 = 50 + \square$

b $104 = \square + 0 + \square$

c $31 = \square + \square$

d $116 = 100 + \square + \square$

e $48 = \square + \square$

f $105 = \square + \square + \square$

g $20 = \square + \square$

h $120 = \square + \square + \square$

3 Write in numerals.

a thirty-five

b one hundred

c one hundred and ten

d one hundred and two

e nineteen

f ninety-three

g seventy-eight

h one hundred and twenty

4 Write in words.

a 61

b 95

c 112

Challenge!

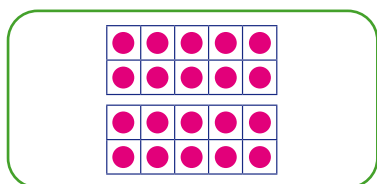
How many 2-digit numbers can be made with
Write them in order from smallest to largest.



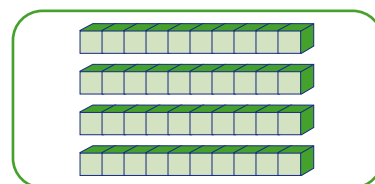
Counting by 10s to 120

TERM 1
Week 2

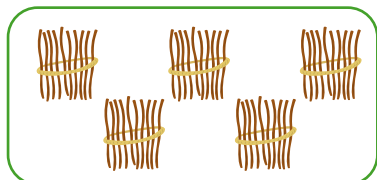
1 Match.



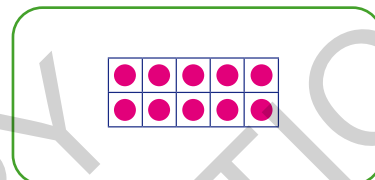
10



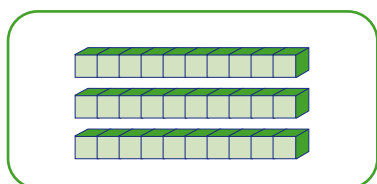
20



30



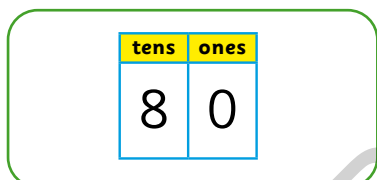
40



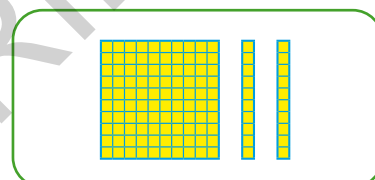
50



60



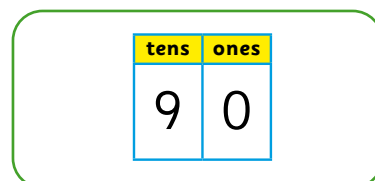
70



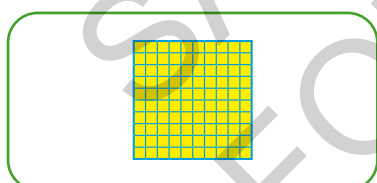
80



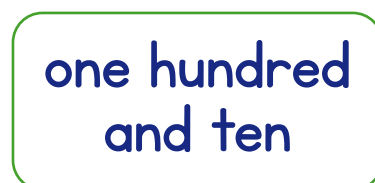
90



100



110

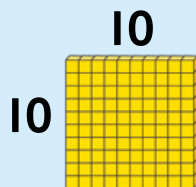


120

2 Match.



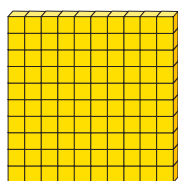
Counting to 120



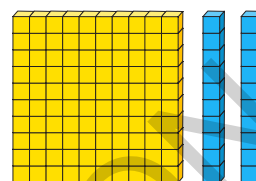
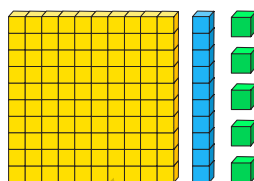
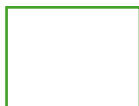
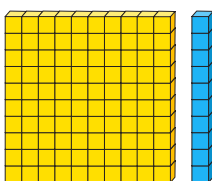
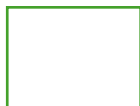
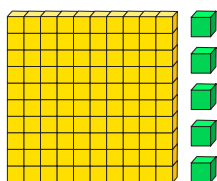
$$10 \times 10 = 100$$

TERM 1
Week 2

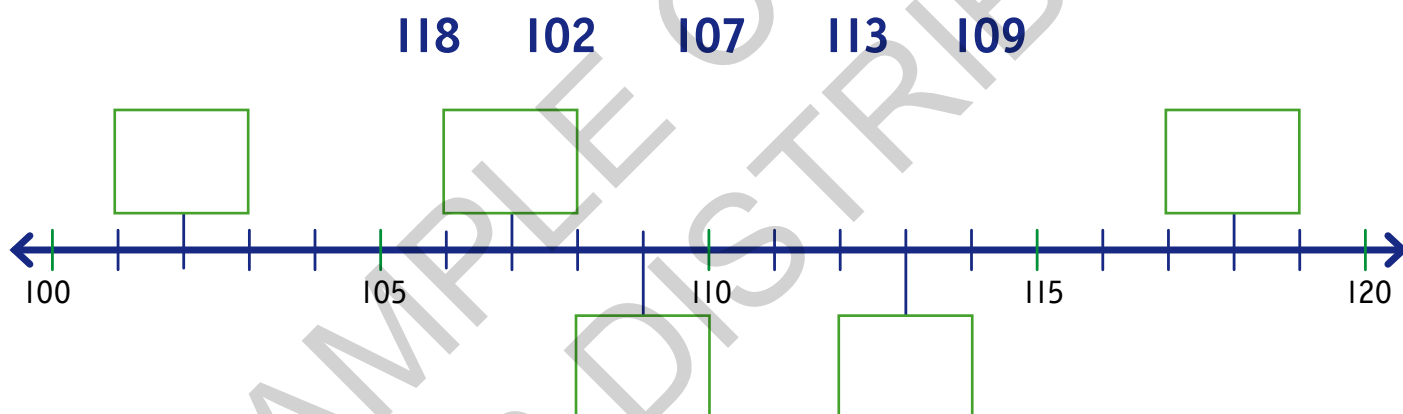
1 Continue counting by 5s to 120. Write the numbers.



100



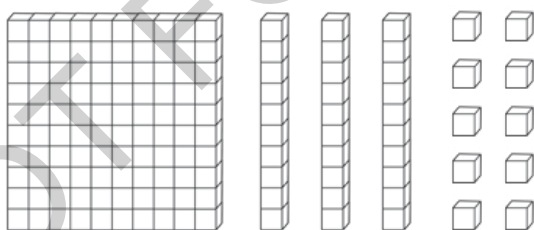
2 Place these numbers on the number line.



3 Colour to show the number.

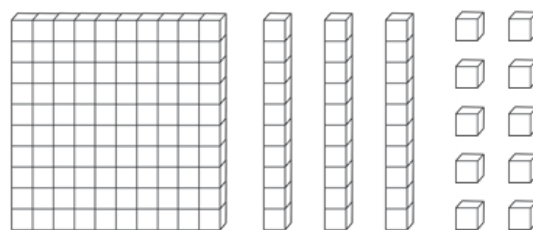
a

106



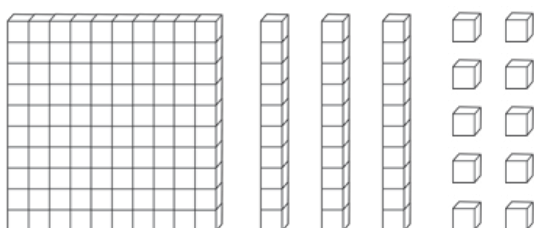
b

113



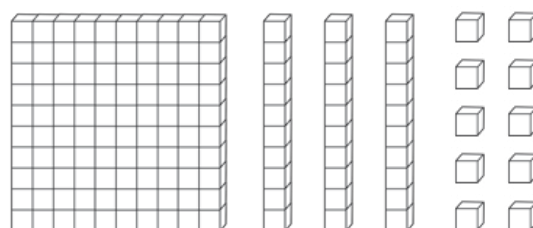
c

117

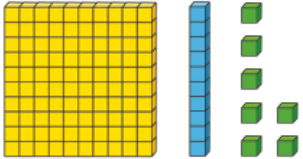


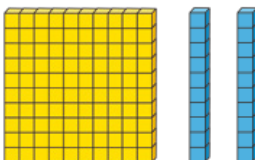
d

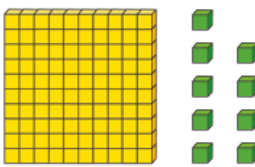
109



1 Complete.

a  _____ hundred _____ ten _____ ones = _____

b  _____ hundred _____ tens _____ ones = _____

c  _____ hundred _____ tens _____ ones = _____

2 Complete.

	hundreds	tens	ones		hundreds	tens	ones
a 86 =				b 72 =			
c 104 =				d 101 =			
e 115 =				f 99 =			

3 a In 72, the 7 means _____

b In 108, the 1 means _____

4 Place these numbers on the number line **12 61 95 110**



Write the number:

1 one more than

a 44 b 97 c 89 d 101

2 one less than

a 29 b 88 c 81 d 20

3 ten more than

a 22 b 19 c 97 d 66

4 ten less than

a 26 b 77 c 120 d 89

5

	before	after
a		67
b		31
c		52
d		119

	between	
e	109	111
f	69	71
g	40	42
h	99	101

Mastery Checklist

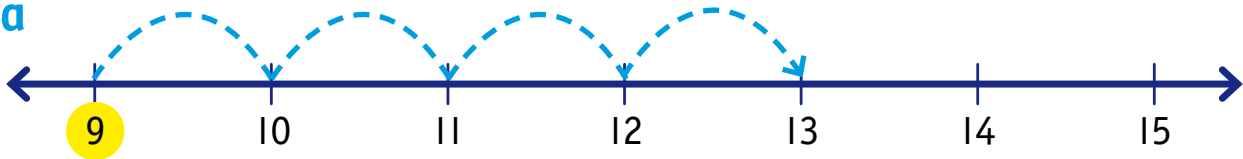
- I can: ☐ read and write numbers to 120
☐ count in 2s, 5s and 10s to 120
☐ compare and order numbers to 120
☐ understand the place value of each in a 3-digit number

Addition on a number line

TERM 1
Week 3

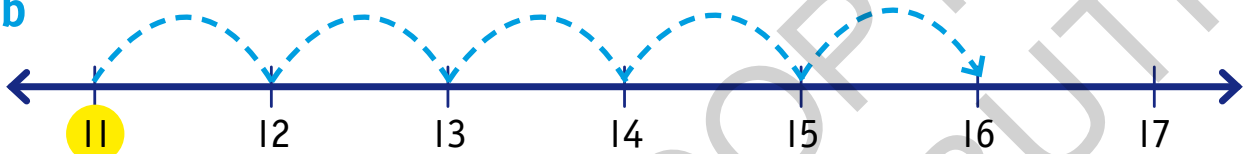
1 Use the number lines to find the answers.

a



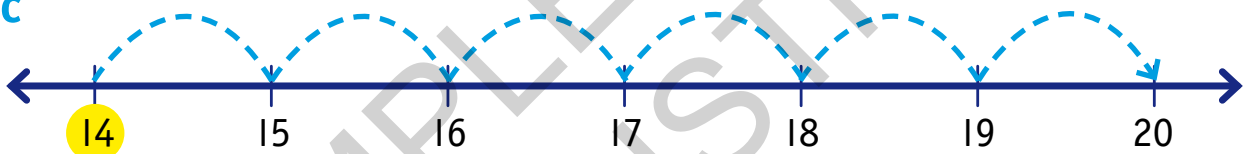
$$9 + 4 = \square$$

b



$$11 + 5 = \square$$

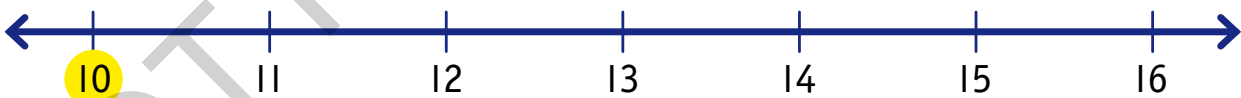
c



$$14 + 6 = \square$$

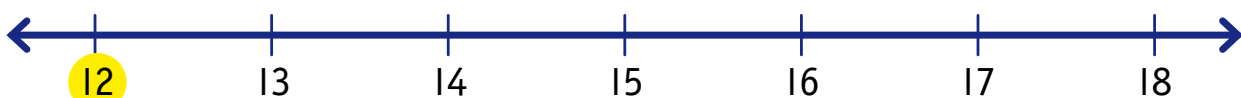
2 Find the answers.

a



$$10 + 4 = \square$$

b

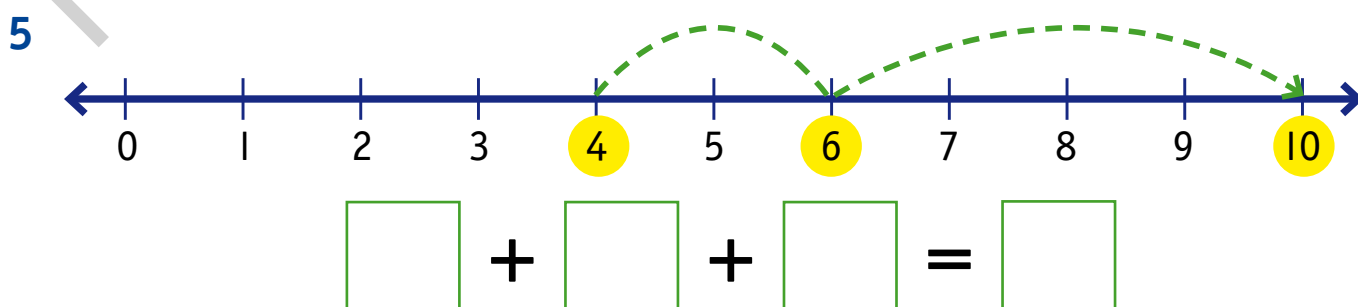
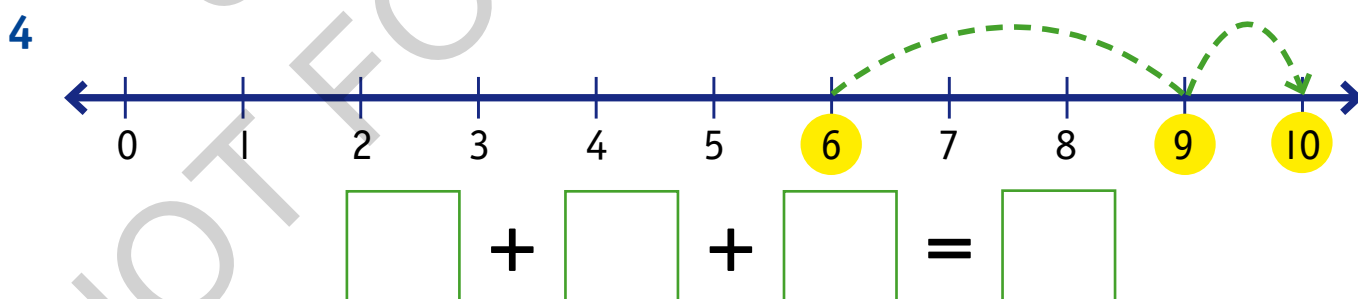
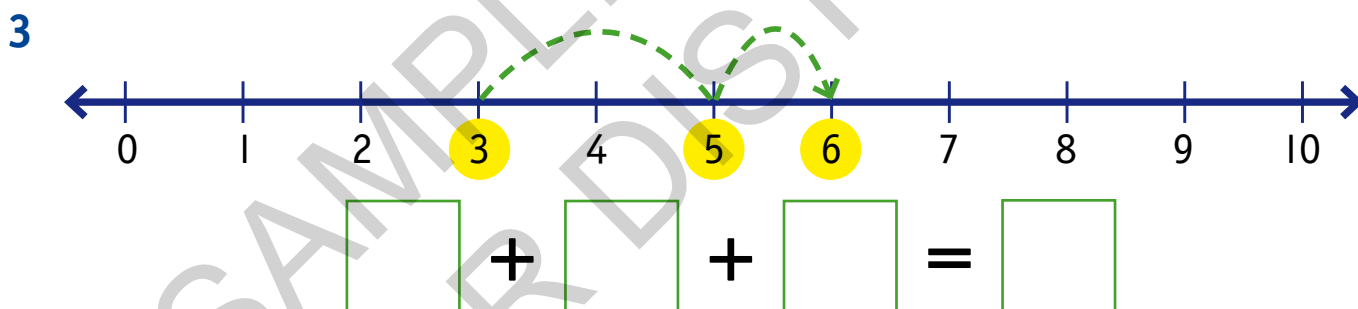
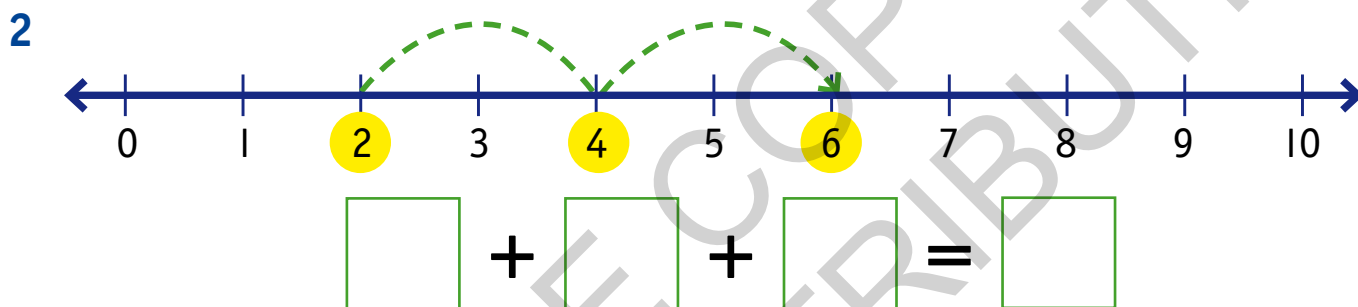
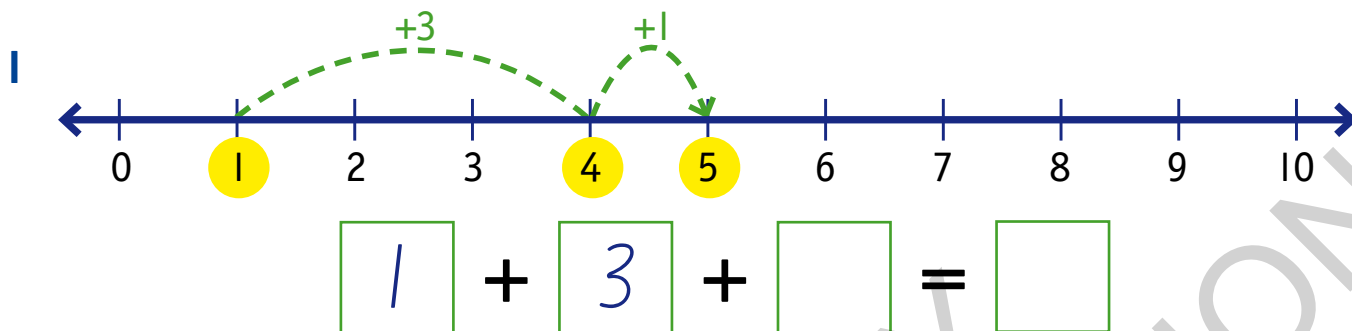


$$12 + 5 = \square$$

Adding 3 numbers on a number line

TERM 1
Week 3

Count the jumps. Complete the number sentences.



1 Find each missing number.

$$\square + 10 = 10$$

$$0 + \square = 10$$

$$\square + 9 = 10$$

$$1 + \square = 10$$

$$\square + 8 = 10$$

$$2 + \square = 10$$

$$\square + 7 = 10$$

$$3 + \square = 10$$

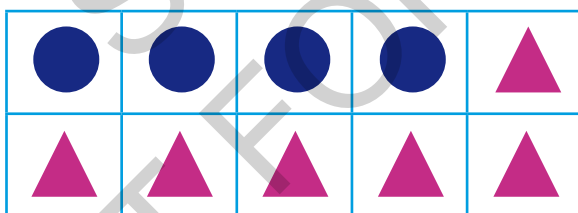
$$\square + 6 = 10$$

$$4 + \square = 10$$

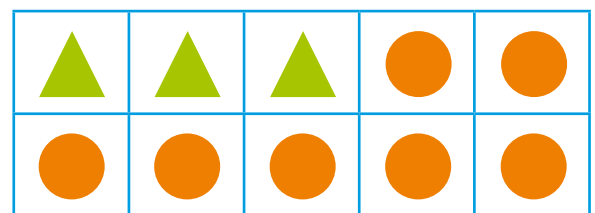
$$\square + 5 = 10$$

$$5 + \square = 10$$

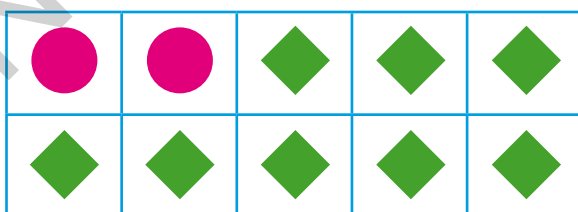
2 Write the matching equation.



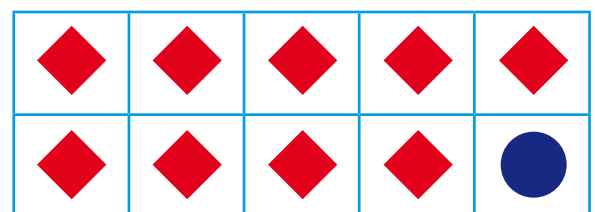
a $4 + \underline{\quad} = 10$



b $3 + \underline{\quad} = 10$



c $\underline{\quad} + \underline{\quad} = 10$



d $\underline{\quad} + \underline{\quad} = 10$

1 Draw the same number of dots. Write the double.

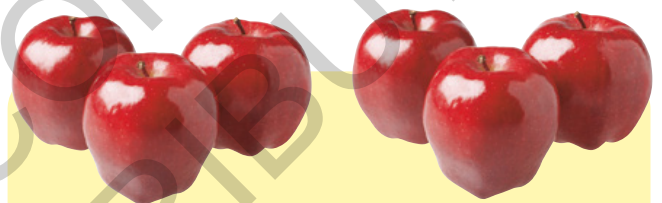


2 Write the double.



Double 4 is

2 groups of 4 =



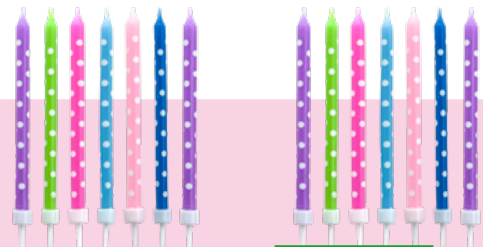
Double 3 is

2 groups of 3 =



Double 5 is

2 groups of 5 =



Double 7 is

2 groups of 7 =

Challenge!

The price doubles as animals get bigger. How much is the chicken?

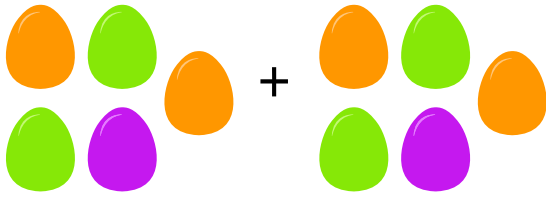


• \$1



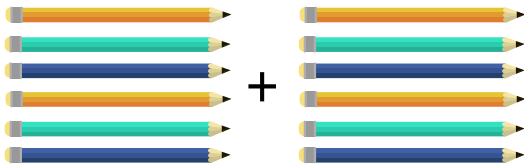
Write the missing numbers.

1



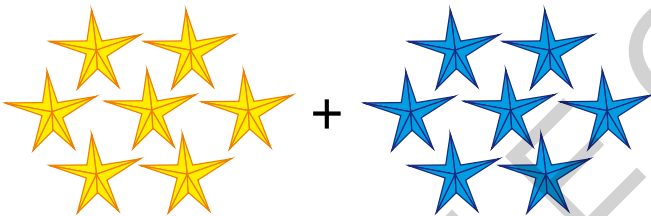
$$5 + 5 = \square$$

2



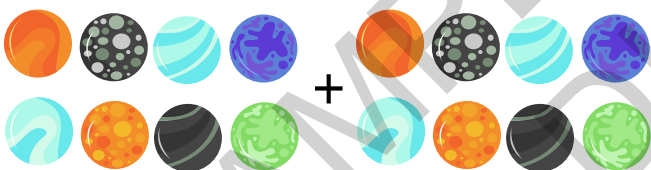
$$\square + 6 = \square$$

3



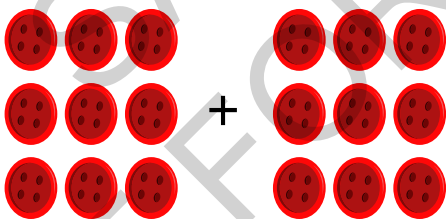
$$\square + \square = 14$$

4



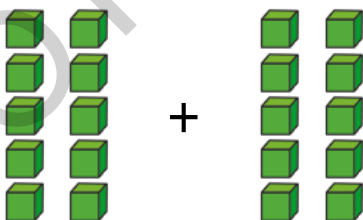
$$\square + \square = 16$$

5



$$\square + \square = \square$$

6



$$\square + \square = \square$$

Mastery Checklist

- I can: ☐ add groups together
☐ add 3 numbers on a number line
☐ solve doubles to 20



centimetre
= cm

I How many cm long is each object?

a



= cm



b



= cm



c



= cm



d



= cm



2 Write **longer** or **shorter**.

a The  is _____ than the .

b The  is _____ than the .

c The  is _____ than the .

d The  is _____ than the .

e The  is _____ than the .

Measure and compare length

TERM 1
Week 4



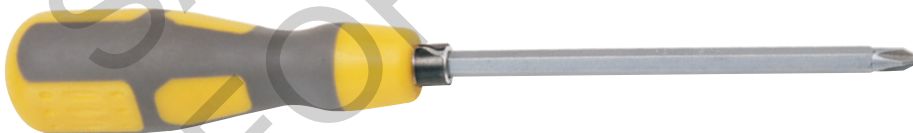
1 Find something that fits in this box.

Draw it.

How long is it?

 cm

2 How long is each thing?

 cm cm cm cm cm

☒ Circle items shorter than 5 cm

Which is: longest?

shortest?

Length in metres

TERM 1
Week 4

We measure longer lengths in metres.

We write **m** for **metre**.

Your outstretched arms are about **1 m** long.

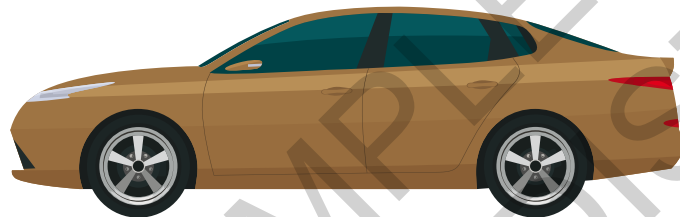


a



The door is
 m tall.

b



The car is
 m long.

c



The paddle is
 m long.

d



The kayak is
 m long.

The metre

TERM 1
Week 4

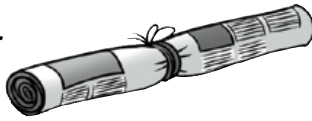


1 Make a metre long measure.

Use



or



or



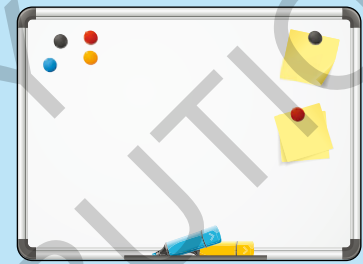
2 Use it to measure the following. Match each to a label.



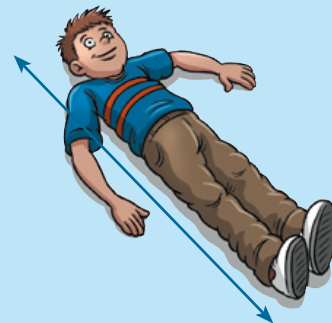
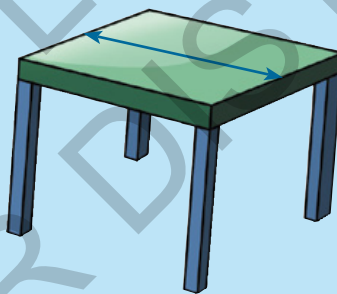
shorter than
1 metre



about
1 metre



longer than
1 metre



3 Measure other things.

shorter than 1 metre	about 1 metre	longer than 1 metre

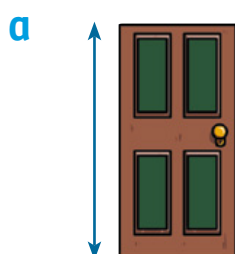
Challenge! Find something that is half a metre long.



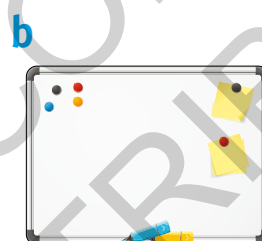
The tiger is about **3 metres** long.



I Estimate each length in metres. Then measure each length.



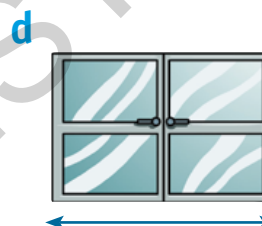
about metres
 metres



about metres
 metres



about metres
 metres



about metres
 metres



about metres metres

Challenge!

Estimate how far it is from your classroom to the:

front gate office playground .

How could you measure these lengths?



Mastery Checklist

I can: ☐ measure length using centimetres (cm) ☐ compare lengths
☐ compare items to 1 metre ☐ measure in metres

1 Complete.



•	C
cents	



•	C
twenty	



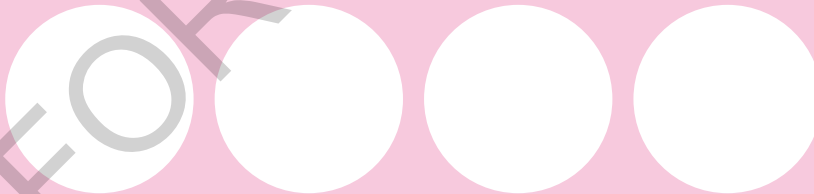
•	C
fifty	

2 Make 50c.

Use 3 coins.



Use 4 coins.



Use 5 coins.



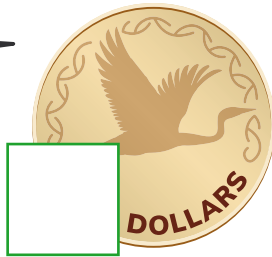
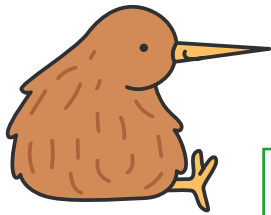
Challenge! How many ways can you make \$1?

--

1 Write the missing numbers.

New Zealand dollars

\$1 \$2
\$5 \$10
\$20 \$50
\$100



2 How many dollars?



\$



\$



\$



\$



\$



\$

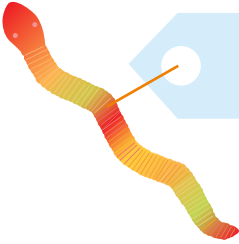
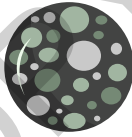
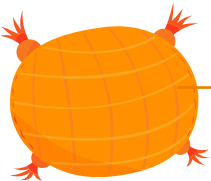
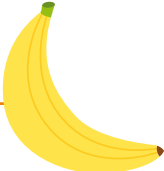
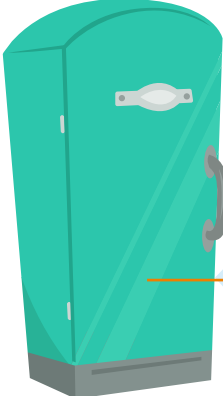
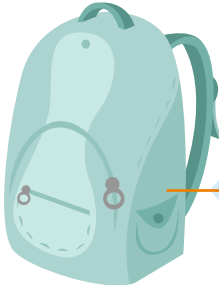
Mastery Checklist

- I can: ☐ recognise coins and notes
☐ add notes to calculate the total



Match.

Match the items to their correct value using the money shown.

	10c		50c	
	\$1			20c
	\$5			\$2
	\$50			\$100
	\$10			\$20
				
				
				
				
				

Circle the least expensive item, cross out **X** the most expensive.

Checkpoint 1

1 Colour the circles that add to 10.

$10+0$

$6+5$

$5+5$

$9+1$

$2+7$

$8+2$

2 Write the missing numbers.

85

86

89

92

3 Write the numerals.

twelve

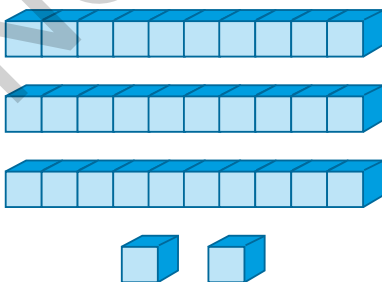
eighteen

eighty

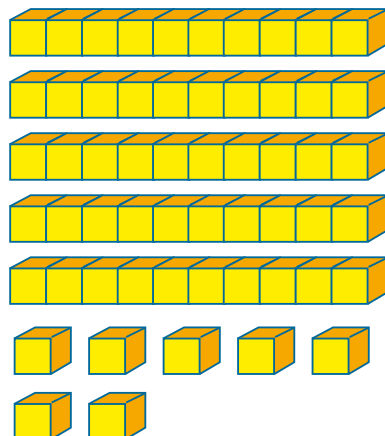
fifty-one

4 How many?

a



b



Checkpoint 1

5 Add.

$$7 + 3 = \square$$

$$5 + 4 = \square$$

Double 6 is $\square$

Double 10 is $\square$

6 Write 2 more than:

7

14

59

118

7 Match.



longer than 1 metre

shorter than 1 metre



Which is shortest?

door

spoon

bat

8 How much?

a



\$

b



\$

c



C

Subtraction fluent facts within 10

TERM 1
Week 6

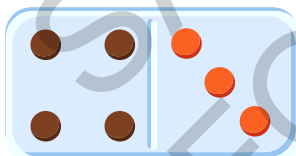
1 Find each missing number.

$10 - 10 = \square$	$10 - 4 = \square$	$10 - \square = 6$
$10 - 9 = \square$	$10 - 3 = \square$	$10 - \square = 3$
$10 - 8 = \square$	$10 - 2 = \square$	$10 - \square = 8$
$10 - 7 = \square$	$10 - 1 = \square$	$10 - \square = 1$
$10 - 6 = \square$	$10 - 0 = \square$	$10 - \square = 7$
$10 - 5 = \square$		$10 - \square = 4$



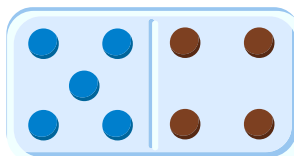
2

a



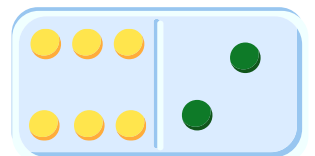
$$7 - 3 = \square$$

b



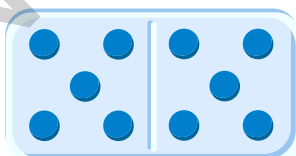
$$9 - 4 = \square$$

c



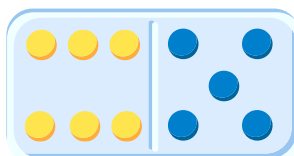
$$8 - 2 = \square$$

d



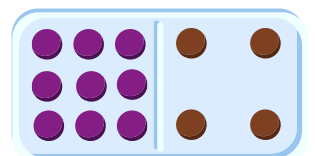
$$10 - 5 = \square$$

e



$$11 - 5 = \square$$

f



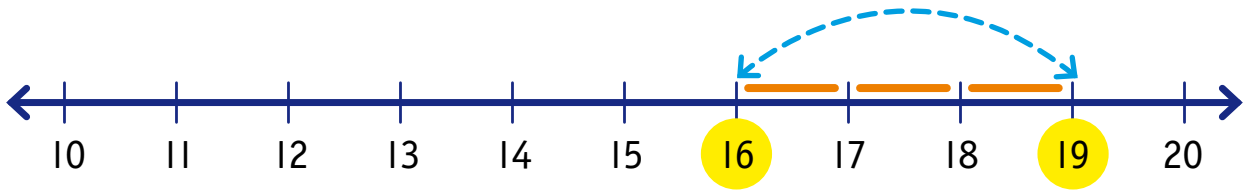
$$13 - 4 = \square$$

Add and subtract

TERM 1
Week 6

Use the number lines to solve the problems.

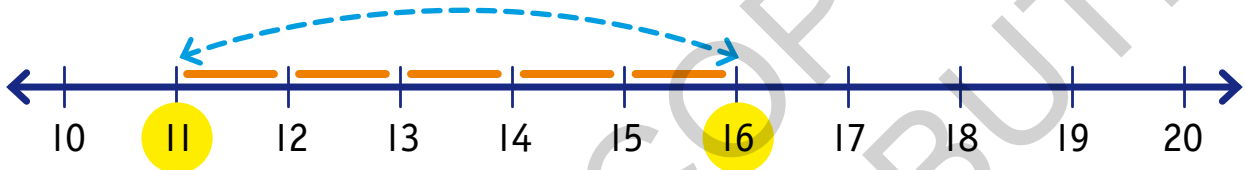
1



$$16 + \square = 19$$

$$19 - 16 = \square$$

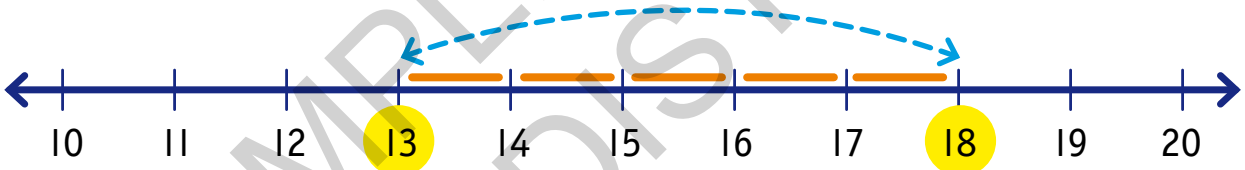
2



$$11 + \square = 16$$

$$16 - 11 = \square$$

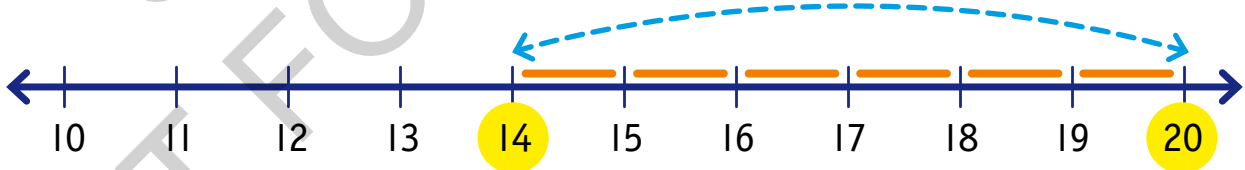
3



$$13 + \square = 18$$

$$18 - 13 = \square$$

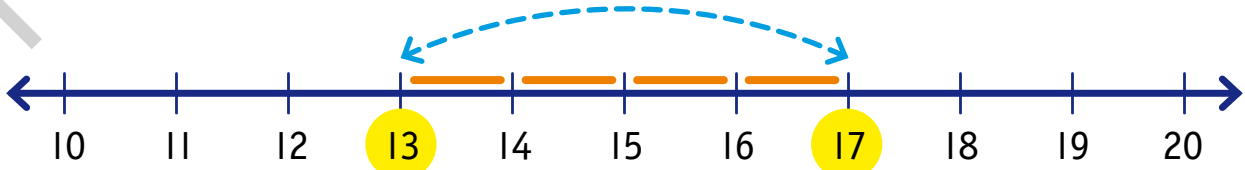
4



$$14 + \square = 20$$

$$20 - 14 = \square$$

5



$$13 + \square = 17$$

$$17 - 13 = \square$$

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

1 a $9 - 2 =$

b $10 - 4 =$

c $15 - 1 =$

d $15 - 3 =$

e $12 - 2 =$

f $11 - 3 =$

2 How much change?

a You have



You spend



change

b You have



You spend



change

c You have



You spend



change

d You have



You spend



change

e You have



You spend



change

f You have



You spend



change

Change from \$20

TERM 1
Week 6

I Count back to find the change.

a



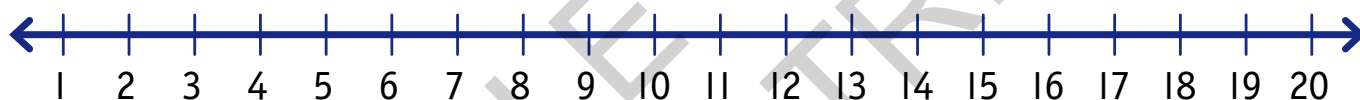
$$- \text{ [pot] } \$11 = \boxed{}$$



b



$$- \text{ [rolling pin] } \$14 = \boxed{}$$



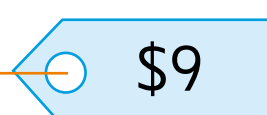
2 Find the change from \$20.

a



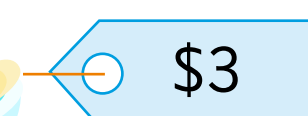
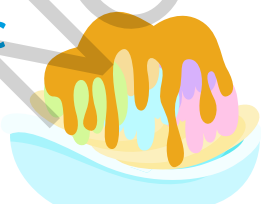
$$\$20 - \$5 = \boxed{}$$

b



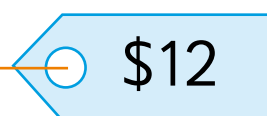
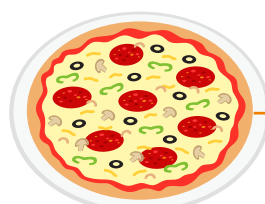
$$\$20 - \boxed{} = \boxed{}$$

c



$$\$20 - \boxed{} = \boxed{}$$

d



$$\$20 - \boxed{} = \boxed{}$$

1 Find each missing number.

$20 - 10 = \square$

$20 - 4 = \square$

$20 - 12 = \square$

$20 - 9 = \square$

$20 - 3 = \square$

$20 - 13 = \square$

$20 - 8 = \square$

$20 - 2 = \square$

$20 - 14 = \square$

$20 - 7 = \square$

$20 - 1 = \square$

$20 - 15 = \square$

$20 - 6 = \square$

$20 - 0 = \square$

$20 - 18 = \square$

$20 - 5 = \square$

$20 - 11 = \square$

$20 - 19 = \square$

2 Use doubles to solve.

$\text{Half of } 10 = \square$

$\text{Half of } 12 = \square$

$\text{Half of } 14 = \square$

$7 + 7 = \square$

$5 + 5 = \square$

$9 + 9 = \square$

$\text{Half of } 8 = \square$

$\text{Half of } 16 = \square$

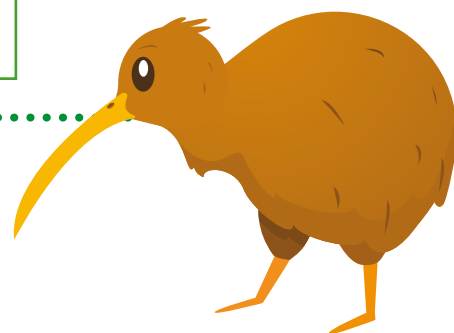
$\text{Half of } 20 = \square$

$10 + 10 = \square$

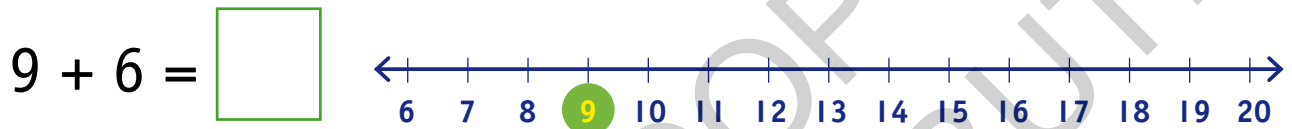
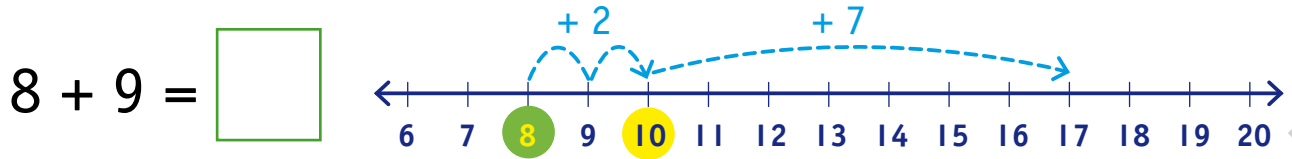
$\text{Half of } 18 = \square$

Mastery Checklist

- I can: ☐ subtract numbers within 20
☐ double or half even numbers to 20



1 Use the number lines. Make 10 first. Then add the rest.



2 Circle the two numbers that add to 10.

$$\textcircled{5} + 3 + \textcircled{5} = 10 + 3 = 13$$

$$\textcircled{6} + 2 + \textcircled{4} = \square + \square = \square$$

$$4 + 7 + 3 = \square + \square = \square$$

$$8 + 5 + 2 = \square + \square = \square$$

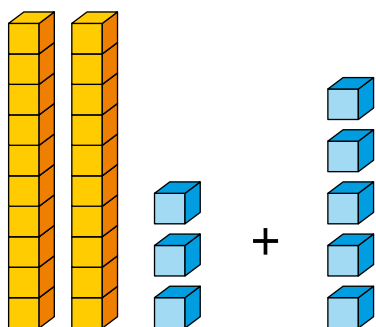
$$3 + 6 + 7 = \square + \square = \square$$

This makes adding easier!



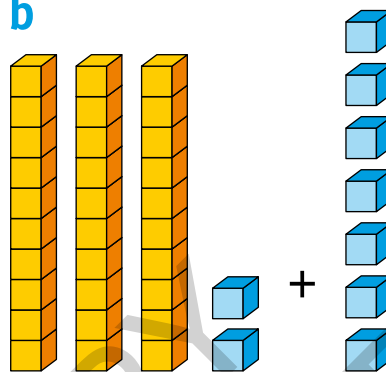
1 Add.

a



$$\square + \square = \square$$

b



$$\square + \square = \square$$

2 Draw the tens and ones to add.

a

$$43 + 4 = \square$$

Tens	Ones

b

$$51 + 6 = \square$$

Tens	Ones

c

$$62 + 5 = \square$$

Tens	Ones

d

$$76 + 3 = \square$$

Tens	Ones

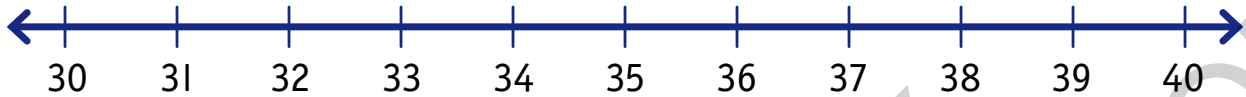
Adding to 2-digit numbers

TERM 1
Week 7

1 Count on to add.

a $34 + 3 =$

b $37 + 1 =$



c $62 + 6 =$

d $65 + 2 =$



2 Count on using the number chart.

a $43 + 3 =$

b $52 + 3 =$

c $65 + 4 =$

d $54 + 4 =$

e $44 + 2 =$

f $61 + 7 =$

g $44 + 5 =$

h $62 + 4 =$

i $57 + 3 =$

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

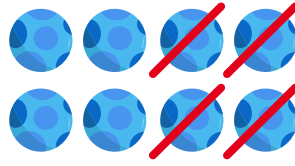
Mastery Checklist

- I can: ☐ add a 1-digit number to a 2-digit number within 100
☐ break a 2-digit number into tens and ones

1 Find the answers.



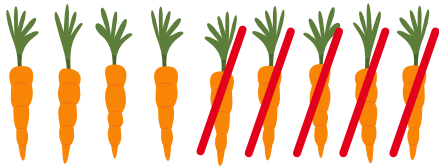
$$5 - 1 = \square$$



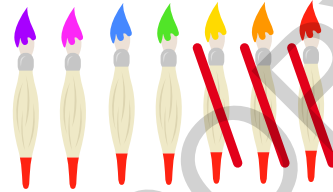
$$8 - 4 = \square$$



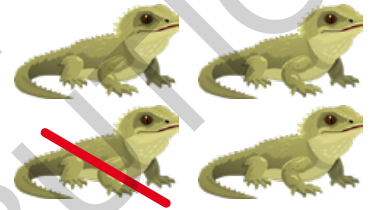
$$6 - 3 = \square$$



$$9 - 5 = \square$$

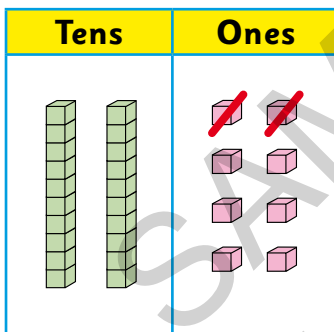


$$7 - 3 = \square$$

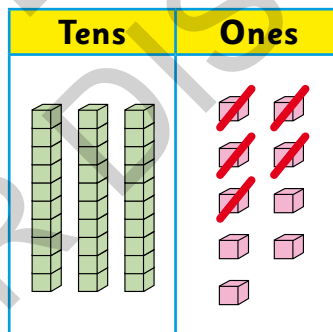


$$4 - 1 = \square$$

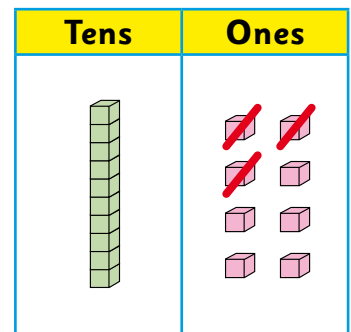
2 Subtract.



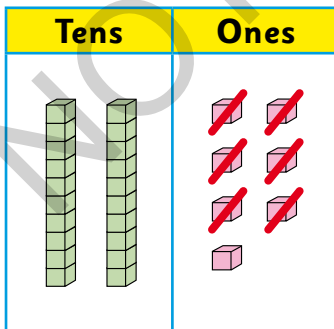
$$28 - 2 = \square$$



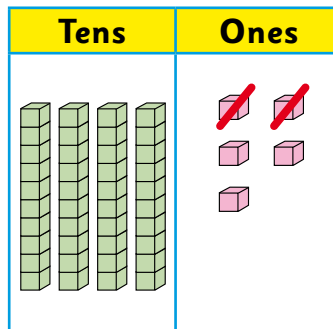
$$39 - 5 = \square$$



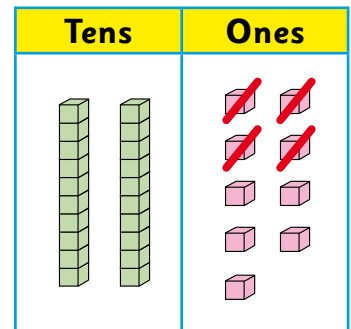
$$18 - 3 = \square$$



$$27 - 6 = \square$$

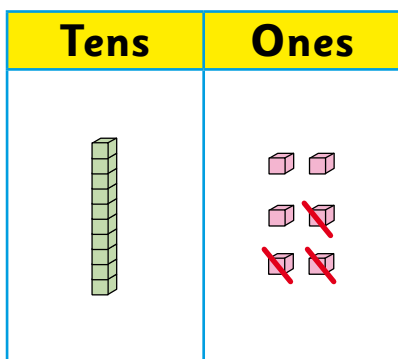


$$45 - 2 = \square$$

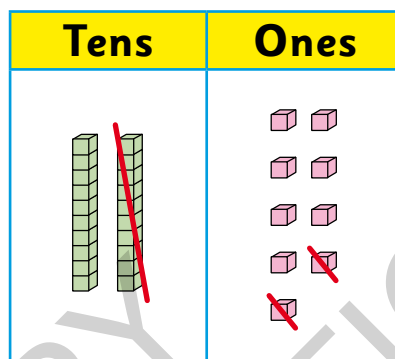


$$29 - 4 = \square$$

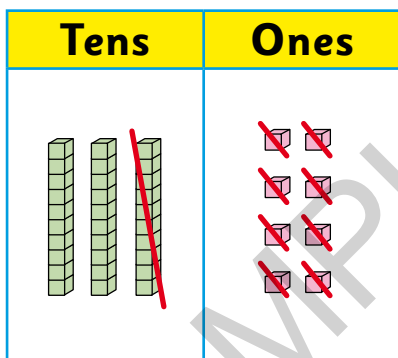
1 Complete the subtraction.



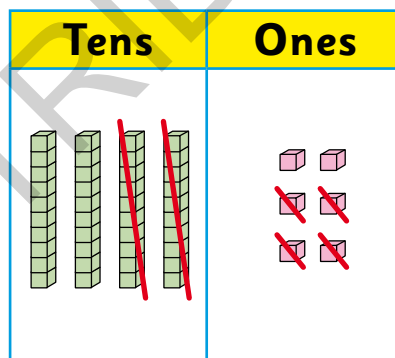
$$\boxed{16} - \boxed{3} = \boxed{}$$



$$\boxed{} - \boxed{} = \boxed{}$$



$$\boxed{} - \boxed{} = \boxed{}$$



$$\boxed{} - \boxed{} = \boxed{}$$

2 Find the answer.

$$9 - 7 = \boxed{} \quad 18 - 5 = \boxed{} \quad 25 - 4 = \boxed{}$$

3 16 children. 5 went home. How many left?

38 marbles. 7 lost. How many left?

29 birds. 5 flew away. How many left?



2D shapes

tapa = edge/side

whā = four

toru = three

ono = six

rite = same/equal

TERM 1

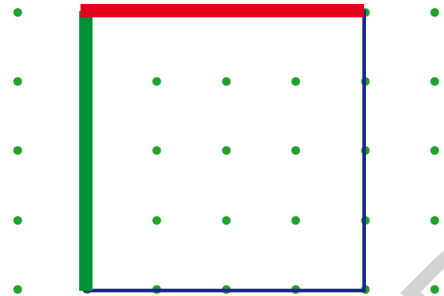
Week 8

I Draw the shape.

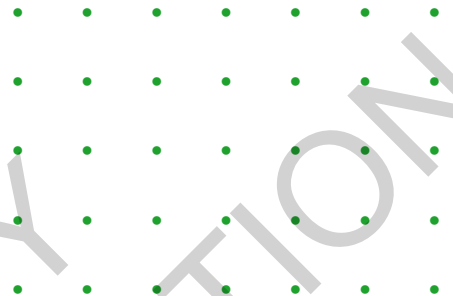


square
tapawhā rite

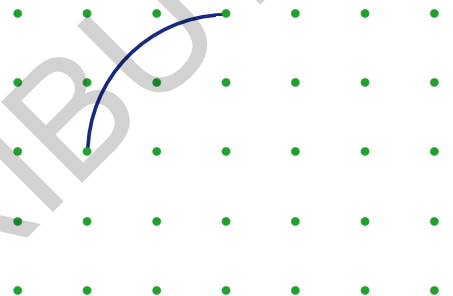
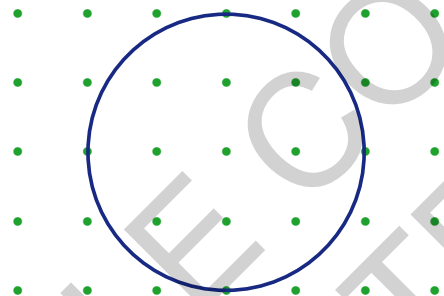
Colour vertical lines **green**. |
Colour horizontal lines **red**. —



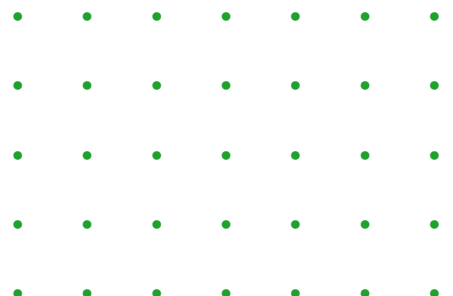
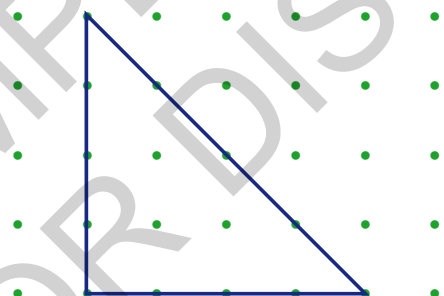
Draw the shape



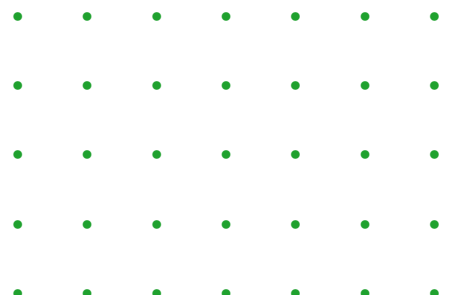
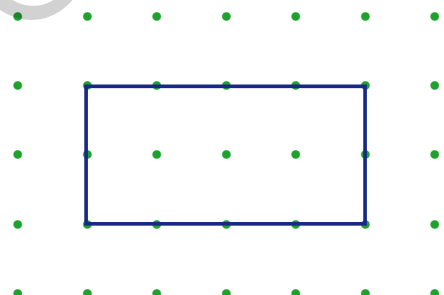
circle
porowhita



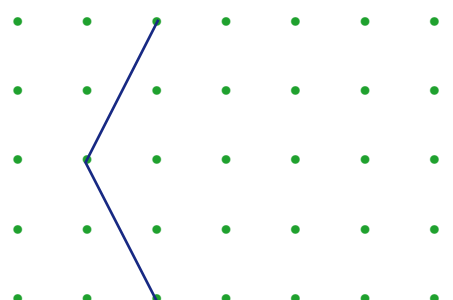
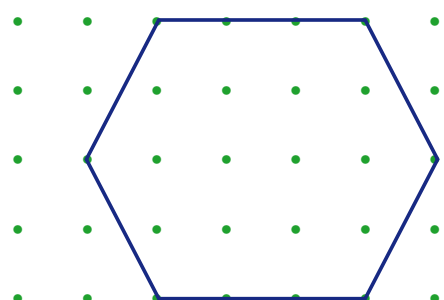
triangle
tapatoru



rectangle
tapawhā hāngai



hexagon
tapaono rite

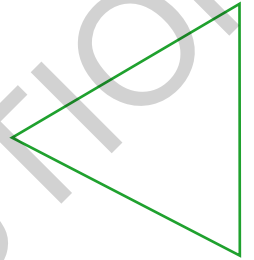
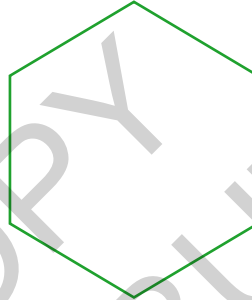
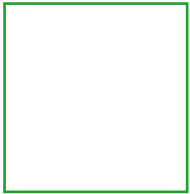
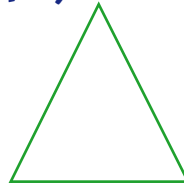
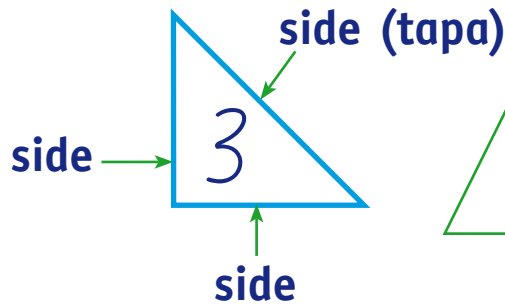


Sides and vertices

Quadrilaterals have
4 straight sides.

TERM 1
Week 8

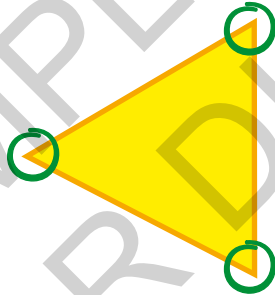
1



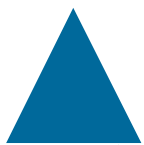
2



Circle vertices. Count them.



3



triangle
tapatoru



square
tapawhā rite



rectangle
tapawhā hāngai

Sides

Vertices

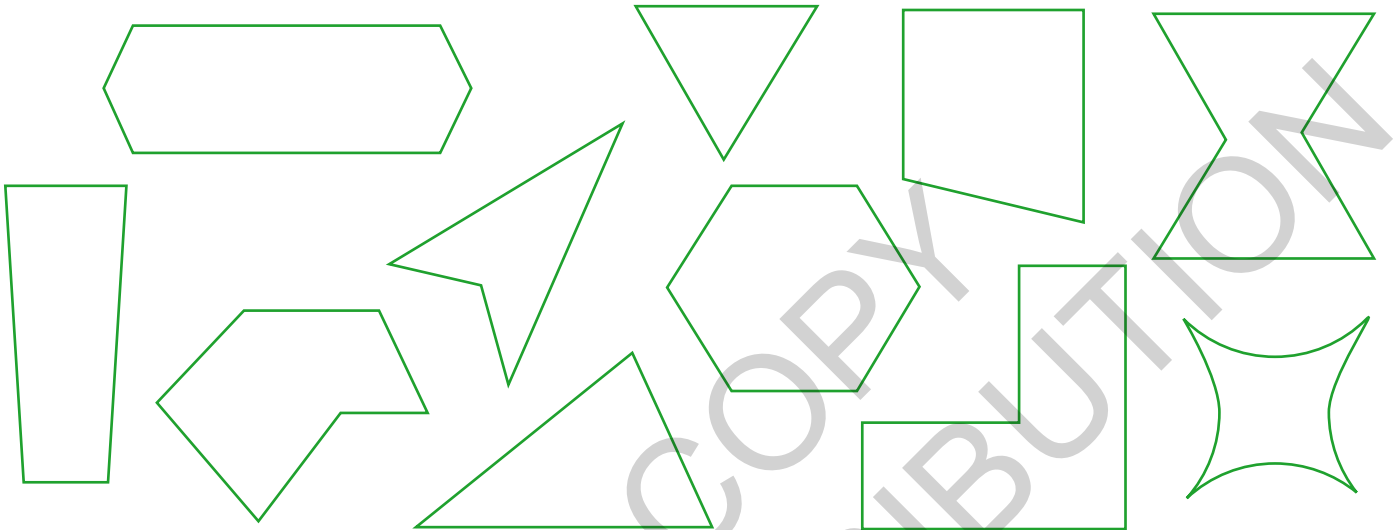
Quadrilateral? (yes or no)

	Sides	Vertices	Quadrilateral? (yes or no)
 triangle tapatoru			
 square tapawhā rite			
 rectangle tapawhā hāngai			

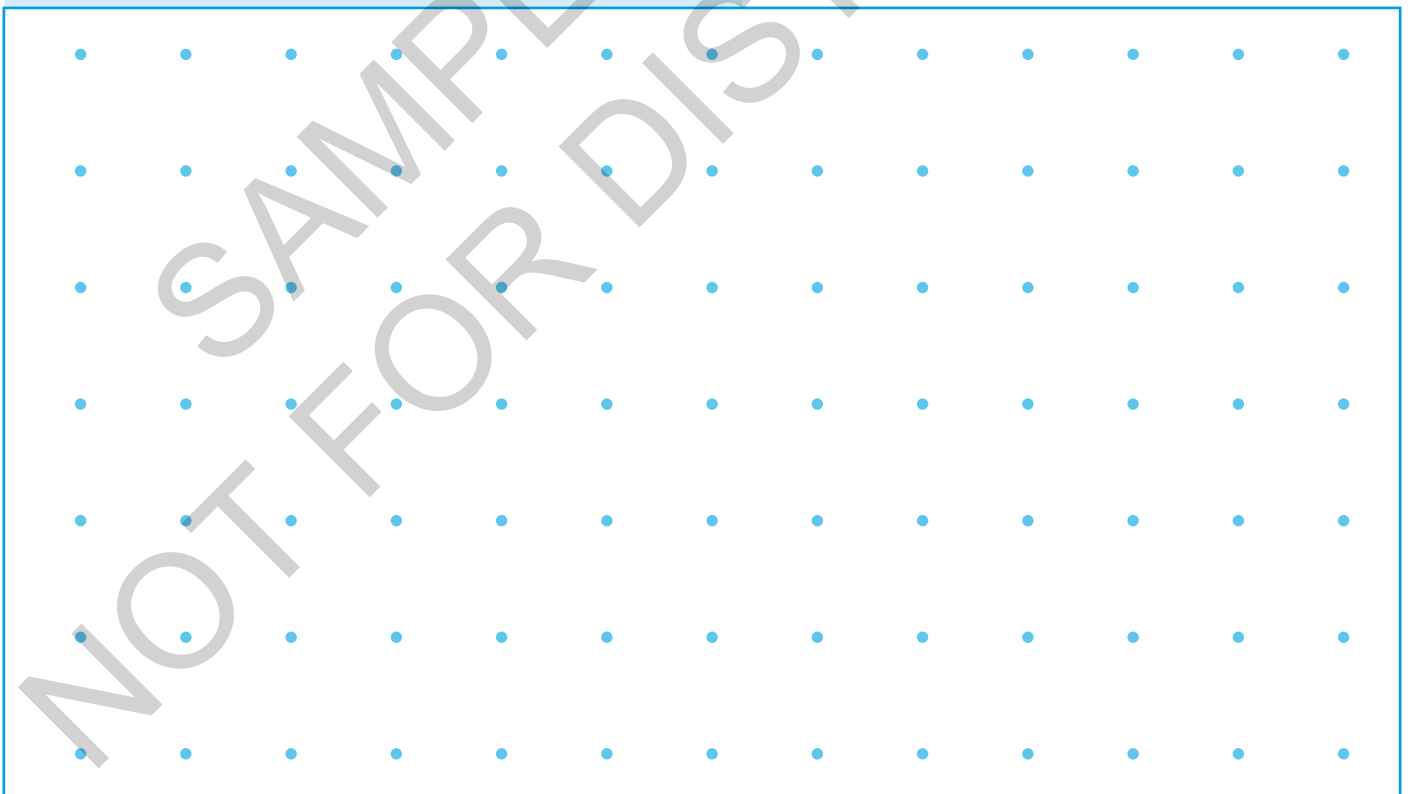
1 Colour the hexagons.



tapa = edge/side
ono = six



2 Draw four different hexagons.

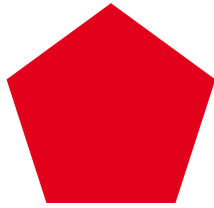


Challenge! Parallel lines are like train tracks. They are straight lines that never meet. Find the parallel lines on this page. Draw over them in red.



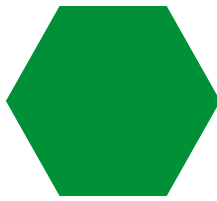
1

taparima



pentagon

tapaono rite



hexagon

tapawaru



octagon

Polygons are
2D shapes with
straight sides.

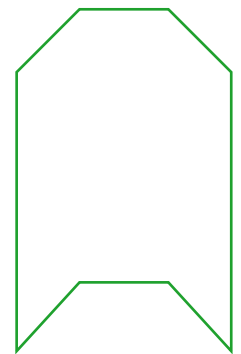
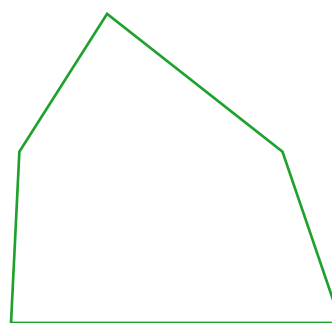
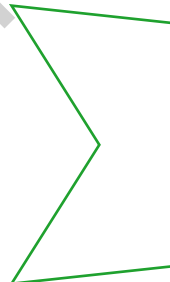
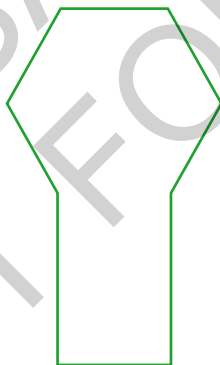
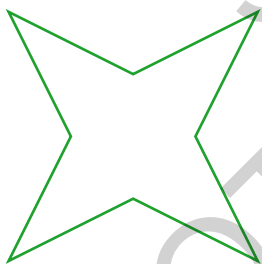
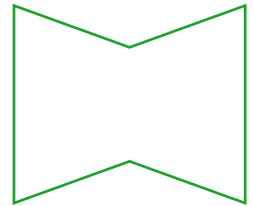
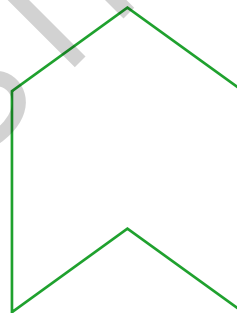
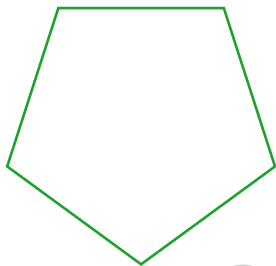
Sides:
(tapa)

Vertices:



2

Colour pentagons **red**, hexagons **green**, octagons **blue**.



Challenge!

How many different
triangles can
you draw?



Mastery Checklist

I can:

- ☐ identify and describe features of 2D shapes
- ☐ classify polygons by the number of sides or vertices
- ☐ identify polygons with different side lengths

2D shapes

Draw and name each shape.

3 vertices

6 sides

4 sides the same length

5 sides of different lengths

2 short vertical sides, 2 long horizontal sides

I can solve a problem by:

☐

naming a shape from its features

☐

drawing a picture

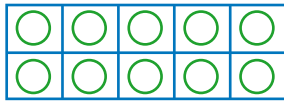
Te reo Māori numbers

toru tekau → three tens
kotahi rau → one hundred

TERM 1
Week 9

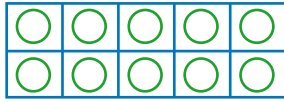
1 Colour the correct number.

1



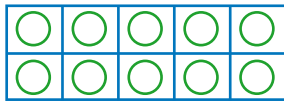
tahi

2



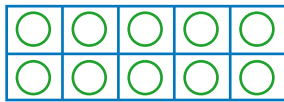
rua

3



toru

4



whā

5



rima

6



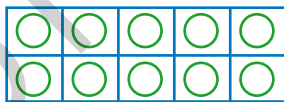
ono

7



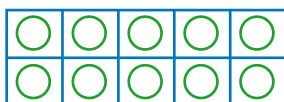
whitu

8



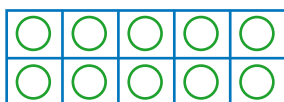
waru

9



iwa

10



tekau

2 Write the number in te reo Māori.

10

20

30

40

50

60

70

80

90

100

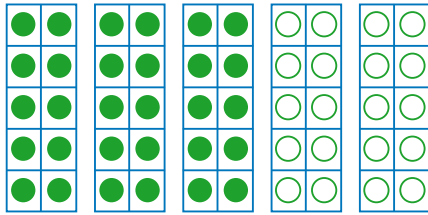
Te reo Māori numbers to 50

TERM 1
Week 9

1 Colour the correct number.

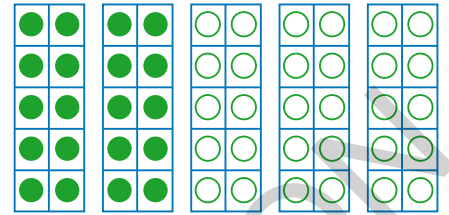
tekau → ten
tekau mā rima → ten and five
toru tekau → three tens

31



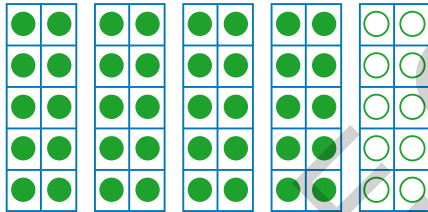
30 + _____
toru tekau mā tahi

26



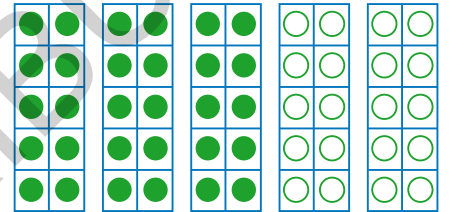
20 + _____
rua tekau mā ono

43



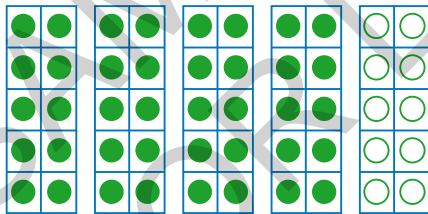
40 + _____
whā tekau mā toru

37



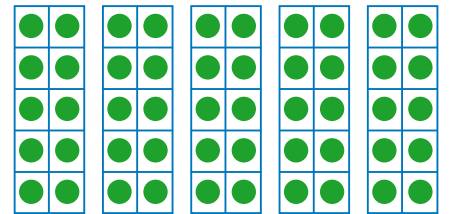
30 + _____
toru tekau mā whitu

48



40 + _____
whā tekau mā waru

50



50 + _____
rima tekau

2 Match.

rima tekau mā whitu

toru tekau mā waru

57

38

29

40

rua tekau mā iwa

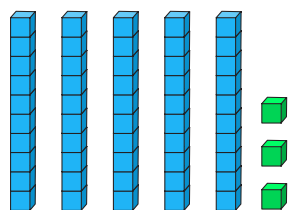
whā tekau

Counting to 100: Te reo Māori

TERM 1
Week 9

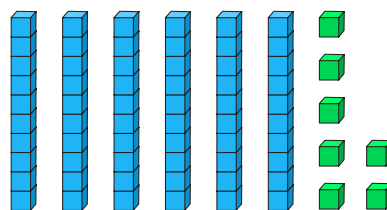
tekau mā rima → ten and five
whitu tekau → seven tens
kotahi rau → one hundred

1 Complete.



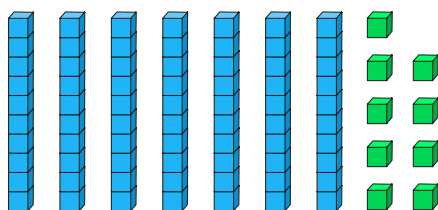
50 + _____

rima tekau mā _____



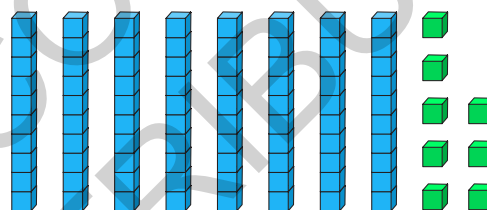
60 + _____

ono tekau mā _____



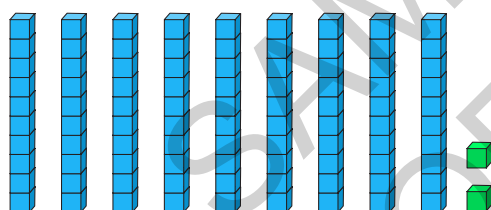
70 + _____

whitu tekau mā _____



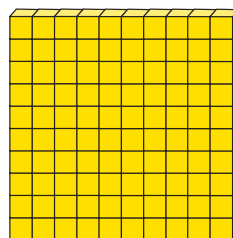
80 + _____

waru tekau mā _____



90 + _____

iwa tekau mā _____



2 Match.

waru tekau mā iwa

whitu tekau mā rima

61

75

89

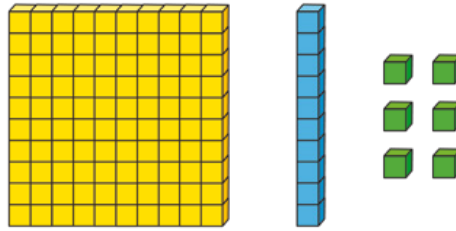
94

iwa tekau mā whā

ono tekau mā tahi

Checkpoint 2

1 How many?

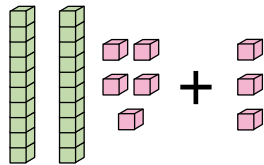


a _____ hundred _____ tens _____ ones

b _____ + _____ + _____ = _____

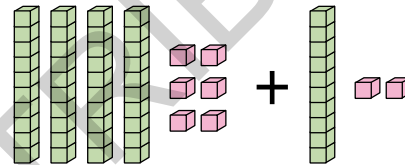
2 Write both numbers. Add them together.

a



$$\boxed{} + \boxed{} = \boxed{}$$

b



$$\boxed{} + \boxed{} = \boxed{}$$

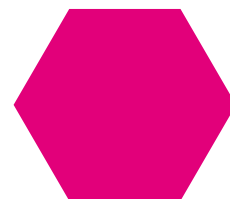
3 Name each shape. How many vertices?

a



--	--

b



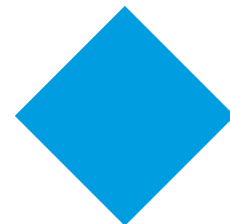
--	--

c



--	--

d



--	--

Checkpoint 2

4 Write the numbers.

whitu _____

ono _____

toru tekau _____

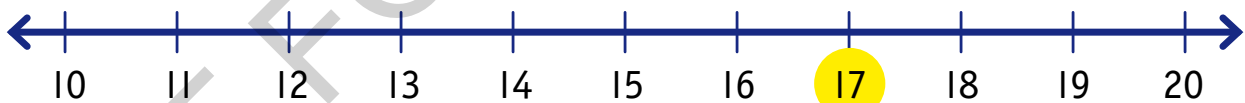
rima tekau mā tahi _____

5 How long is each line?





6 Subtract.



$$17 - 6 = \square$$

7

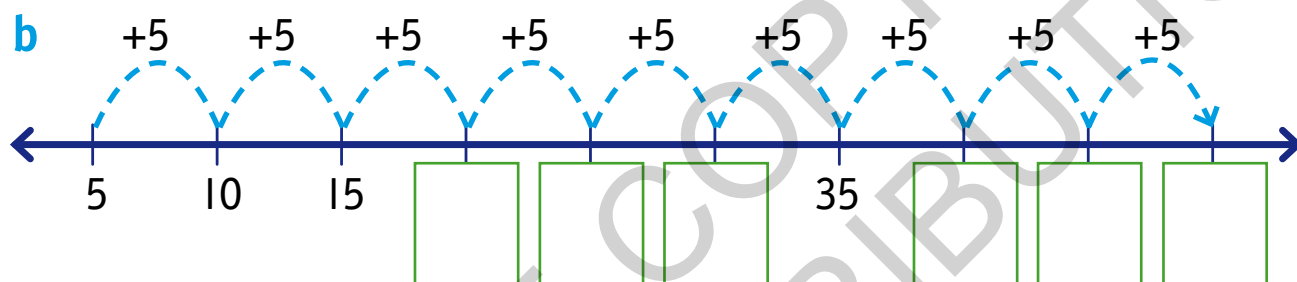
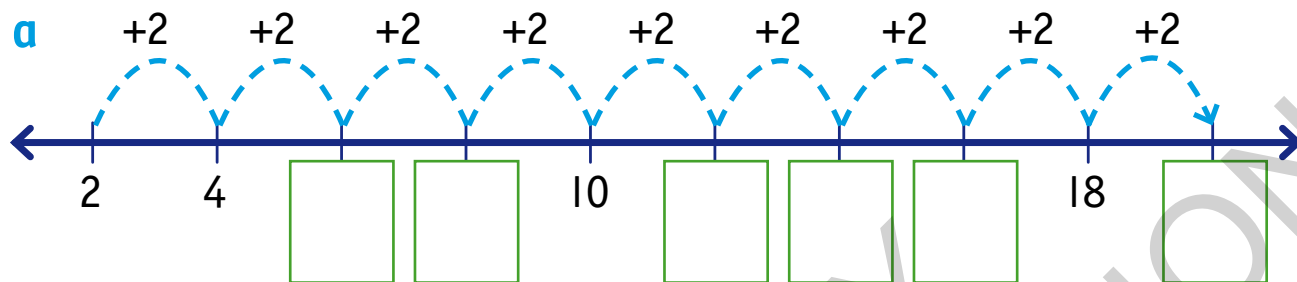
$$10 - 7 = \square$$

$$20 - 4 = \square$$

$$10 - 4 = \square$$

$$20 - 9 = \square$$

1 Complete the skip counting number lines.



2 Write the missing numbers.

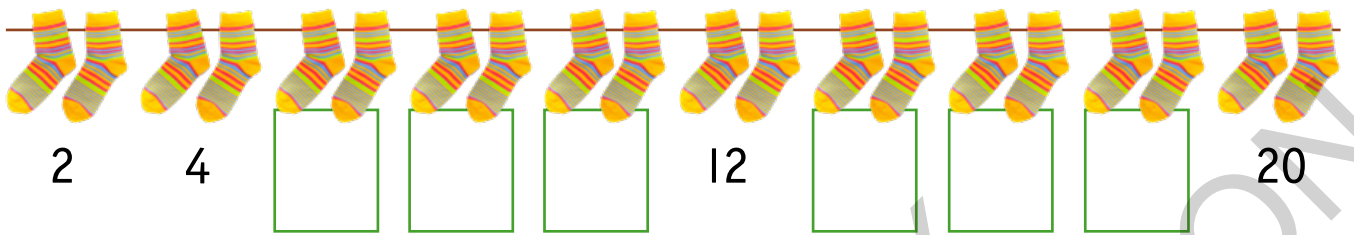


Multiply $\times 2$

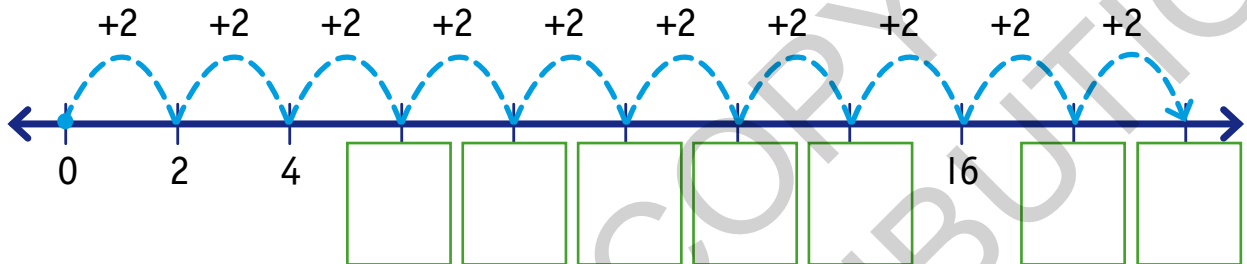
TERM 2
Week 1

1 Count by 2s.

a



b



2 Write the answers.

a

$$2 + 2 = \square$$
$$2 \times 2 = \square$$

b

$$2 + 2 + 2 = \square$$
$$3 \times 2 = \square$$

c

$$2 + 2 + 2 + 2 = \square$$
$$4 \times 2 = \square$$

d

$$2 + 2 + 2 + 2 + 2 = \square$$
$$5 \times 2 = \square$$

e

$$6 \times 2 = \square$$

f

$$7 \times 2 = \square$$

g

$$8 \times 2 = \square$$

h

$$9 \times 2 = \square$$

i

$$10 \times 2 = \square$$

j

$$11 \times 2 = \square$$

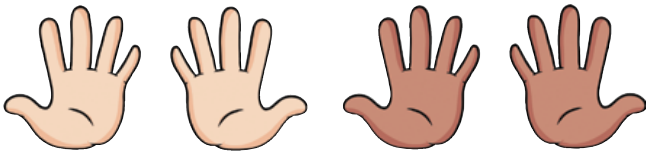
Counting in fives

TERM 2
Week 1

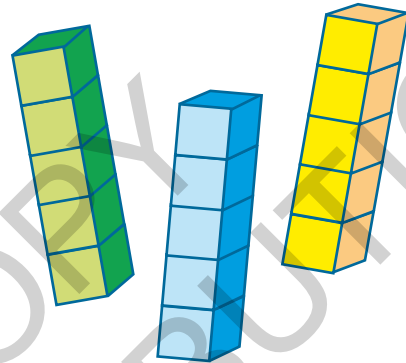
0	5	10	15	20	25	30	35	40	45	50
---	---	----	----	----	----	----	----	----	----	----

Count in 5s to find how many.

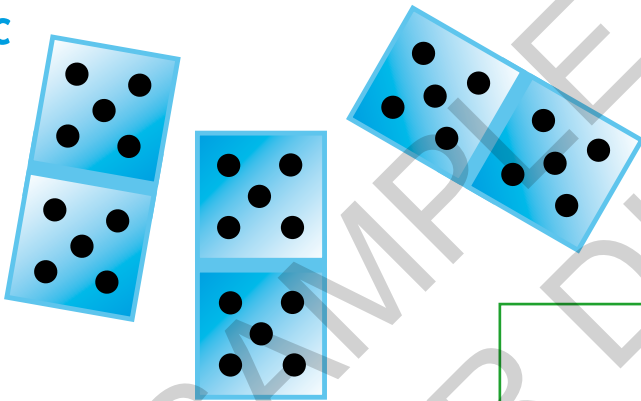
a



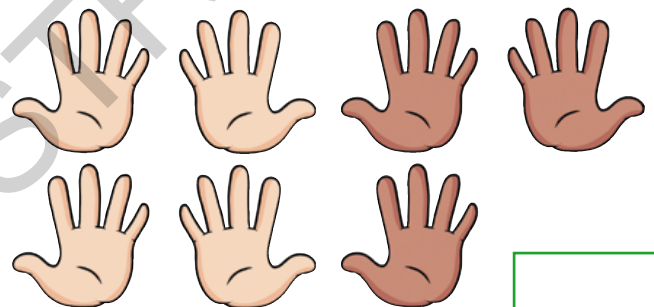
b



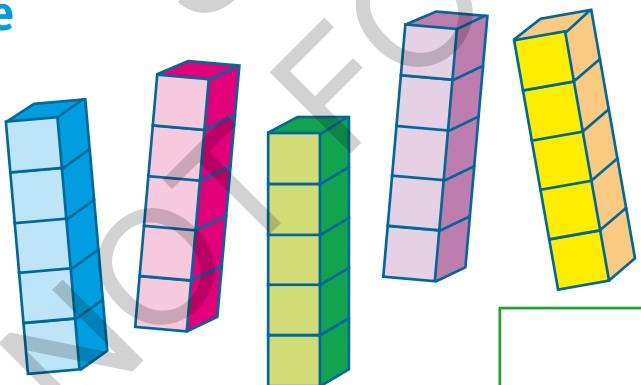
c



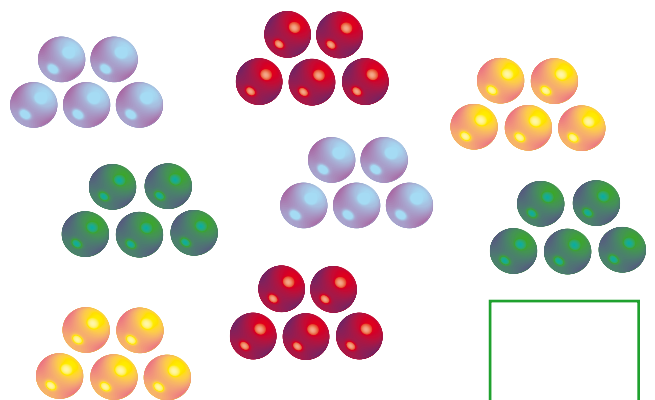
d



e



f



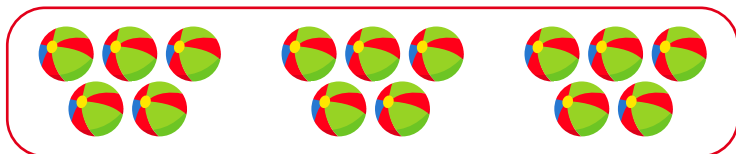
Challenge!

50 55 65 80 90 100

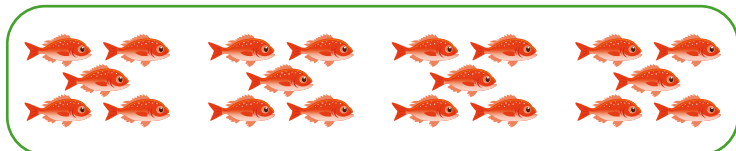
Multiplying groups

TERM 2
Week 1

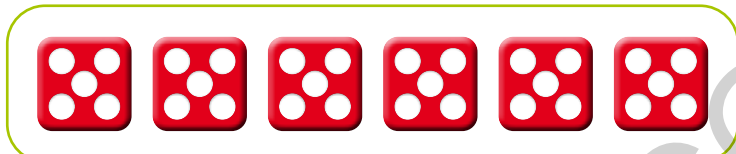
1 Match each group with its number sentence.



$4 \times 5 = \square$



$3 \times 5 = \square$



$6 \times 5 = \square$



$2 \times 5 = \square$



$5 \times 5 = \square$

2 Find the answer. Draw groups to help.

a

$7 \times 5 = \underline{\hspace{2cm}}$

b

$8 \times 5 = \underline{\hspace{2cm}}$

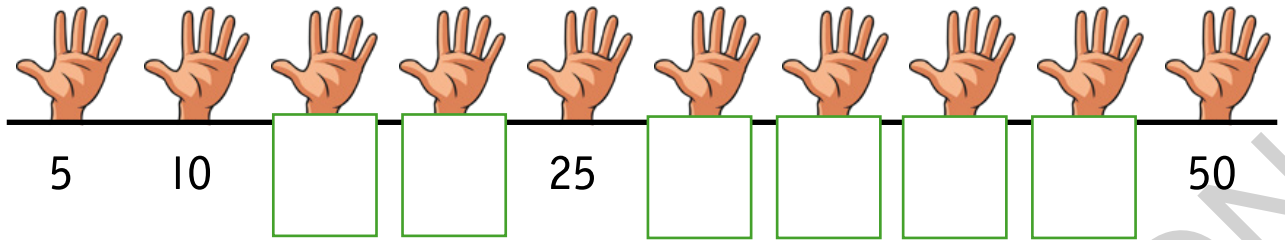
c

$9 \times 5 = \underline{\hspace{2cm}}$

d

$10 \times 5 = \underline{\hspace{2cm}}$

1 Count by 5s.



2 a

$$5 + 5 = \boxed{}$$

$$2 \times 5 = \boxed{}$$

b

$$5 + 5 + 5 = \boxed{}$$

$$3 \times 5 = \boxed{}$$

c

$$5 + 5 + 5 + 5 = \boxed{}$$

$$4 \times 5 = \boxed{}$$

d

$$5 + 5 + 5 + 5 + 5 = \boxed{}$$

$$5 \times 5 = \boxed{}$$

e

$$6 \times 5 = \boxed{}$$

f

$$7 \times 5 = \boxed{}$$

g

$$8 \times 5 = \boxed{}$$

h

$$9 \times 5 = \boxed{}$$

i

$$10 \times 5 = \boxed{}$$

j

$$0 \times 5 = \boxed{}$$

3 How many 5s in

$$50? \boxed{}$$

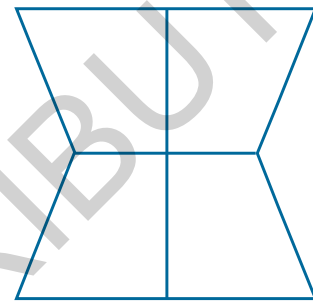
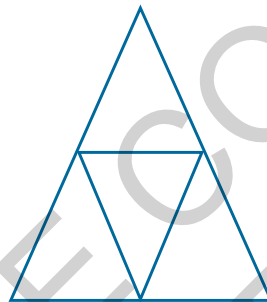
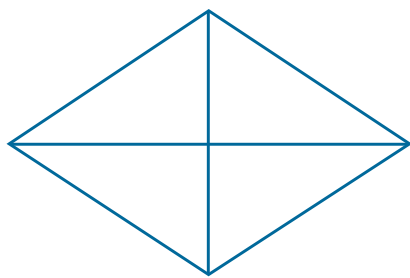
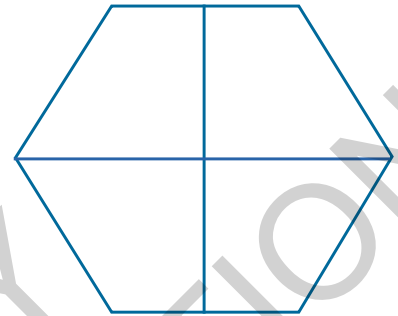
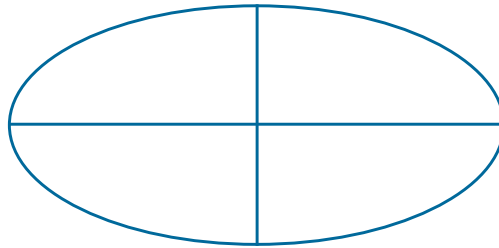
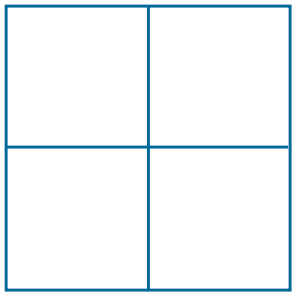
$$40? \boxed{}$$

$$25? \boxed{}$$

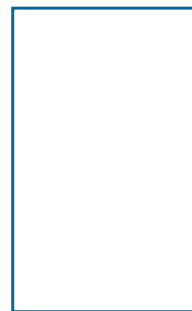
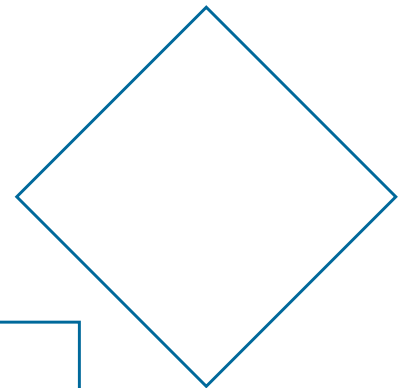
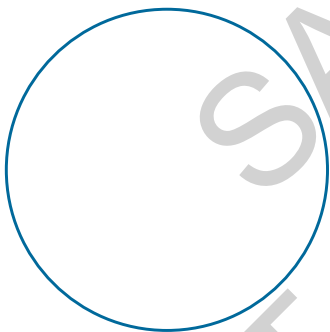
Mastery Checklist

- I can: ☐ skip count by 2s, 5s and 10s
☐ multiply by 2s to 20 and 5s to 50

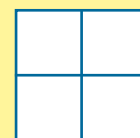
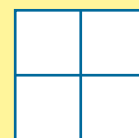
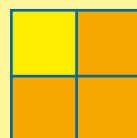
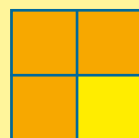
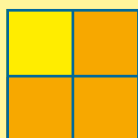
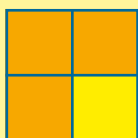
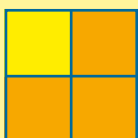
1 Colour one quarter of each shape.



2 Slice each shape into quarters. Colour one quarter.



Challenge! Continue the pattern.



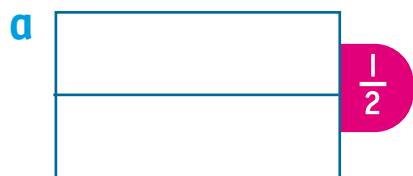
Halves and quarters

TERM 2
Week 2

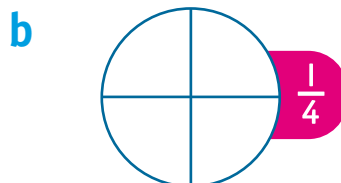
$$\frac{1}{2} = \text{one half}$$

$$\frac{1}{4} = \text{one quarter}$$

1 Colour to match the label.



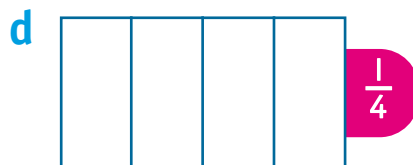
one half



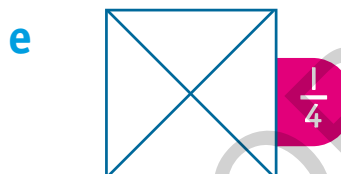
one quarter



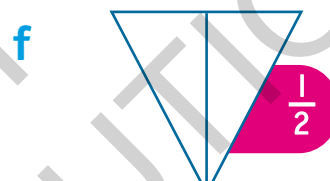
one half



one quarter

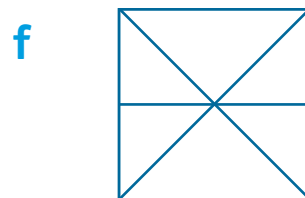
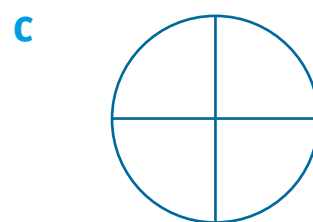
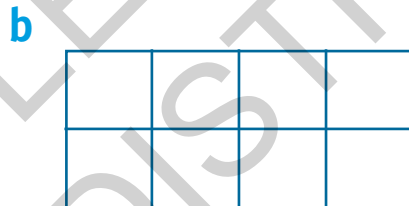
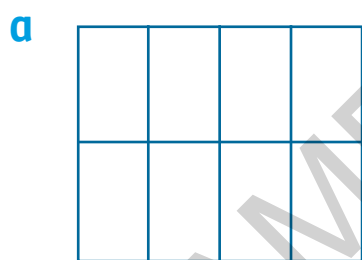


one quarter

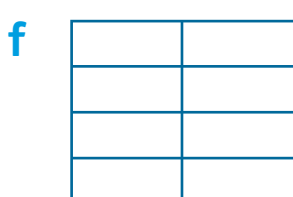
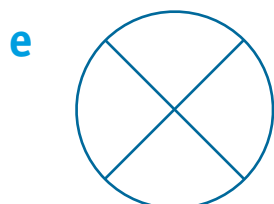
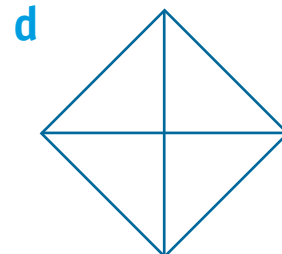
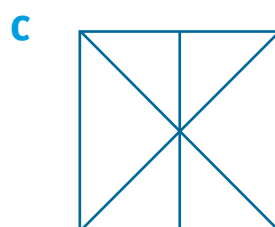
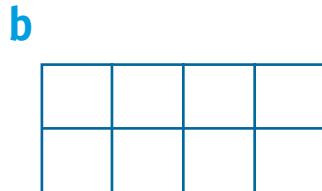
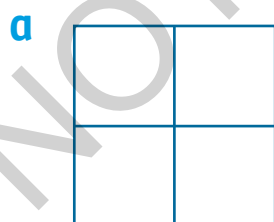


one half

2 Colour one half ($\frac{1}{2}$).



3 Colour one quarter ($\frac{1}{4}$).



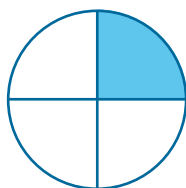
1 What fraction is blue: one half ($\frac{1}{2}$) or one quarter ($\frac{1}{4}$)?

a



$\frac{1}{2}$

b

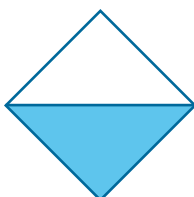


one quarter

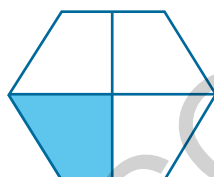
c



d



e



f



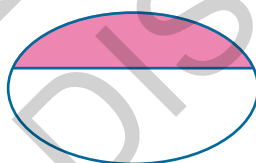
2 Write 'more' or 'less'.

a



than a half

b



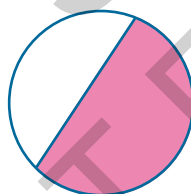
than a half

c



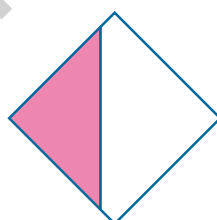
than a half

d



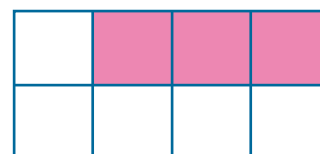
than a half

e



than a half

f

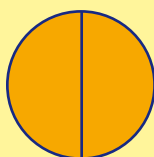


than a half

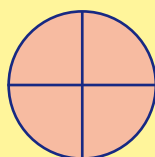
Challenge!

Paul eats one half of each pizza.
How many pieces in each half?

a



b



c



d



Half a collection

Halves are
two equal parts.

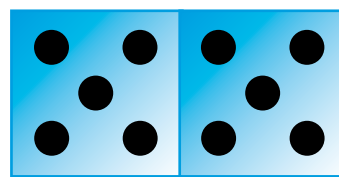
TERM 2
Week 2

1



half of 8 is

2



half of 10 is

3



half of is

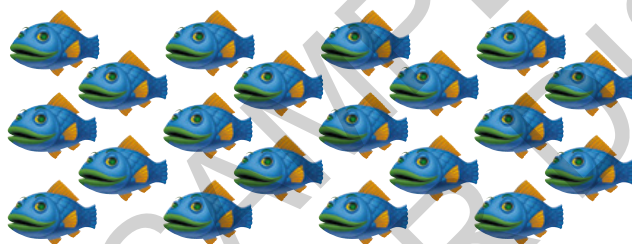
4



half of is

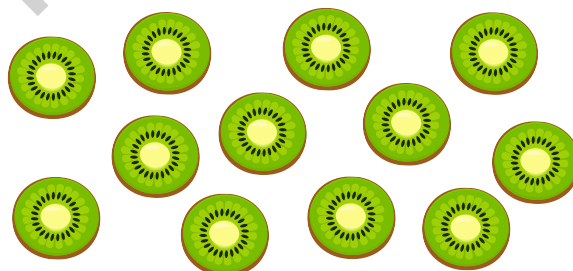
Divide into equal halves.

5



half of is

6



half of is

7 Hemi had 12 cards.
He gave half of them away.
How many left?

8 Maia ate half of the biscuits.
There are 10 left.
How many were there?

Draw a diagram

18 animals.
Half are cats.
How many cats?

Mastery Checklist

I can:

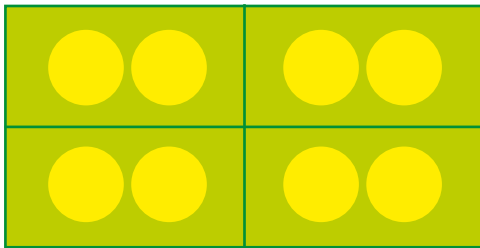
- ☐ read and write halves $\frac{1}{2}$ and quarters $\frac{1}{4}$
- ☐ colour halves and quarters of shapes
- ☐ identify half of a set of objects

Quarter of a collection

Quarters are
four equal parts.

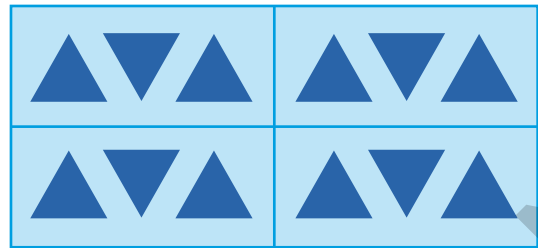
TERM 2
Week 2

1



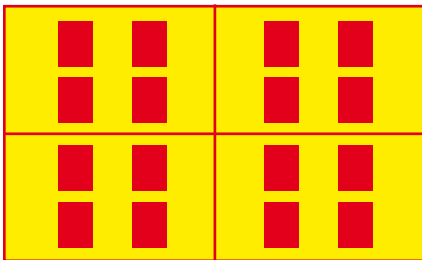
one quarter of 8 is

2



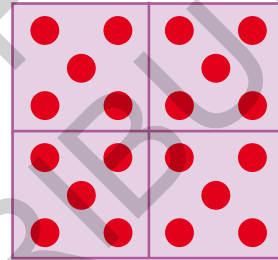
one quarter of 12 is

3



one quarter of is

4



one quarter of is

5



one quarter of is

6 Use counters.

$\frac{1}{4} =$ one quarter

a $\frac{1}{4}$ of 4 =

b $\frac{1}{4}$ of 8 =

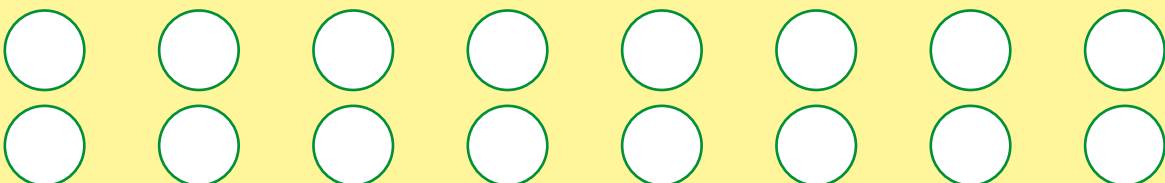
c $\frac{1}{4}$ of 12 =

d $\frac{1}{4}$ of 16 =

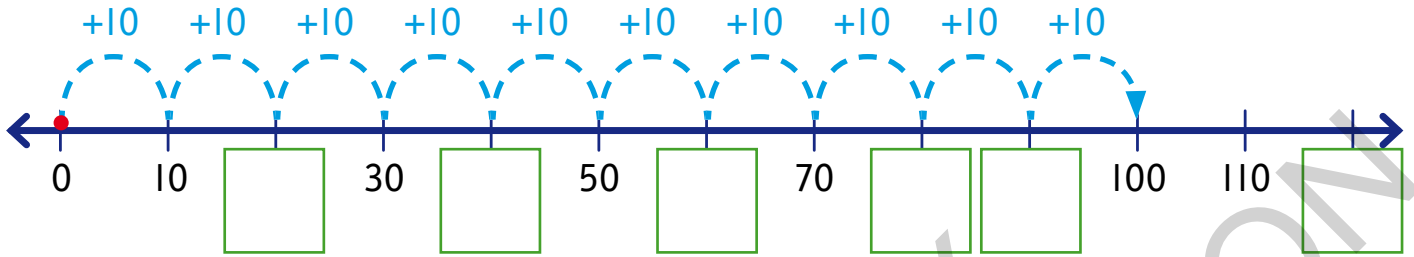
e $\frac{1}{4}$ of 20 =

f $\frac{1}{4}$ of 24 =

Challenge! Colour $\frac{1}{4}$ red, $\frac{1}{4}$ blue, $\frac{1}{2}$ yellow.



1 Complete the number line.



2 Count by 10s. Circle the odd number out.

a 10 20 30 31 40 50

b 80 70 60 50 40 35

c 60 70 81 90 100 110

d 120 110 100 91 80 70

3 Write 10 more than each number.

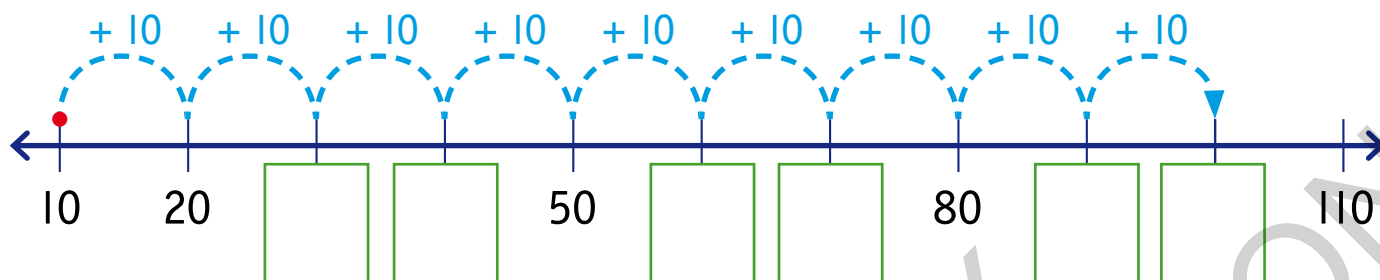
20	0	40	50
60	30	90	10
100			

Multiply $\times 10$

TERM 2
Week 3

When you multiply
by **zero** the answer
is always **zero**.

1 Complete the skip counting pattern.



2

a $10 + 10 =$

$2 \times 10 =$

b $10 + 10 + 10 =$

$3 \times 10 =$

c

$10 + 10 + 10 + 10 =$

$4 \times 10 =$

d

$10 + 10 + 10 + 10 + 10 =$

$5 \times 10 =$

e $7 \times 10 =$

g $10 \times 10 =$

i $12 \times 10 =$

f $9 \times 10 =$

h $11 \times 10 =$

j $0 \times 10 =$

3 How many 10s in

30?

120?

100?

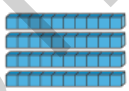
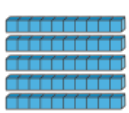
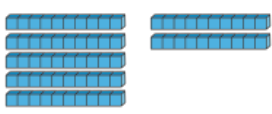
50?

60?

90?

1 Find each missing number.

$1 \times 5 =$		
$2 \times 5 =$		
$3 \times 5 =$		
$4 \times 5 =$		
$5 \times 5 =$		
$6 \times 5 =$		
$7 \times 5 =$		
$8 \times 5 =$		
$9 \times 5 =$		
$10 \times 5 =$		

$1 \times 10 =$		
$2 \times 10 =$		
$3 \times 10 =$		
$4 \times 10 =$		
$5 \times 10 =$		
$6 \times 10 =$		
$7 \times 10 =$		
$8 \times 10 =$		
$9 \times 10 =$		
$10 \times 10 =$		

2 Yes or no?

a Is 1×10 double 1×5 ?

b Is 4×5 half of 4×10 ?

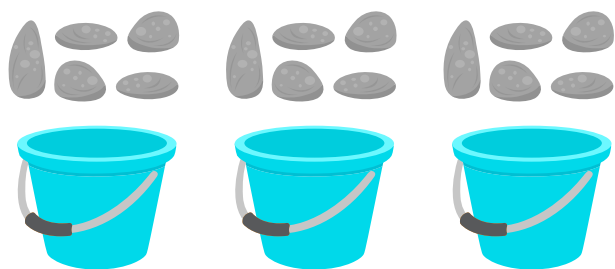
c Is 10×10 double 10×5 ?

d Can you see the pattern?

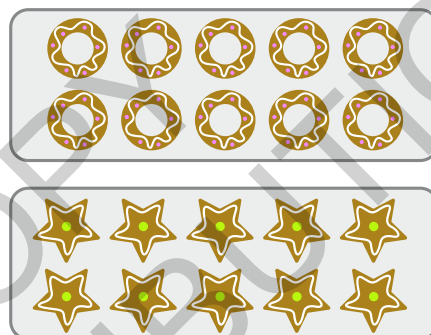


1 Find the answer.

- a** Min has three buckets with five rocks in each bucket. How many rocks altogether? _____



- b** Kim made two trays of ten cookies. How many cookies altogether? _____



2 Multiply to find the answer.

- a** Ruby bought four pairs of shoes. How many shoes in total? _____

- b** Waldo has five fish bowls. There are two fish in each bowl. How many fish in total? _____

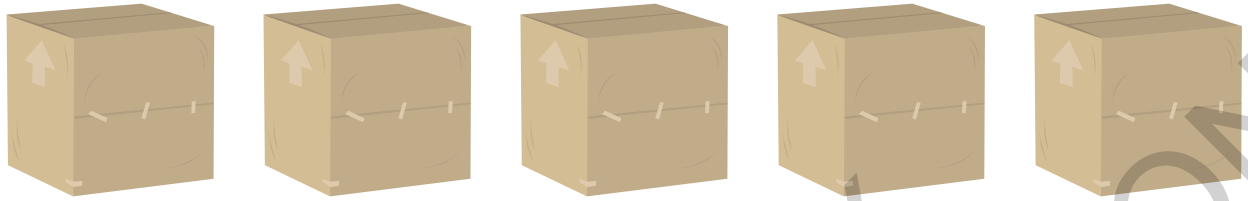
- c** Mango made eight sandwiches. She used two slices of bread for each sandwich. How much bread did she use altogether?

- d** Doc wrote six books. Each book had ten pages. How many pages did Doc write altogether?

Skip counting patterns

TERM 2
Week 3

Use the boxes to help answer the questions.
Hint: Use skip counting to help.



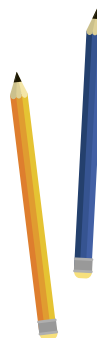
- 1 If there are 2 shoes in each box, how many shoes in total?



- 2 If there are 5 shells in each box, how many shells altogether?

- 3 If there are 10 books in each box, how many books in total?

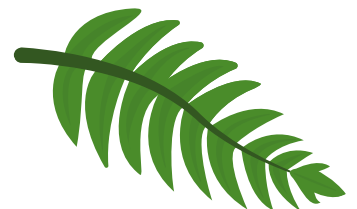
- 4 If there are 20 pencils in each box, how many pencils altogether?



Mastery Checklist

I can:

- ☐ skip count by 2s, 5s, 10s and 100s
- ☐ solve problems using skip counting and multiplication



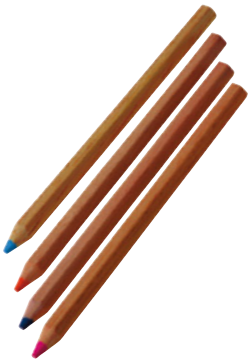
Comparing weight

TERM 2
Week 4

1 Circle  the heavier one. Draw a  on the lighter one.



2 Draw something heavier.



3 Draw something lighter.



4 Draw two different things that weigh the same.

Compare and measure weight

TERM 2
Week 4

1 Match.



heavier



lighter



heavier

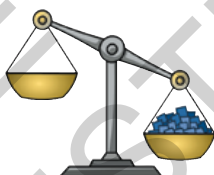


lighter

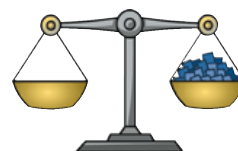
2 Weigh items against 20 blocks.
Draw an item that matches each word:



heavier



lighter



about the same

is heavier than 20 blocks.

is lighter than 20 blocks.

weighs about the same as 20 blocks.

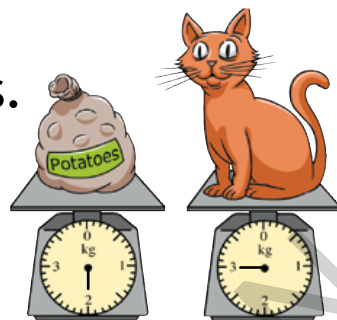
Weight in grams and kilograms

TERM 2
Week 4

Weight tells us how **heavy** or **light** something is.

We measure **light objects** in **grams (g)**.

We measure **heavier objects** in **kilograms (kg)**.



1



10 g



30 g



1 kg



3 kg



20 kg

a Is the pencil light or heavy? _____

b Is the dog light or heavy? _____

2 Circle the correct unit. Circle g or kg.

a



g kg

b



g kg

c



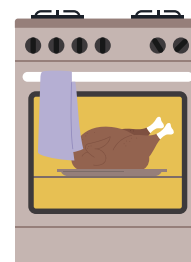
g kg

d



g kg

e



g kg

3 Match the object to the unit.

grams (g)



kilograms (kg)

Compare and measure weight

TERM 2
Week 4



Weigh.

1



grams

2



grams

3



grams

4



grams

5



grams

6



grams

7 The

was lightest.

8 The

was heaviest.

9 Order from lightest to heaviest:



Challenge! Who has the heaviest shoe?

has the heaviest shoe.

Dumplings, tarts, rolls and buns

How many dumplings weigh the same as a bun?

2 rolls weigh the same as 1 bun.



4 rolls weigh the same as 2 tarts.



3 dumplings weigh the same as 1 tart.



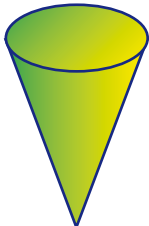
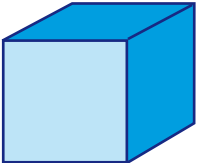
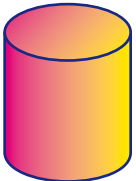
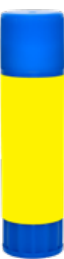
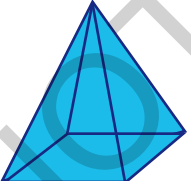
_____ dumplings weigh the same as 1 bun.



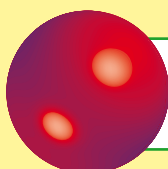
I can solve a problem by:

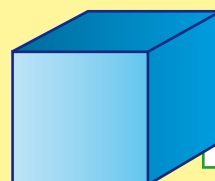
- ☐ comparing the mass of groups of objects ☐ using logical thinking

Circle things that are shaped like each 3D shape.

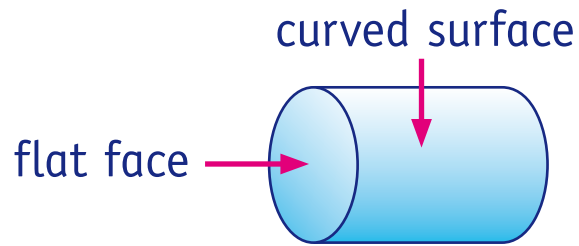
a  cone	   
b  cube	   
c  cylinder	   
d  sphere	   
e  pyramid	   

Challenge! Name the 3D shapes.





3D shapes may have flat faces, curved surfaces, or both.



1 What is the arrow pointing to? Circle the correct answer.

 curved surface <u>flat face</u>	 curved surface flat face	 curved surface flat face
--	---------------------------------	---------------------------------

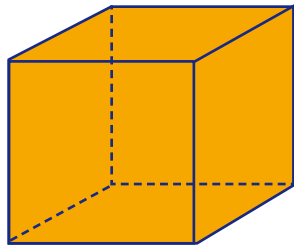
2 How many?

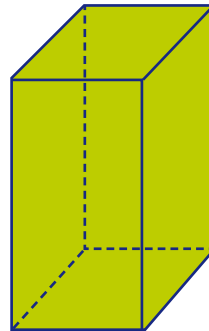
curved surfaces

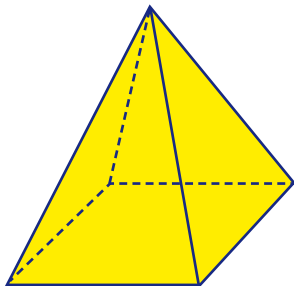
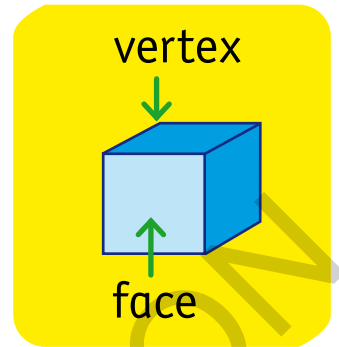
flat faces

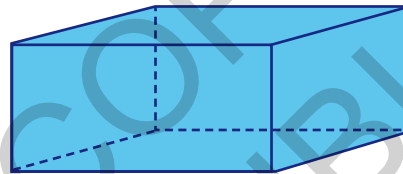
	curved surfaces	flat faces
a cone		
b cube		
c sphere		
d cylinder		
e pyramid		

1 How many faces?

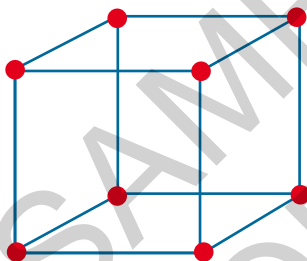


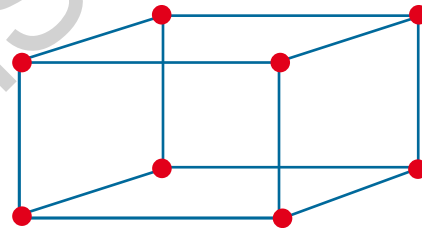


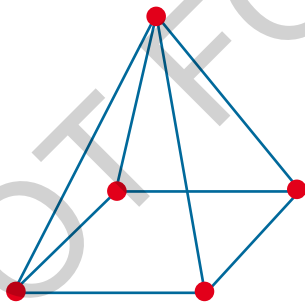


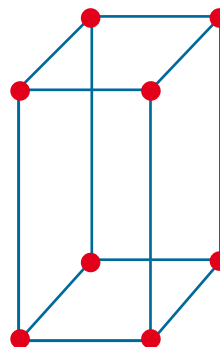


2 How many vertices?









Challenge!

Make your own shapes. Label them.



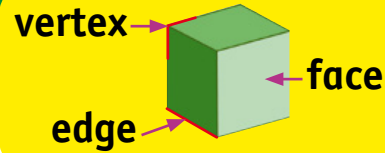
Mastery Checklist

I can:

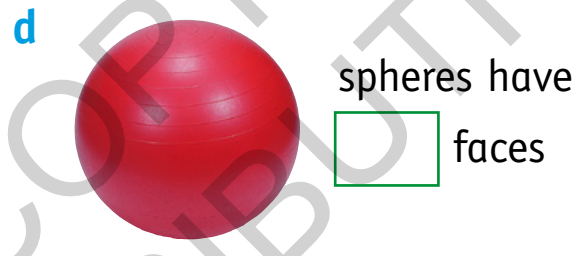
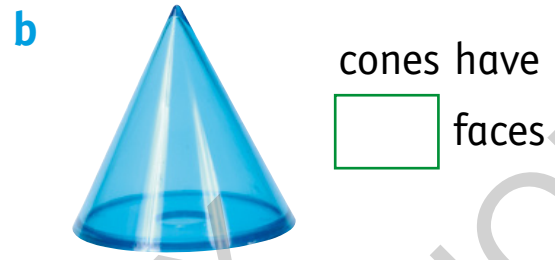
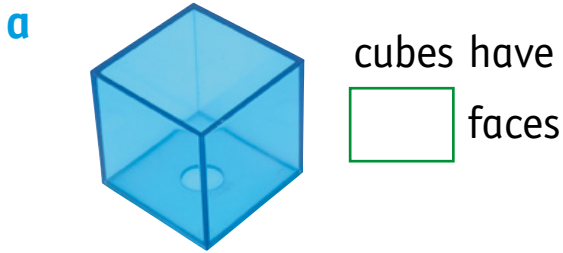
- ☐ identify 3D shapes and 2D shapes
- ☐ identify the 2D shapes of faces on 3D shapes
- ☐ count faces and vertices on 3D shapes
- ☐ describe 3D shapes

Faces, edges and vertices

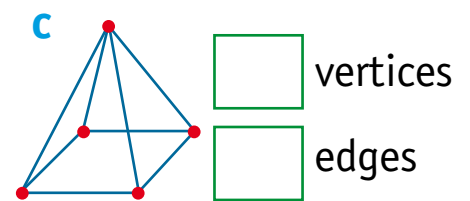
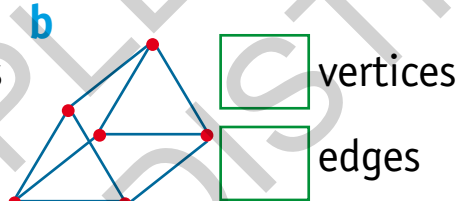
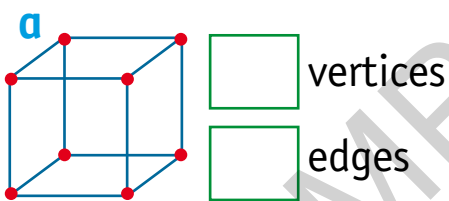
TERM 2
Week 5



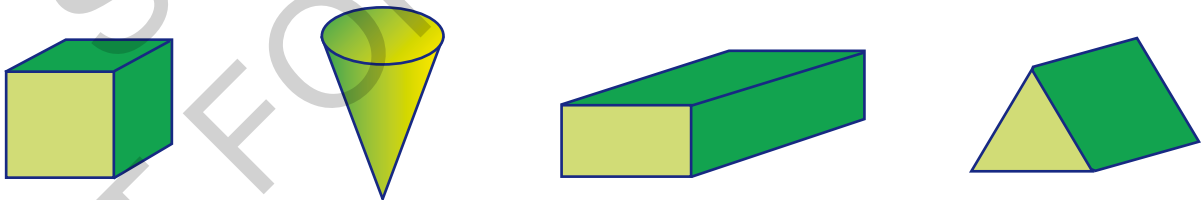
- 1 Shapes can have flat faces or curved surfaces. Count the faces.



- 2 Count the vertices and the edges.



- 3 Circle the objects with 6 faces.



- 4 What am I? Match.

I have 1 face that is a circle and 1 curved surface.

cylinder

cone

I have 2 faces that are circles and 1 curved surface.

I have 1 curved surface.

cube

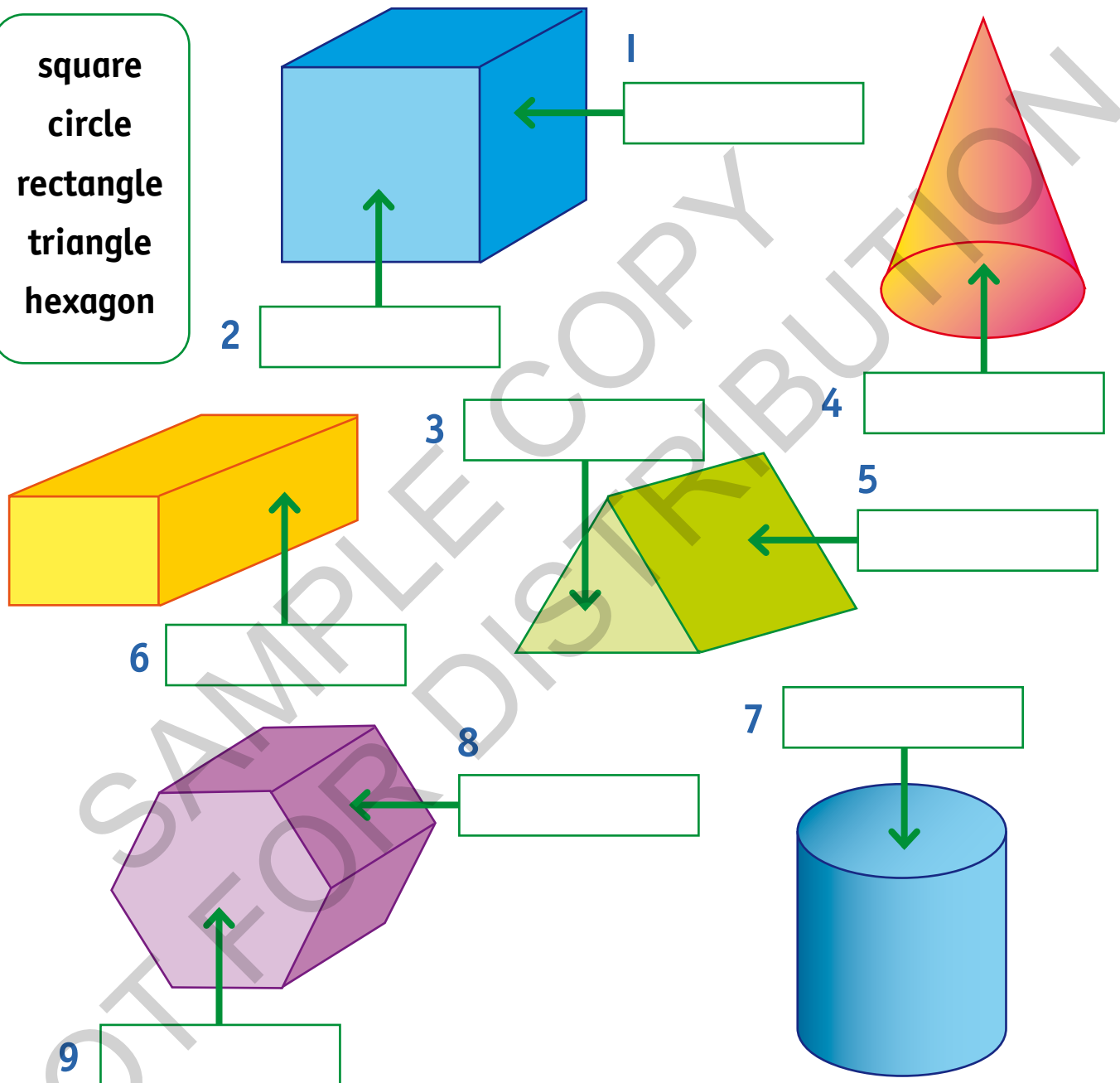
sphere

I have 6 square faces and 8 vertices.

A face is a
flat surface.

Name the shape of the face.

square
circle
rectangle
triangle
hexagon



Challenge!

What object could you make out of these faces?

a 6 squares

b 2 triangles and 3 rectangles

Checkpoint 3

1 Write the missing numbers.

40

50

70

80

2 Colour each fraction.

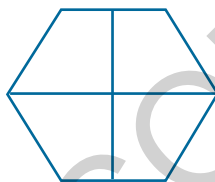
a



$\frac{1}{2}$

one half

b



$\frac{1}{4}$

one quarter

c



$\frac{1}{2}$

one half

3 How many groups of 2?



groups of 2 =

4 How many groups of 5?



groups of 5 =

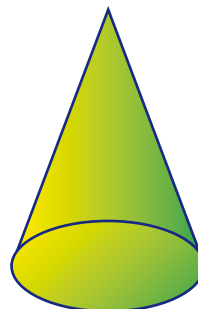
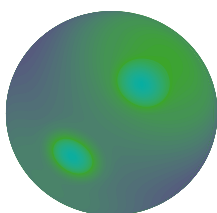
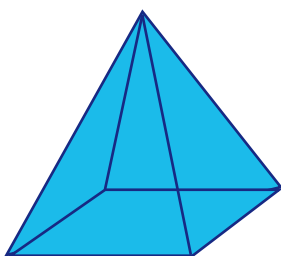
5 Match.

cone

cylinder

pyramid

sphere



Checkpoint 3

6 Complete the counting pattern.



7

a $5 + 5 + 5 =$ b $4 \times 5 =$

c $3 \times 5 =$ d $5 \times 5 =$

8 Circle the correct unit. Circle g or kg.



g kg



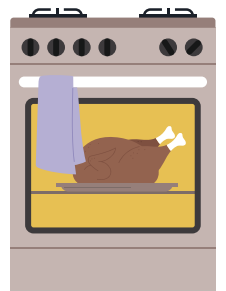
g kg



g kg



g kg



g kg

9

a Half of 10 is b Double 8 is

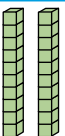
c Double 7 is d Half of 12 =

2-digit addition

TERM 2
Week 6

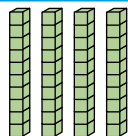
1 Write the sum. Find the answer.

a

Tens	Ones
	
+	

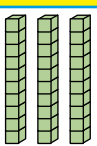
$$\boxed{24} + \boxed{5} = \boxed{}$$

b

Tens	Ones
	
+	

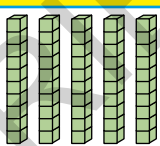
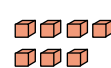
$$\boxed{} + \boxed{} = \boxed{}$$

c

Tens	Ones
	
+	

$$\boxed{} + \boxed{} = \boxed{}$$

d

Tens	Ones
	
+	

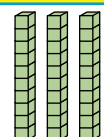
$$\boxed{} + \boxed{} = \boxed{}$$

e

Tens	Ones
	
+	

$$\boxed{} + \boxed{} = \boxed{}$$

f

Tens	Ones
	
+	

$$\boxed{} + \boxed{} = \boxed{}$$

2 Find the answer.

a $14 + 2 = \boxed{}$ **b** $25 + 3 = \boxed{}$ **c** $13 + 4 = \boxed{}$

Write the sum and find the answer.

.....

- 1 Doc collects the eggs from the henhouse. Chooky laid five eggs and Penny laid four eggs. How many eggs altogether?

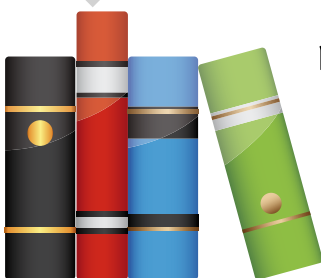


- 2 Mango watched a TV show for twenty-two minutes and then switched to another programme for five minutes. How long was he watching TV for?

- 3 Dizzy has thirty-three cars in his toy box. His grandma gives him five more. How many toy cars does he have now?



- 4 Ruby borrows 22 library books. Waldo borrows 7 books. How many library books altogether?



Add and subtract tens

TERM 2
Week 6

1 Draw the tens and ones, then count to add.

a $35 + 40 =$

b $51 + 20 =$

Tens	Ones

Tens	Ones

2 Draw the first number, then cross off the tens to subtract.

a $89 - 50 =$

b $64 - 30 =$

Tens	Ones

Tens	Ones

3 Find the answers.

a $73 + 20 =$

b $27 + 70 =$

c $44 + 20 =$

d $98 - 70 =$

e $65 - 40 =$

f $56 - 30 =$

g $62 + 12 =$

h $24 + 33 =$

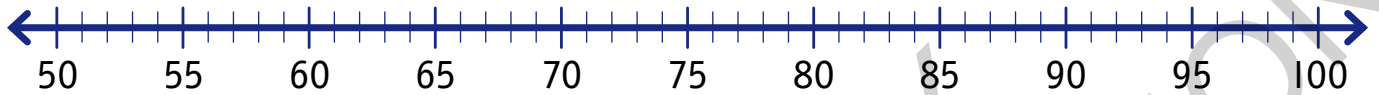
i $100 - 40 =$

Add and subtract tens

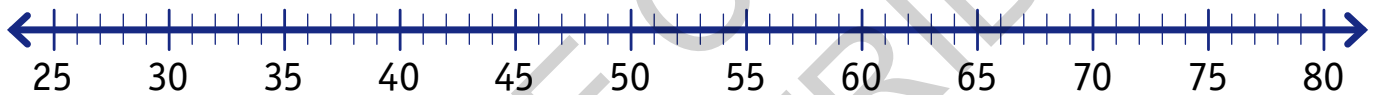
TERM 2
Week 6

Circle the first number, then jump by tens.

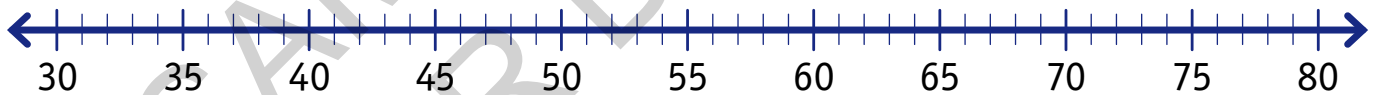
1 $61 + 30 =$ _____



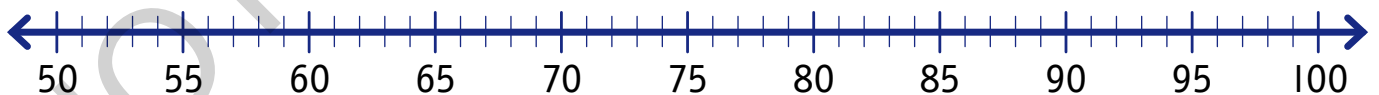
2 $38 + 30 =$ _____



3 $74 - 40 =$ _____



4 $93 - 20 =$ _____



5 $52 - 30 =$ _____



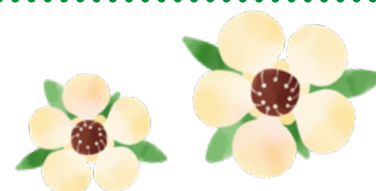
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Jump up or down the hundred chart by tens to find the answers.

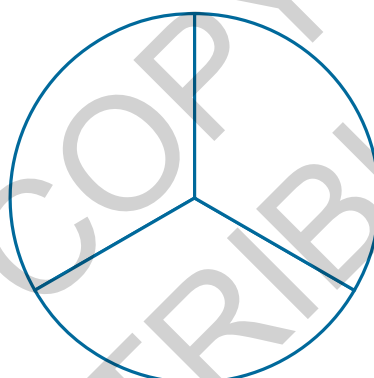
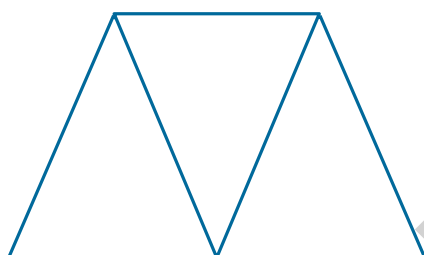
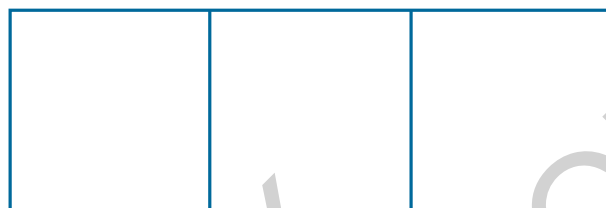
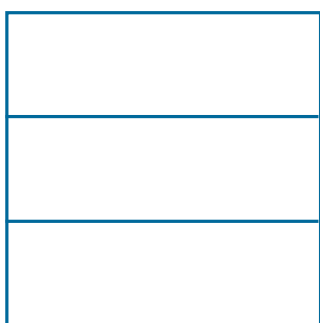
a $32 + 60 =$	b $56 + 20 =$	c $17 + 70 =$
d $95 - 80 =$	e $49 - 30 =$	f $84 - 50 =$
g $16 + 40 =$	h $25 + 50 =$	i $43 + 40 =$
j $91 - 50 =$	k $74 - 40 =$	l $37 - 20 =$

Mastery Checklist

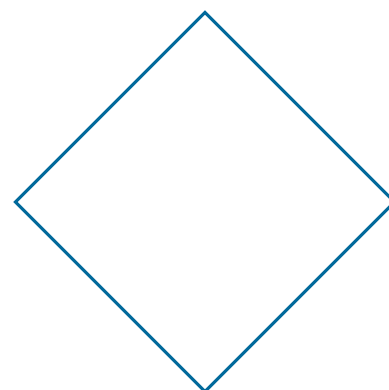
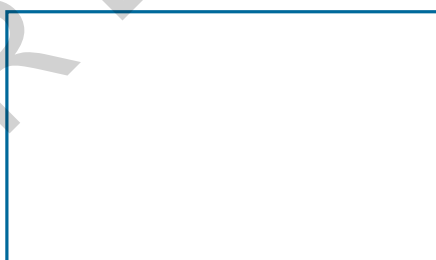
- I can: ☐ add and subtract tens
☐ add and subtract numbers up to 100



1 Colour one third of each shape.



2 Slice each shape into thirds. Colour one third.



3 Circle three equal thirds.

a



is one third of

b



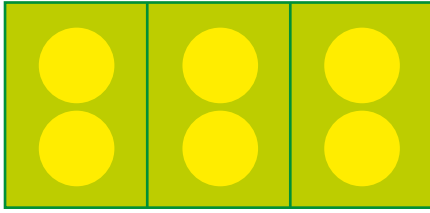
is one third of

Third of a collection

Thirds are
three equal parts.

TERM 2
Week 7

1



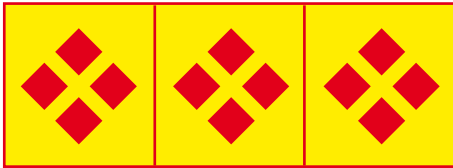
one third of 6 is

2



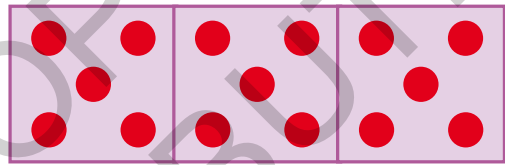
one third of 9 is

3



one third of is

4



one third of is

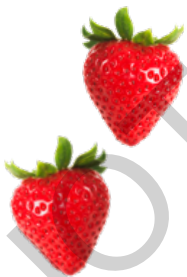
5



one third of is

6 Here is one third. How many in a whole? Draw and write the answer.

a



is one third of

b



is one third of

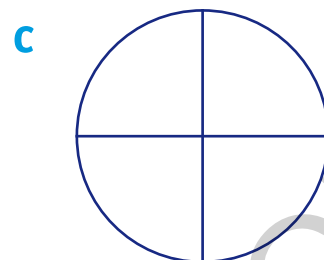
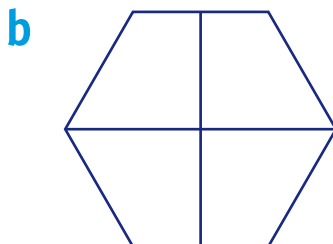
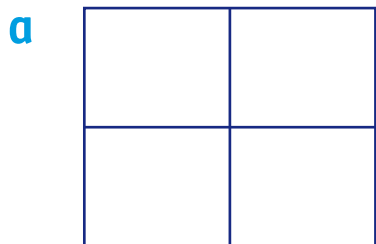
7 Use counters.

a $\frac{1}{3}$ of 3 = b $\frac{1}{3}$ of 6 = c $\frac{1}{3}$ of 9 =

Comparing fractions

TERM 2
Week 7

1 In each shape colour one half ($\frac{1}{2}$) blue. Colour $\frac{2}{4}$ yellow.

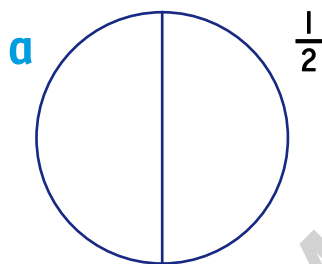


d Is one half equal to $\frac{2}{4}$? _____

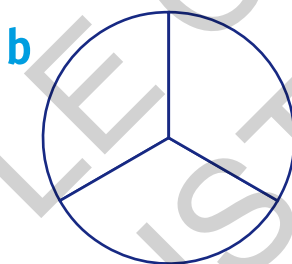
e How many quarters make one half? _____

$\frac{2}{4}$ ← numerator
4 ← denominator

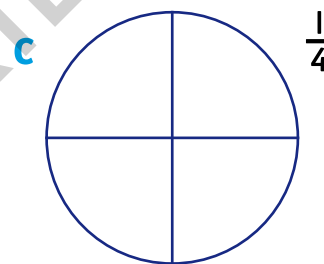
2 Colour and compare the size.



$\frac{1}{2}$



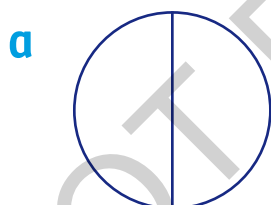
$\frac{1}{3}$



$\frac{1}{4}$

Which fraction is largest? _____ smallest? _____

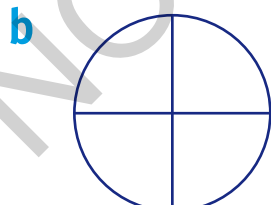
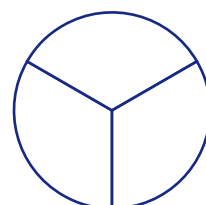
3 Colour the fraction. Write **larger than**, **smaller than** or **equal to**.



$\frac{1}{2}$

is _____

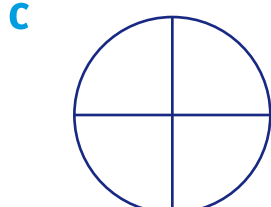
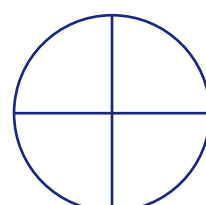
$\frac{1}{3}$



$\frac{1}{2}$

is _____

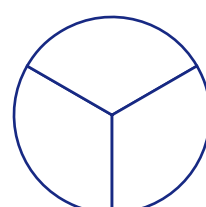
$\frac{2}{4}$



$\frac{1}{4}$

is _____

$\frac{1}{3}$



1 Draw a diagram to help you find the answer.

a What is $\frac{1}{2}$ of 8? _____

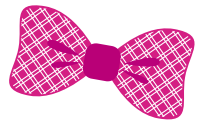
b What is $\frac{1}{4}$ of 12? _____

c What is $\frac{2}{4}$ of 16? _____

d What is $\frac{1}{3}$ of 9? _____

2 Draw a diagram to solve the problem.

a Doc has 20 bow ties. He wants to give $\frac{1}{4}$ of them away.
How many is that? _____



b Ruby bought 18 buns. $\frac{1}{2}$ are for Waldo.
How many is that? _____



c Mango found 21 shells. She put $\frac{1}{3}$ in the hermit crab tank.
How many is that? _____



Mastery Checklist

I can: ☐ share a collection into groups to find a fraction of a collection



Fractions of a group



- 1 Grab a handful of blocks or counters. Draw them.

How many altogether?

Circle half the group.

One half of is .

- 2 Grab a smaller handful. Draw them.

How many altogether?

Circle a quarter of the group.

One quarter of is .

- 3 Grab a larger handful. Draw them.

How many altogether?

Circle a third of the group.

One third of is .

- 4 If you had an odd number, what did you do with the extra one?



I can solve a problem by:

☐

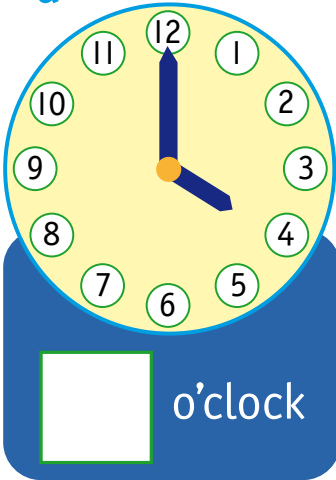
dividing a group in halves, quarters or thirds

☐

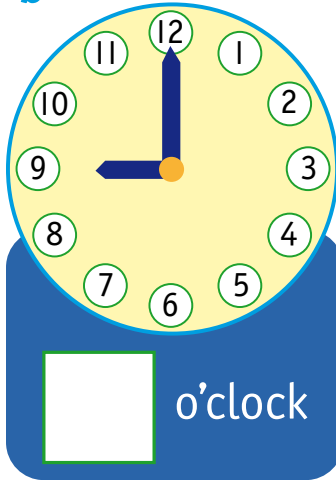
drawing a diagram

1 What time is it?

a



b



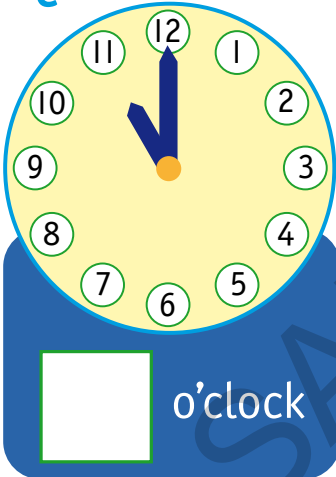
c



d



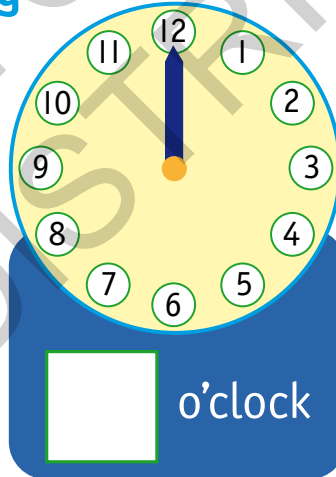
e



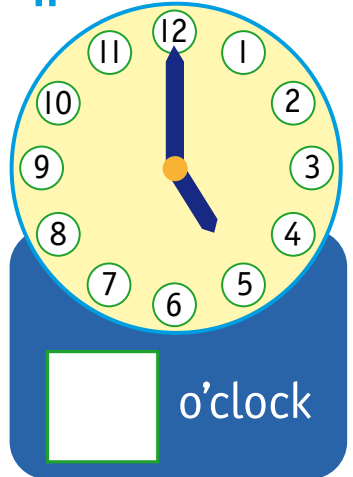
f



g



h

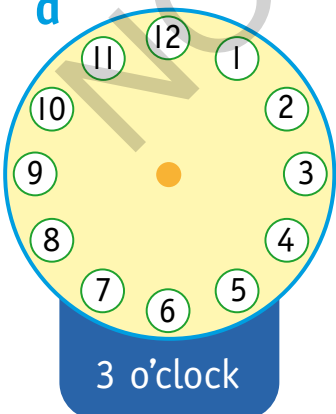


2

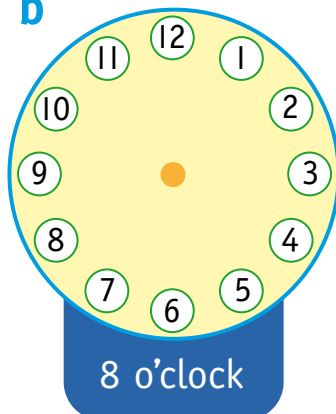


Draw hands.

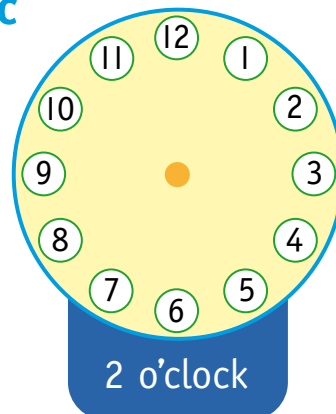
a



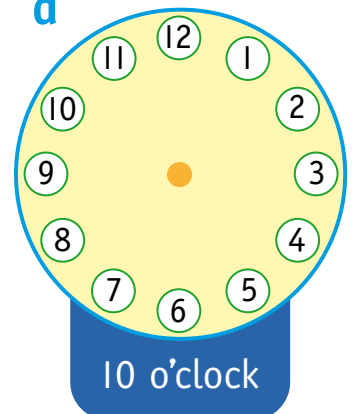
b

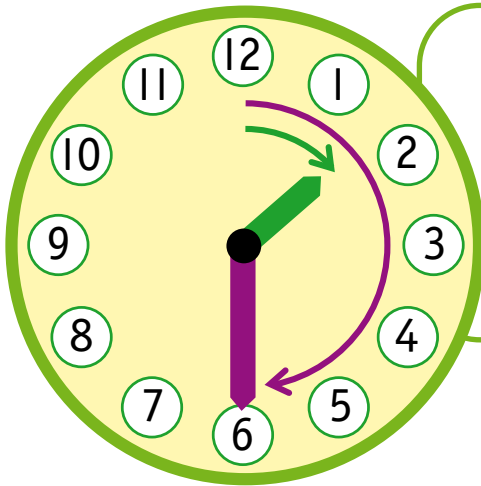


c



d





1:30

Half-past

Minute hand points to 6, a **half turn** around the clock. **Hour hand** is **halfway** between the last hour and the next. Both clocks show **half-past**.

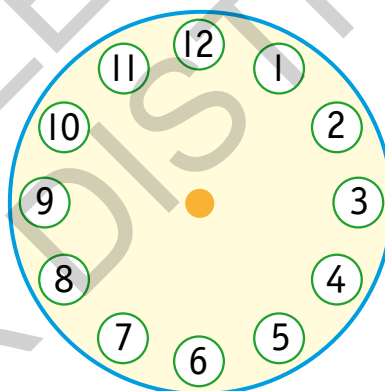
1 There are:

a minutes is an hour.

b minutes in half an hour.

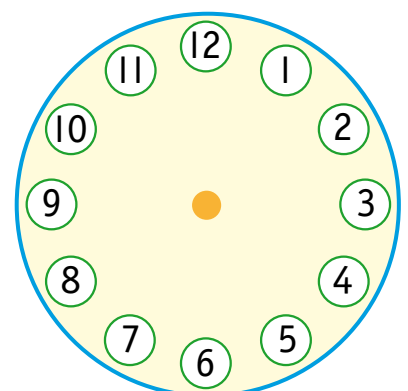
2 Complete the clocks.

Half-past 4



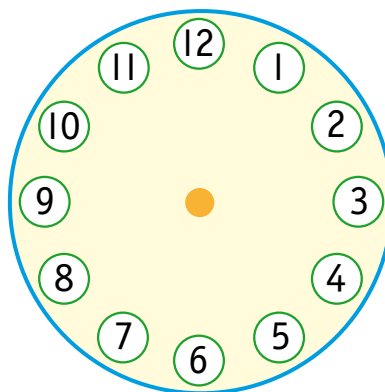
a :

Half-past 9



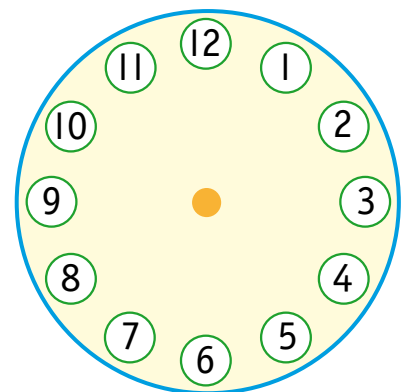
b :

Half-past 11

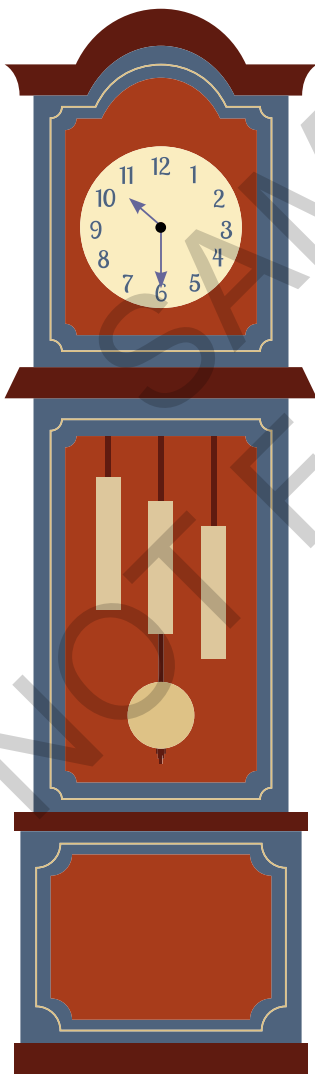


c :

Half-past 6



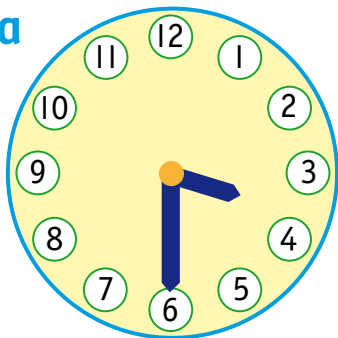
d :



Half-past

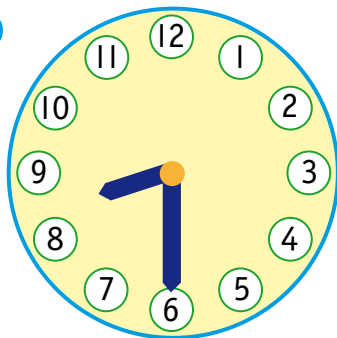
TERM 2
Week 8

1 a



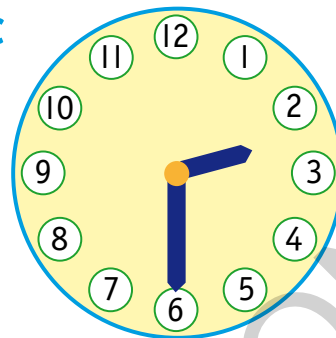
half-past

b



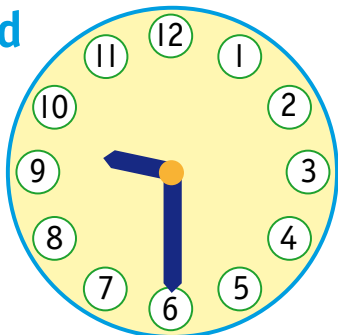
half-past

c



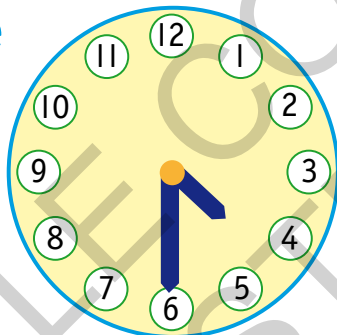
half-past

d



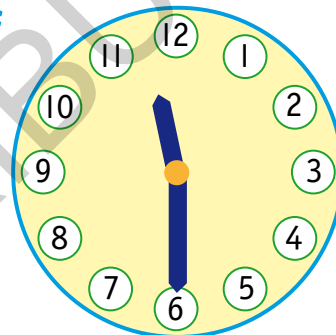
half-past

e



half-past

f



half-past

2 Match.

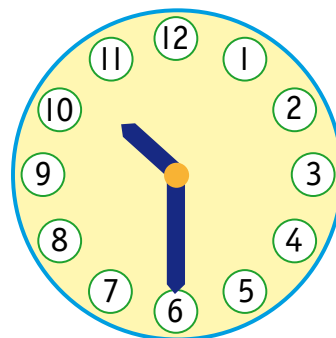
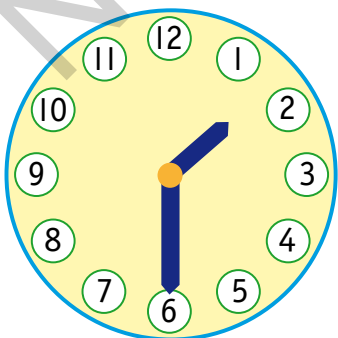
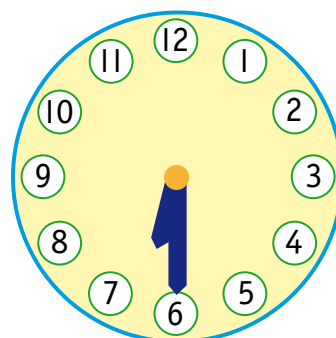


half-past 10

half-past 7

half-past 1

half-past 6



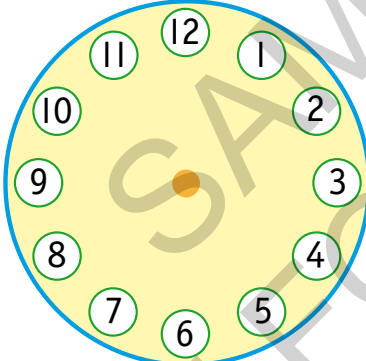


Half an hour

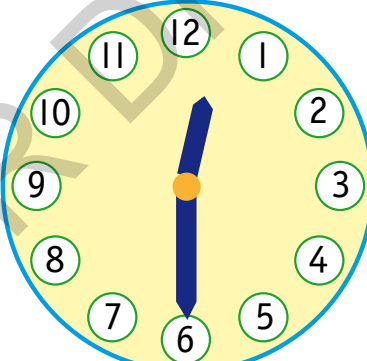
An hour is 60 minutes long.
Half an hour is **30 minutes**.
Half-past 1 is 1:30.
Half-past 5 is 5:30.
Half-past 12 is 12:30.

Fill in the missing times.

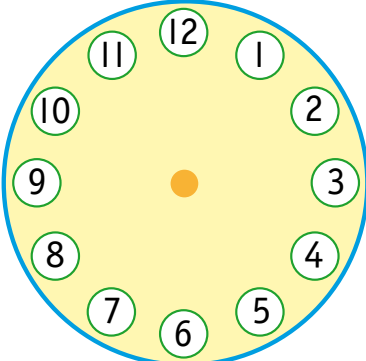
1

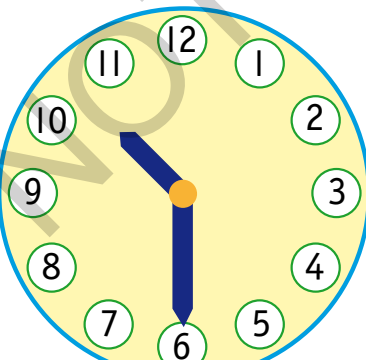
2

3

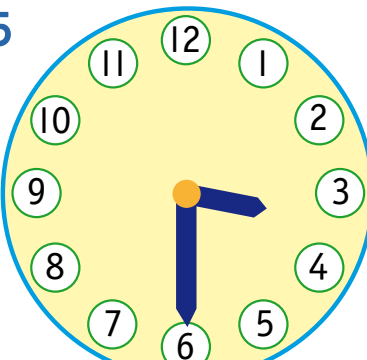



4



·
·

5



·
·

Mastery Checklist

I can:

- ☐ read clocks to the hour and half-hour
- ☐ use 'o'clock' and 'half-past'
- ☐ read digital time to the half-hour

Half-past

Half-past 7 is the same as 7:30.

TERM 2
Week 8

What time is it?

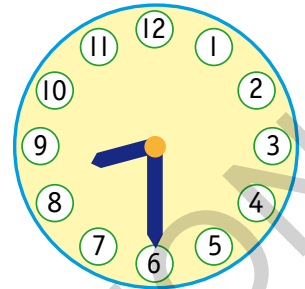
1



half-past 7

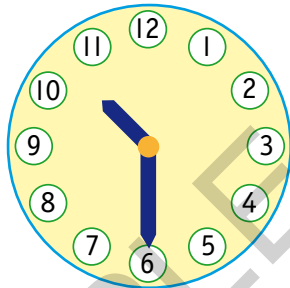
7:30

2



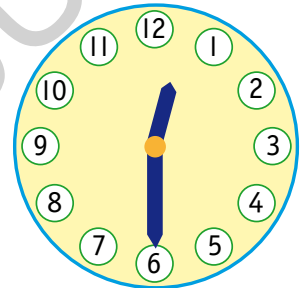
:

3



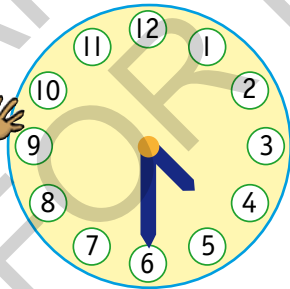
:

4



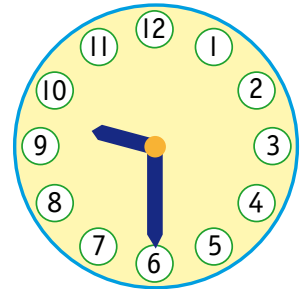
:

5



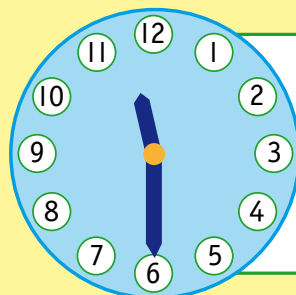
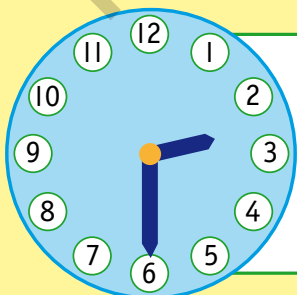
:

6



:

Challenge! What time is it two hours later?



Comparing capacity

Capacity is
how much it
will hold.

TERM 2
Week 9

1 Circle the one that holds more.



a



b



c



d



2 Order these from holds least (1) to holds most (6).



holds most



holds least

Challenge! Compare lunchboxes. Order four lunchboxes from holds least to holds most.



Capacity in cups

TERM 2
Week 9



Find four drink containers like these.

1 How many cups does each hold? Colour the number of cups.

a	Container	Number of cups	b	Container	Number of cups
c			d		

2 During one week of school:

a Alex drank 10 . How many cups did he drink? _____

b Freya drank 5 . How many cups did she drink? _____

c Ned drank 2 and 3 cups of water. How many cups did he drink? _____

d Karen drank 2 and 3 . How many cups did she drink? _____



Challenge! Jenny makes 2 jugs of cordial a day. Each jug holds 5 cups. How many cups does Jenny make:

a in one week?

b in 4 weeks?

Measuring capacity in litres

TERM 2
Week 9

- 1 How much water does it hold?
Use a 1 litre measuring jug.



a



litres

b



litres

c



litres

d



litres

e



litres

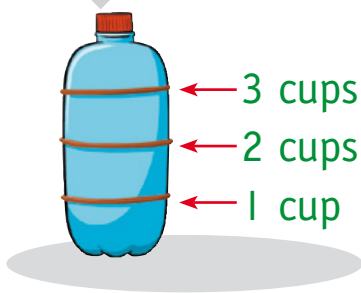
f



litres

- 2 Draw in order from holds least to holds most.

- 3 How many cups does each bottle hold? Estimate using elastic bands.
Measure to check.



Bottle 1

a



Estimate

cups

Measure

cups

Bottle 2

b



Estimate

cups

Measure

cups

Checkpoint 4

1 How many cups  will it hold?

a



1
3



b



4
8



c

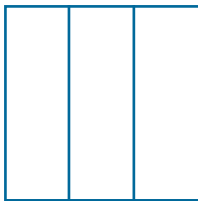


2
5



2 Colour one third of each shape.

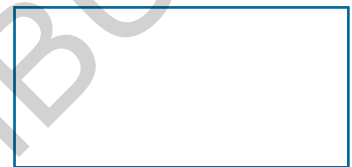
a



b



c



3 Complete.

30

add 10

add 10

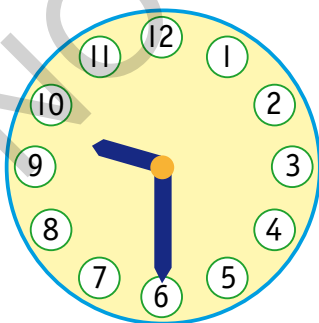
add 10

4 Subtract the tens.

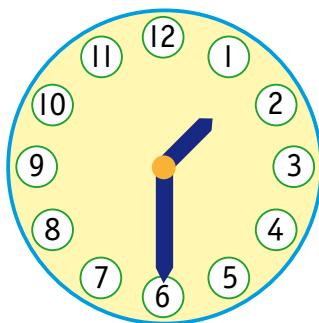
a $62 - 20 =$

b $85 - 40 =$

5 What time is it?



a half-past



b half-past

4:00

c

o'clock

10:30

d half-past

Checkpoint 4

6 Take away.

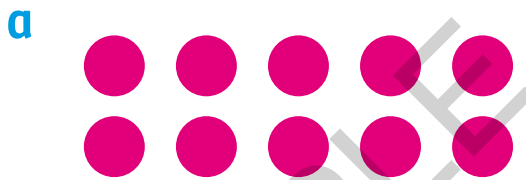
a $5 - 2 =$

b $3 - 1 =$

c $16 - 4 =$

d $28 - 3 =$

7 Circle the fraction. Complete the sentence.



One half of 10 is .



One quarter of 8 is .



One third of 9 is .

d Circle the largest fraction.

$\frac{1}{3}$ $\frac{1}{2}$ $\frac{1}{4}$

8 Add the tens.

a $12 + 20 =$

b $25 + 40 =$

c $33 + 50 =$

d $64 + 30 =$

1 Find each missing number.

$$\square + 10 = 20$$

$$10 + \square = 20$$

$$\square + 9 = 20$$

$$9 + \square = 20$$

$$\square + 8 = 20$$

$$8 + \square = 20$$

$$\square + 7 = 20$$

$$7 + \square = 20$$

$$\square + 6 = 20$$

$$6 + \square = 20$$

$$\square + 5 = 20$$

$$5 + \square = 20$$

2 Complete the doubles.

$$7 + 7 = \square$$

$$5 + 5 = \square$$

$$9 + 9 = \square$$

$$\text{Double 3 is } \square$$

$$\text{Double 8 is } \square$$

$$\text{Double 4 is } \square$$

$$\text{Double 6 is } \square$$

$$\text{Double 2 is } \square$$

$$\text{Double 10 is } \square$$

$$\text{Half of 12 is } \square$$

$$\text{Half of 18 is } \square$$

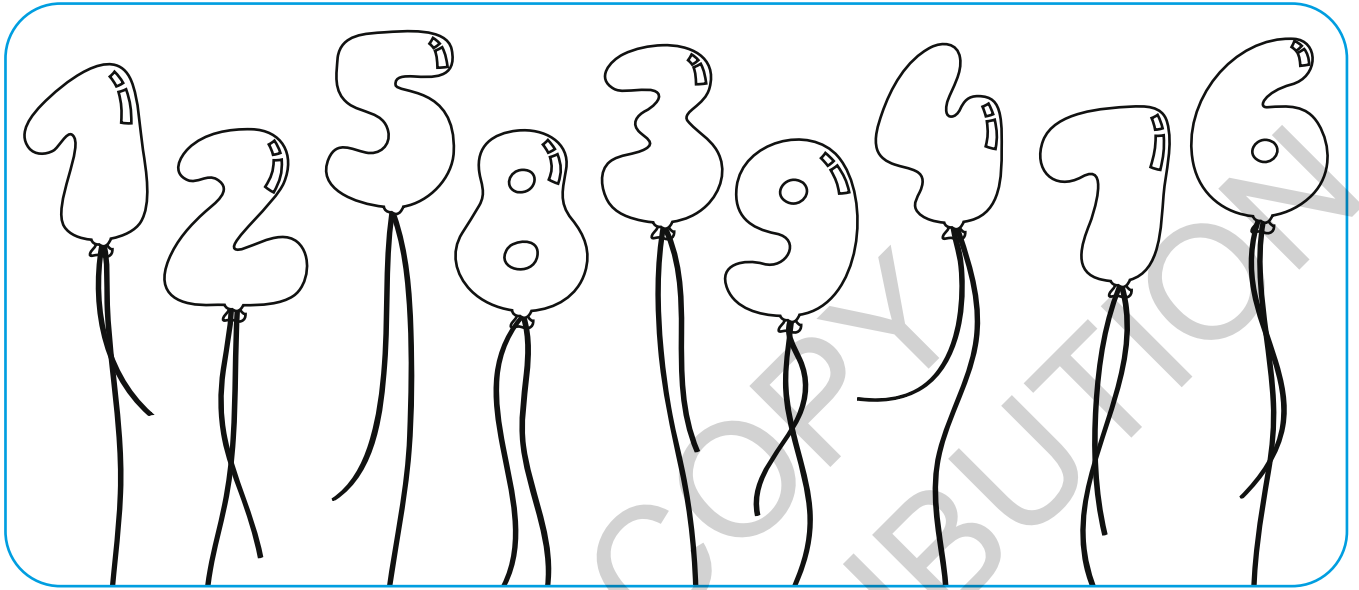
$$\text{Half of 20 is } \square$$

Rounding numbers

TERM 3
Week 1

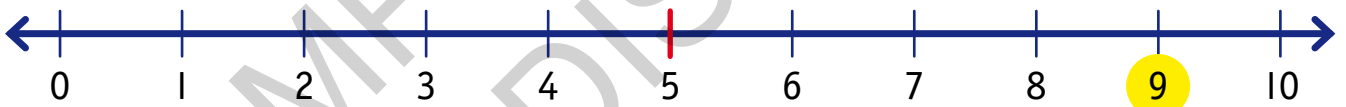
5 or more
round up!

1 Colour the numbers which round up to 10.

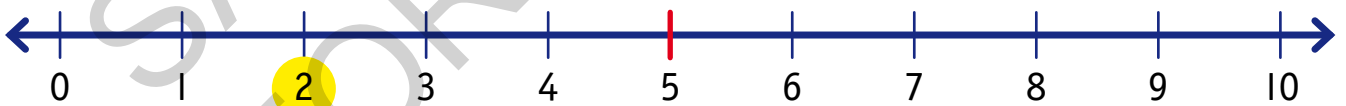


2 Does the yellow number round up or down? Circle 0 or 10.

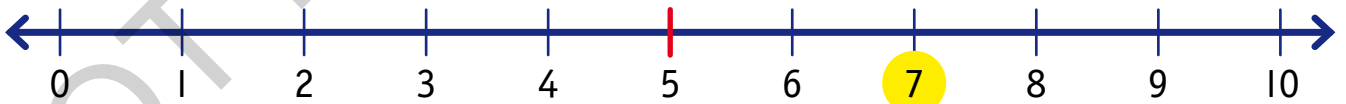
a



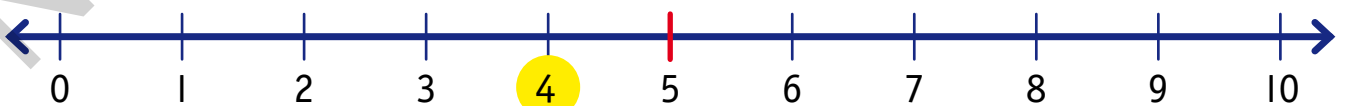
b



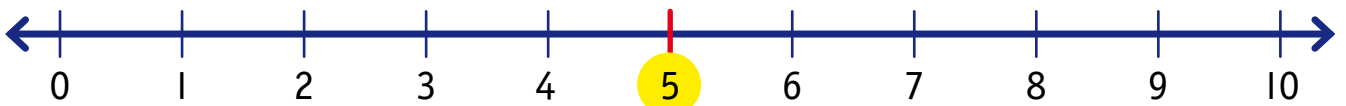
c



d

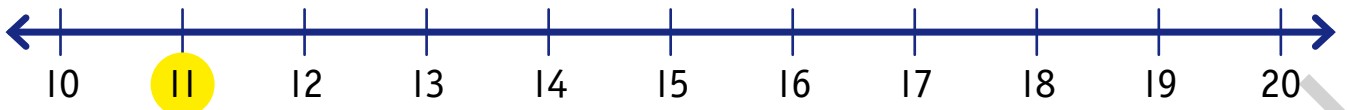


e

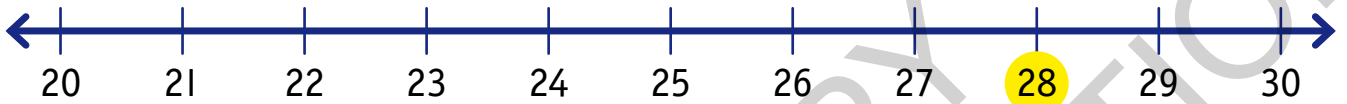


1 Round the number to the nearest ten. Circle your answer.

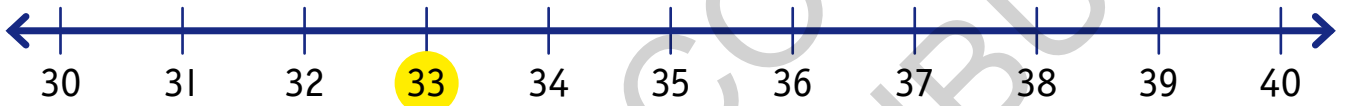
a



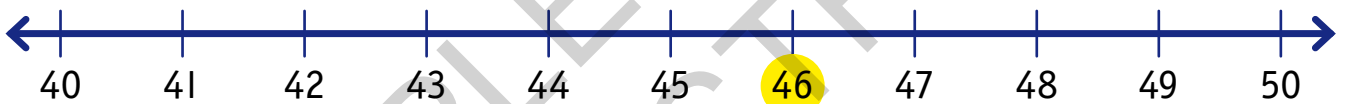
b



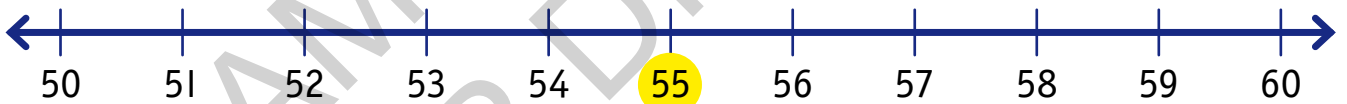
c



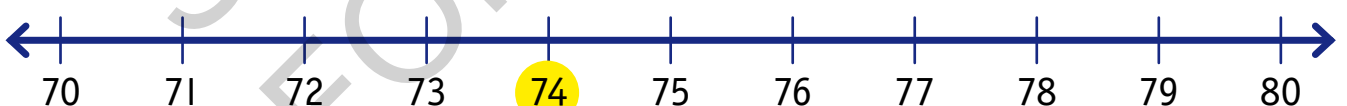
d



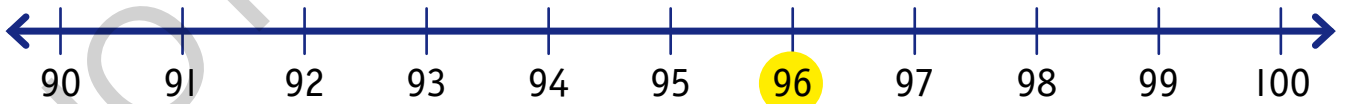
e



f



g



2 Round to the nearest ten.

a

55

b

62

c

79

d

84

e

91

f

97

1 Circle the numbers in each row that round to Dizzy's number.



60

67

61

56

53

59

20

18

26

19

21

14

80

72

88

78

83

81

2 Round each number to the nearest ten, then estimate the answer.

$19 + 19$

+

=

$29 + 11$

+

=

$31 + 41$

+

=

$52 + 28$

+

=



3 Estimate to the nearest ten.

$39 + 28 =$

$61 + 34 =$

$88 + 12 =$

$42 + 19 =$

$27 + 23 =$

$78 + 11 =$

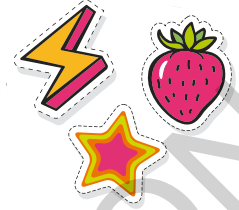
$21 + 49 =$

$32 + 41 =$

$51 + 49 =$

Add or subtract. Round your answer to the **nearest 10**.

- 1 Dizzy collected 23 stickers. Ruby gave him 16 more.
How many stickers altogether?



_____ stickers altogether. Rounded to the nearest 10 = _____

- 2 The hens lay 27 eggs. Waldo drops 6 eggs on the floor.
How many eggs are left?



_____ eggs left. Rounded to the nearest 10 = _____

- 3 Doc picks up 34 stones in the backyard and 25 stones in the park.
How many stones altogether?

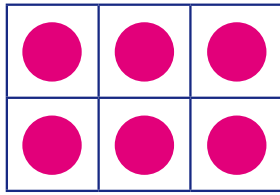


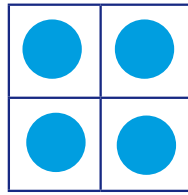
_____ stones altogether. Rounded to the nearest 10 = _____

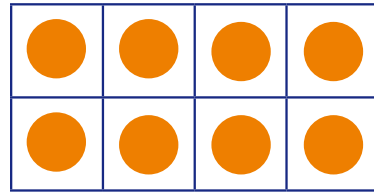
Odd and even numbers

TERM 3
Week 2

1 Even numbers make pairs. Write the even numbers.







2 Odd numbers have one left over. Write the odd numbers.







3 Colour the even numbers **blue** and the odd numbers **red**.

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

4 What do even numbers end with?

What do odd numbers end with?



Divide by 2

TERM 3
Week 2

÷ is the sign that
tells us to divide

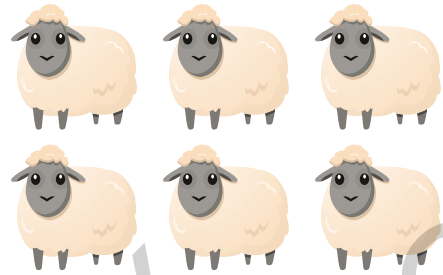
- 1 Divide into two equal groups.
Fill in the equation.

a



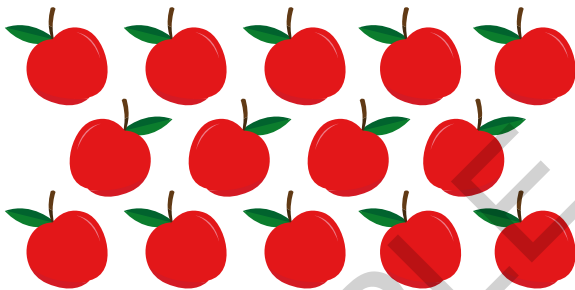
$$\boxed{4} \div \boxed{} = \boxed{}$$

b



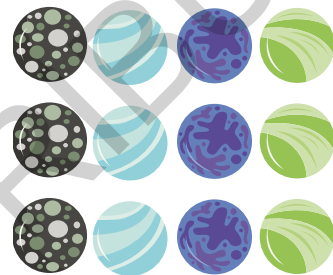
$$\boxed{} \div \boxed{} = \boxed{}$$

c



$$\boxed{} \div \boxed{} = \boxed{}$$

d



$$\boxed{} \div \boxed{} = \boxed{}$$

- 2 Circle two equal groups. Fill in the missing numbers.

a



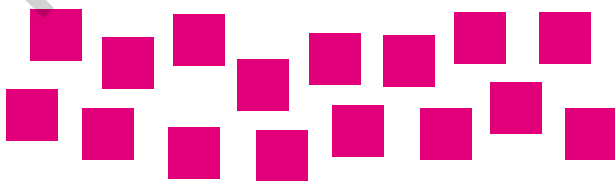
$$8 \div \underline{} = \underline{}$$

b



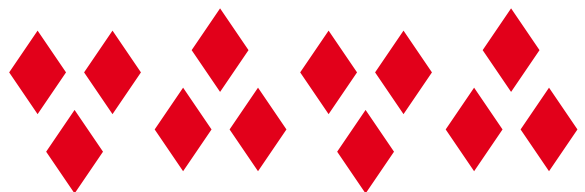
$$10 \div \underline{} = \underline{}$$

c



$$\underline{} \div \underline{} = \underline{}$$

d



$$\underline{} \div \underline{} = \underline{}$$

The division sign

TERM 3
Week 2

1 Draw a picture to find each answer.

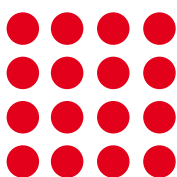
$12 \div 2 =$

$16 \div 2 =$

$20 \div 2 =$

$18 \div 2 =$

2 Match and find the answer.



$12 \div 2 =$

$8 \div 2 =$

$16 \div 2 =$

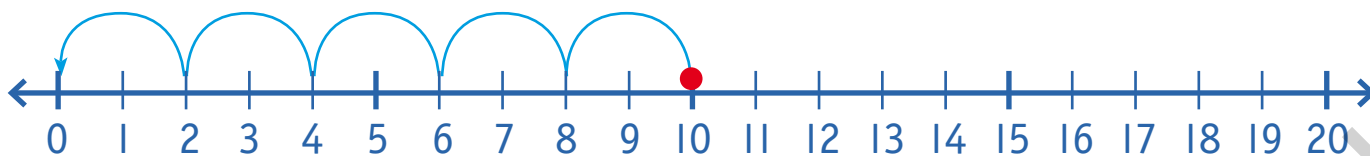
$14 \div 2 =$

$10 \div 2 =$

Dividing on a number line

TERM 3
Week 2

1 How many 2s in 10?



There are 2s in 10.

2 How many 2s in 14?



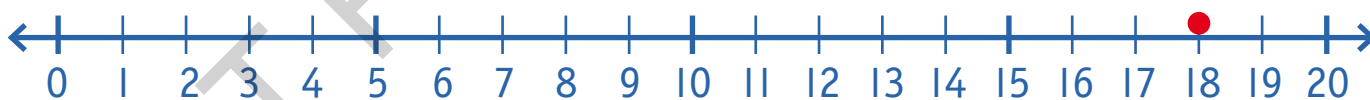
There are 2s in 14.

3 How many 2s in 16?



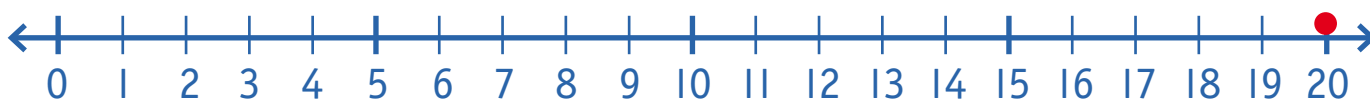
There are 2s in 16.

4 How many 2s in 18?



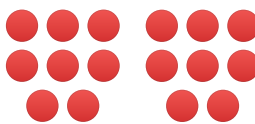
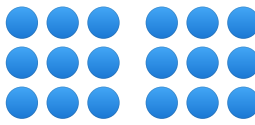
There are 2s in 18.

5 How many 2s in 20?

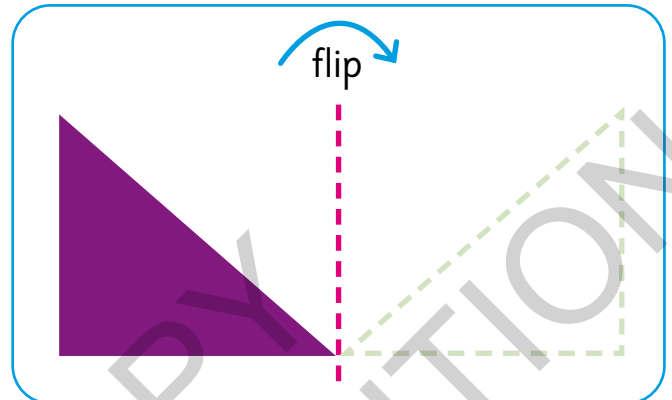
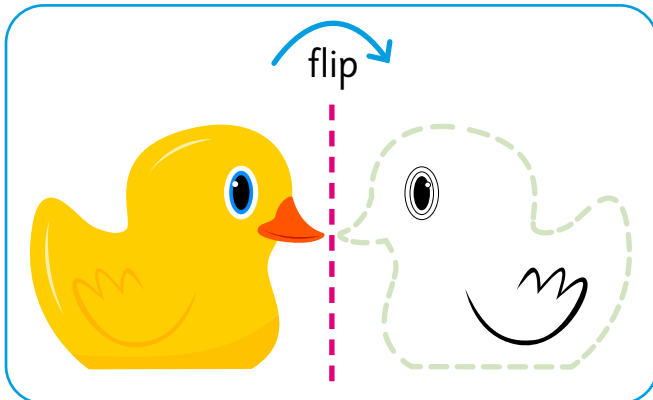


There are 2s in 20.

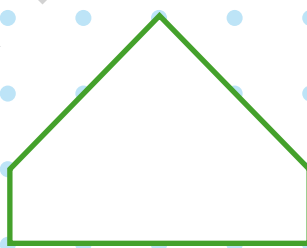
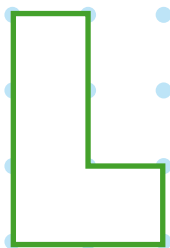
Complete the table.

$1 \times 2 = 2$	Double 1 is 2		Half of 2 is 1	$2 \div 2 = 1$
$2 \times 2 = 4$	_____ 2 is 4		_____ of 4 is 2	$4 \div 2 = 2$
$3 \text{ _____} = 6$	Double 3 is 6			$6 \text{ _____} = 3$
$4 \times 2 = 8$	Double 4 is 8		Half of 8 is _____	$8 \div 2 = 4$
$5 \times 2 = 10$	Double 5 is _____		Half of 10 is 5	
	Double 6 is _____		Half of 12 is _____	
$7 \times 2 = 14$				$14 \div 2 = 7$
			Half of 16 is _____	$16 \div 2 = 8$
$9 \times 2 = 18$	Double 9 is 18			
				

1 Trace each shape to show a flip.



2 Flip each shape and draw it.



3 This shape has been flipped. Flip and draw it again. Continue across the page.

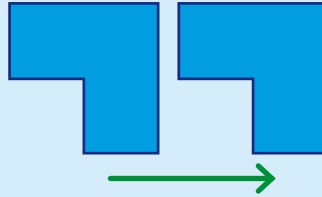


flip



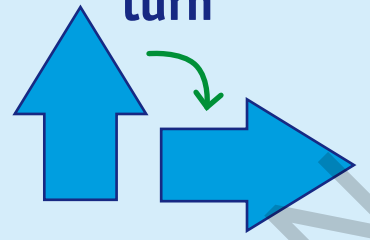
flip it over

slide



slide it along

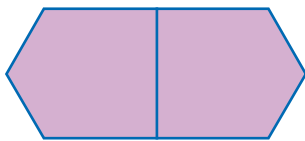
turn



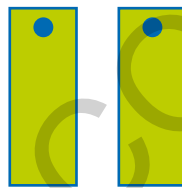
turn it around

1 How has the shape been moved? Write flip, slide or turn.

a



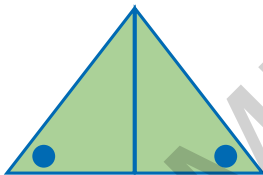
b



c



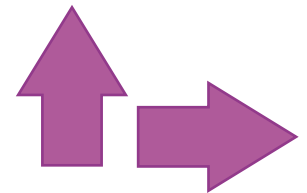
d



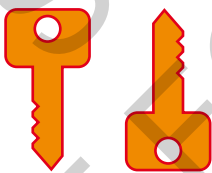
e



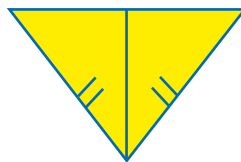
f



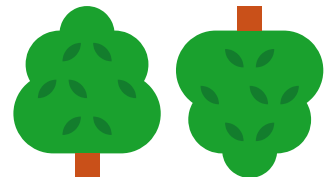
g



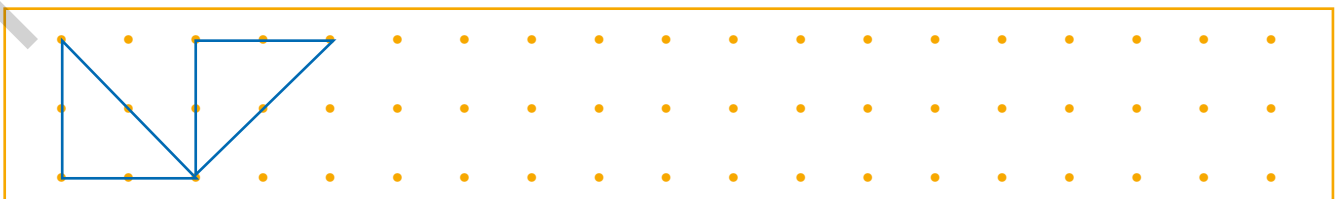
h



i



2 Continue the pattern.



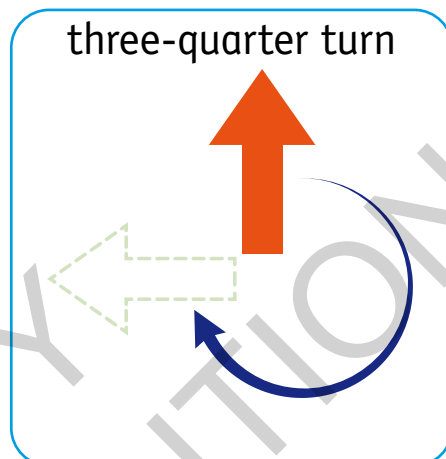
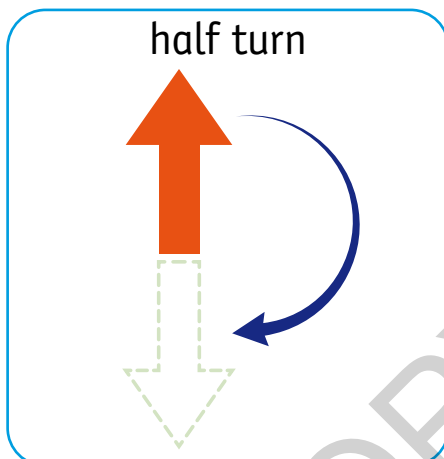
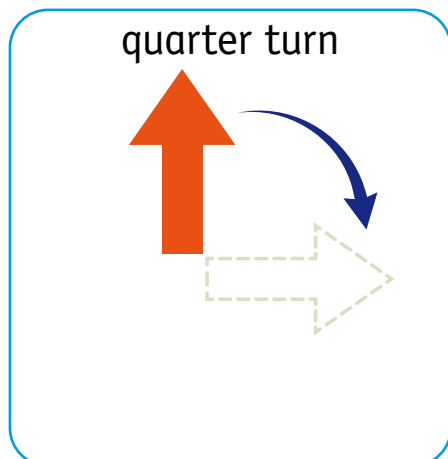
How did you move the triangle?

Turning shapes

Clockwise
is the same
direction
a clock turns

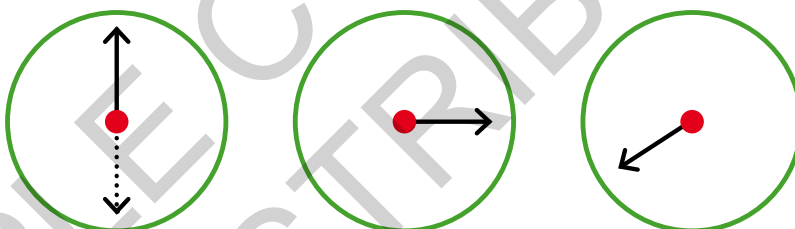
TERM 3
Week 3

1 Let's turn this arrow. Trace each turn.

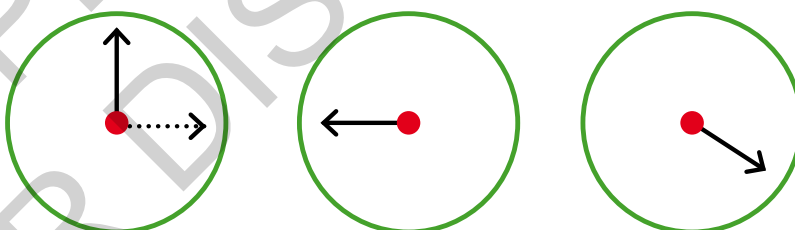


2 Draw where the hand would be after a:

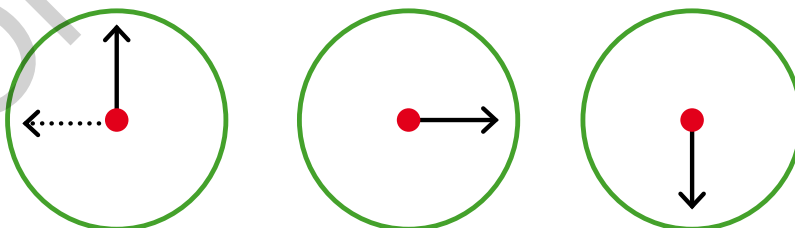
half turn.



quarter turn.

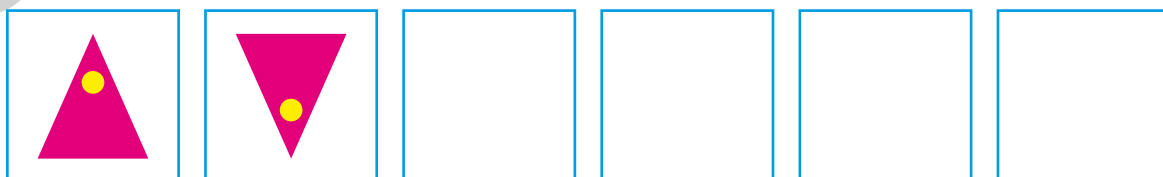


three-quarter turn.

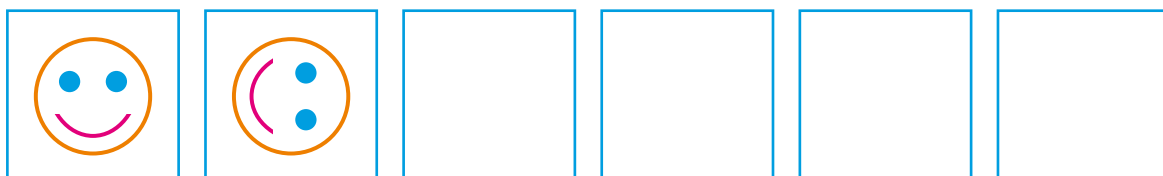


3 Complete the patterns using half and quarter turns.

half
turns



quarter
turns

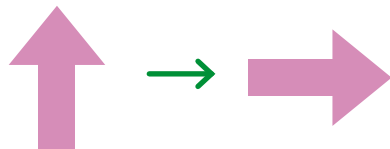


Turning clockwise

TERM 3
Week 3



- Each shape has turned clockwise.
Is it a quarter, half or three-quarter turn?
Label each one.



--



2025 RELEASE UNDER E.O. 14176




 University of Twente



bioRxiv preprint doi: <https://doi.org/10.1101/2020.06.10.244100>; this version posted June 10, 2020. The copyright holder for this preprint (which was not certified by peer review) is the author/funder, who has granted bioRxiv a license to display the preprint in perpetuity. It is made available under aCC-BY-NC-ND 4.0 International license.



ANNEX D

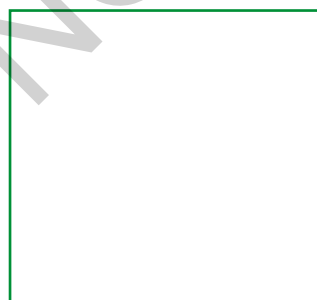




EF



- 2** Draw a shape then show each turn.



10

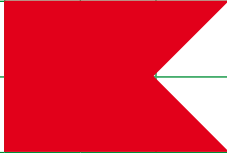
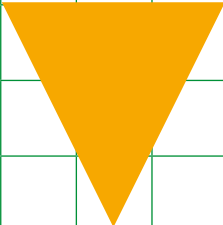
The following table shows the results of the regression analysis. The dependent variable is the number of days of absence due to illness. The independent variables are the age, sex, and education level of the respondent. The results show that the age of the respondent has a positive effect on the number of days of absence due to illness. The coefficient for age is 0.001, which is statistically significant at the 1% level. The coefficient for sex is -0.001, which is not statistically significant. The coefficient for education level is -0.001, which is not statistically significant.

quarter

half

three-quarter

- 1 Complete the table. Start with the shape. Flip it, then slide it, then give it a half turn.

Shape	Flip	Slide	Half turn
			
			
			
			

- 2 Draw a shape then flip, slide and turn it.

Mastery Checklist I can: ☐ flip, slide and turn a shape
☐ turn shapes using quarter, half and three-quarter turns

Dividing by 5

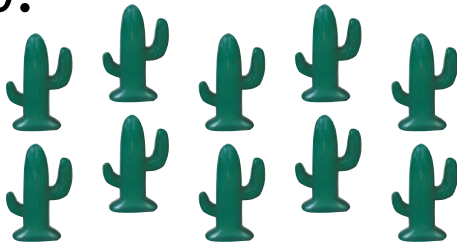


is the sign
that tells us
to divide.

TERM 3
Week 4

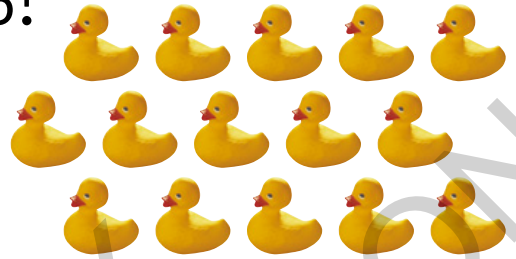
1 How many fives in:

a 10?



$$10 \div 5 = \square$$

b 15?



$$15 \div 5 = \square$$

c 20?



$$20 \div 5 = \square$$

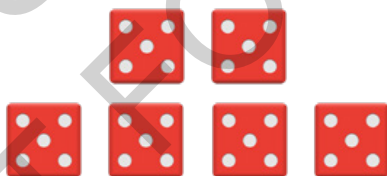
d 25?



$$25 \div 5 = \square$$

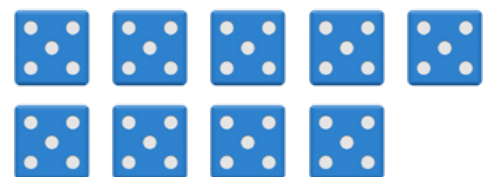
2 How many fives in:

a 30?



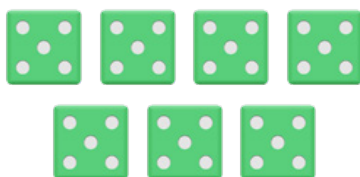
$$30 \div 5 = \square$$

b 45?



$$45 \div 5 = \square$$

c 35?



$$35 \div 5 = \square$$

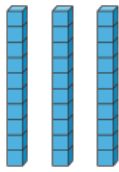
d 40?



$$40 \div 5 = \square$$

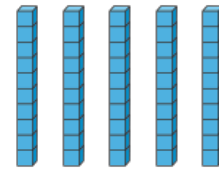
1 How many tens in:

a 30?



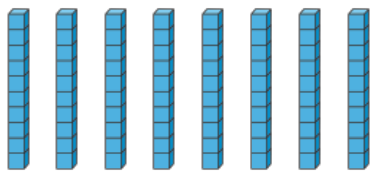
$$30 \div 10 = \square$$

b 50?



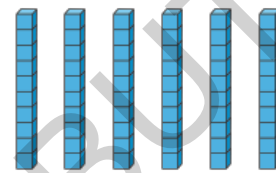
$$50 \div 10 = \square$$

c 80?



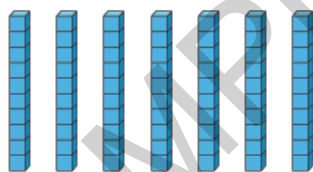
$$80 \div 10 = \square$$

d 60?



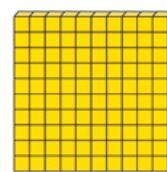
$$60 \div 10 = \square$$

e 70?



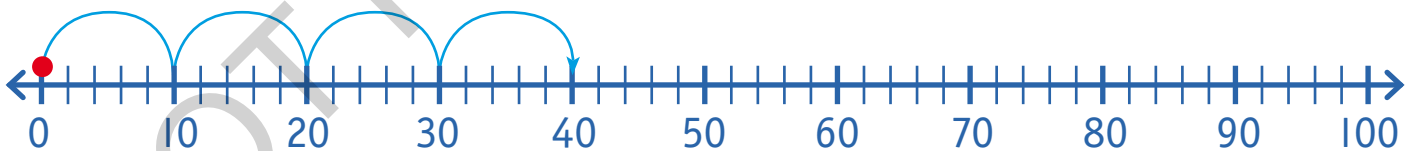
$$70 \div 10 = \square$$

f 100?



$$100 \div 10 = \square$$

2 How many 10s in 40?



There are 4 10s in 40.

3 How many 10s in 90?

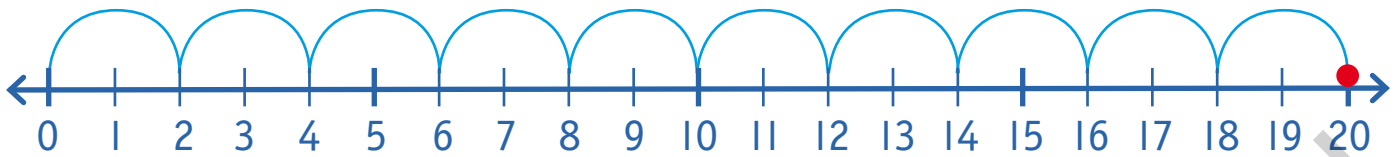


There are 9 10s in 90.

Dividing on a number line

TERM 3
Week 4

1 How many 2s in 20?



There are 2s in 20.

$20 \div 2 =$

2 How many 5s in 20?



There are 5s in 20.

$20 \div 5 =$

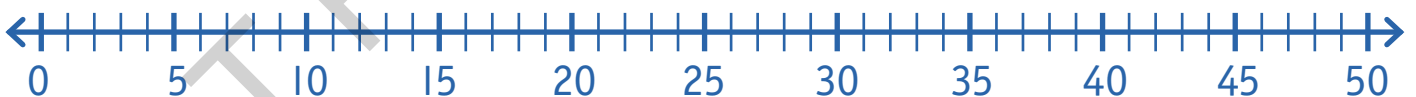
3 How many 10s in 20?



There are 10s in 20.

$20 \div 10 =$

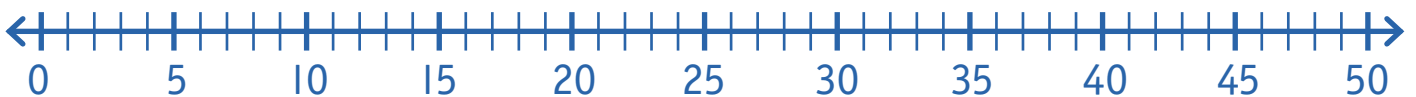
4 How many 5s in 35?



There are 5s in 35.

$35 \div 5 =$

5 How many 10s in 40?

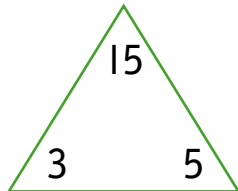
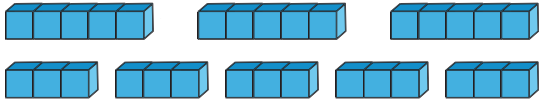


There are 10s in 40.

$40 \div 10 =$

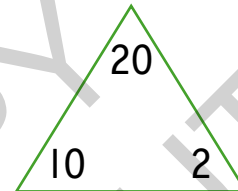
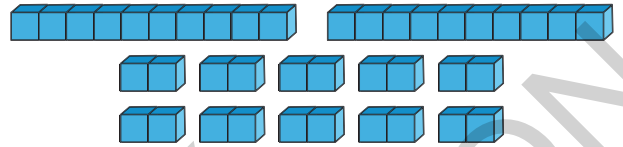
Multiplication and division are related.
Write four facts for each number mountain.

1



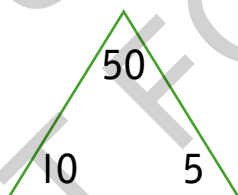
	×		=	
	×		=	
	÷		=	
	÷		=	

2



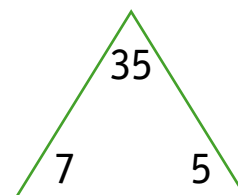
	×		=	
	×		=	
	÷		=	
	÷		=	

3



	×		=	
	×		=	
	÷		=	
	÷		=	

4



	×		=	
	×		=	
	÷		=	
	÷		=	

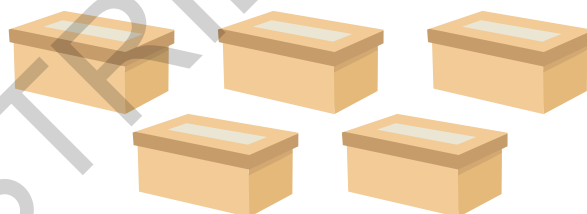
The division sign

- 1 Read the problem.
- 2 Circle the operations and number words.
- 3 Write an equation.
- 4 Find the answer.

Dizzy shared 20 marbles between his ten friends. How many marbles did each person get?

$$\square \square \square = \square$$

Mango has five boxes. Each box holds one pair of shoes. How many shoes does Mango have?



$$\square \square \square = \square$$

Waldo bought 20 fish. He divided them equally into five fish tanks. How many fish are in each fish tank?



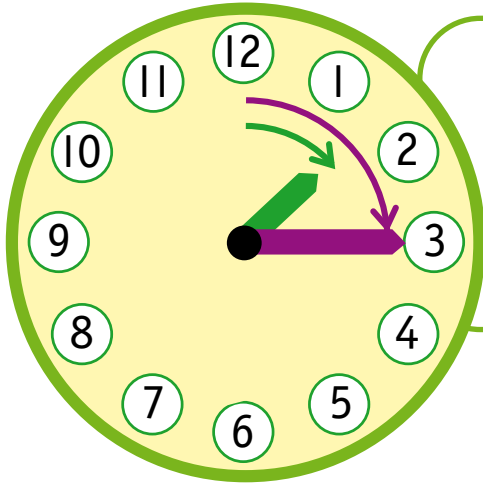
$$\square \square \square = \square$$

Doc walked two kilometres each day this week, including the weekend. How far did Doc walk this week?

$$\square \square \square = \square$$

I can solve a problem by:

- ☐ dividing by 2s, 5s and 10s ☐ using division equations ☐ using a number line to divide



1:15

Quarter-past

Minute hand points to 3, a **quarter turn** around the clock. A **quarter hour** is 15 minutes. Both clocks show **quarter-past**.

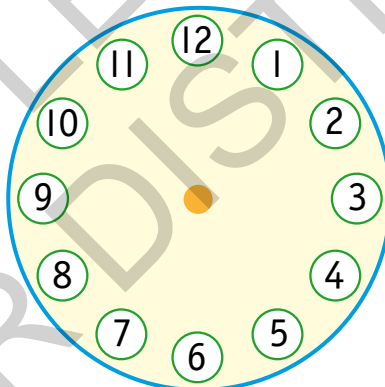
1 There are:

a minutes is an hour.

b minutes in a quarter hour.

2 Complete the clocks.

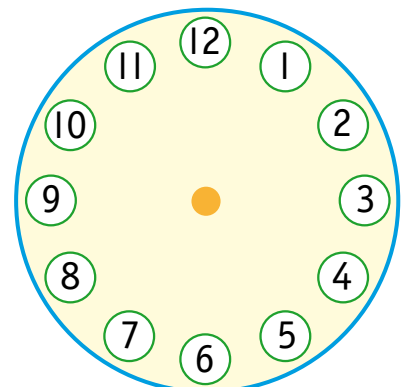
Quarter-past 4



a

 :

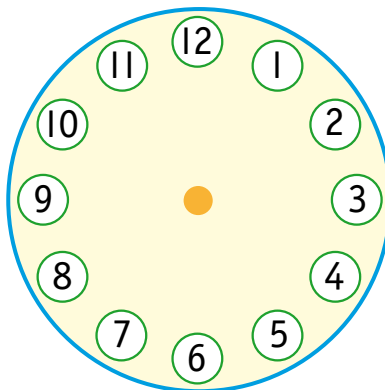
Quarter-past 9



b

 :

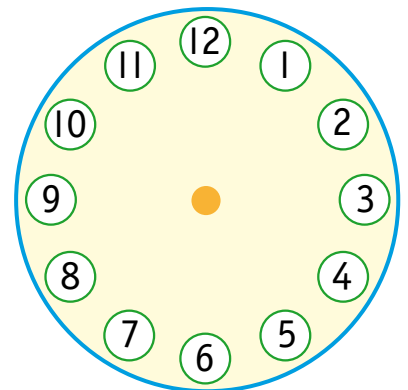
Quarter-past 11



c

 :

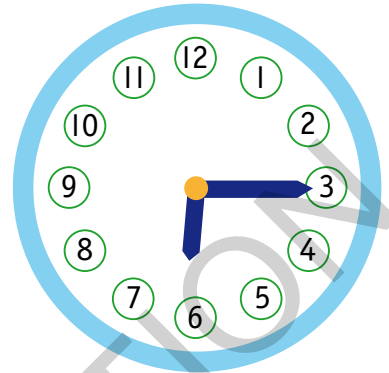
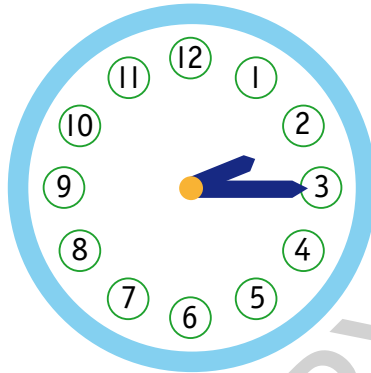
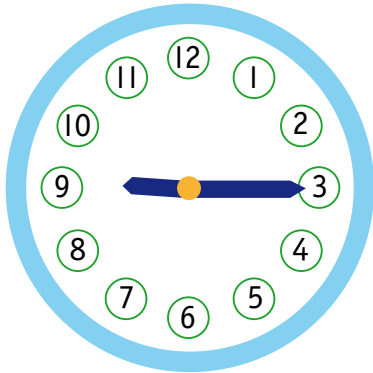
Quarter-past 6



d

 :


1 What time is it?



a Quarter-past _____ b Quarter-past _____ c Quarter-past _____

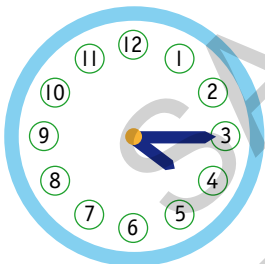
12:15

4:15

8:15

d Quarter-past _____ e Quarter-past _____ f Quarter-past _____

2 Colour the matching time in each row.



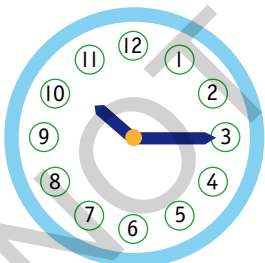
a

4:15

1:15

3:15

5:15



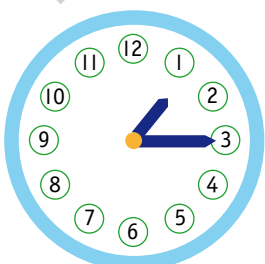
b

3:15

8:15

10:15

9:15



c

1:15

12:15

4:15

2:15

Reading digital clocks

TERM 3
Week 5

1 What time is it?

a  _____ o'clock

b  quarter-past _____

c  _____ o'clock

d  quarter-past _____

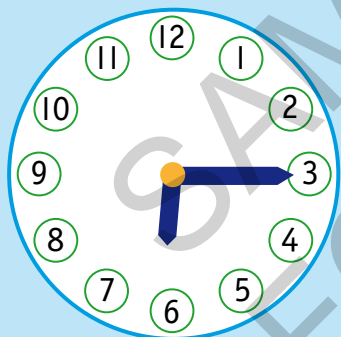
e  half-past _____

f  quarter-past _____

g  half-past _____

h  half-past _____

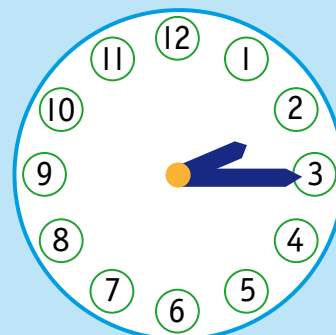
2 Colour to match.



2:15

12 o'clock

6:15



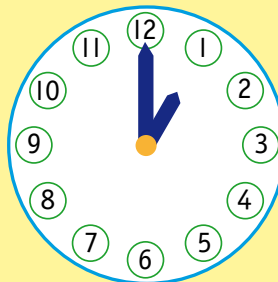
12:00

Challenge!

What time is it 1 hour later?

 4:00

o'clock



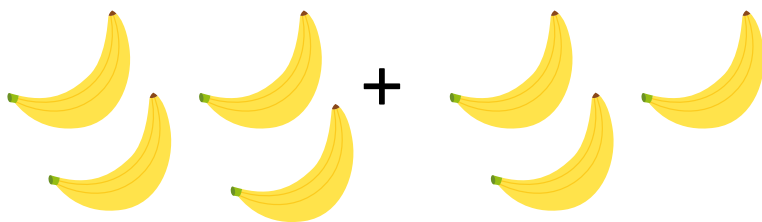
o'clock

Mastery Checklist I can: ☐ tell times: hour, half-past and quarter-past
☐ read analogue and digital clocks

Checkpoint 5

1 Is the answer odd or even?

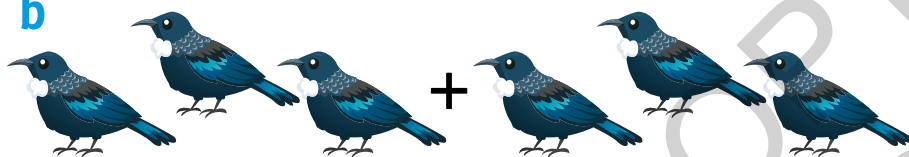
a



odd

even

b

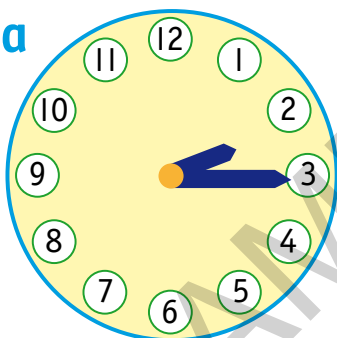


odd

even

2 What time is it?

a

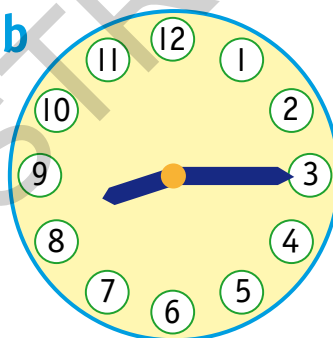


quarter-past

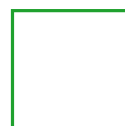


10:00

b



quarter-past



3:30

c



d



3 Slide the shape.



4 Flip the shape.



Checkpoint 5

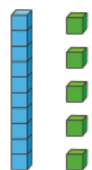
5 Add.

a $32 + 5 = \square$

b $36 + 3 = \square$

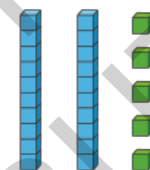
6 How many fives in:

15?



a $15 \div 5 = \square$

25?

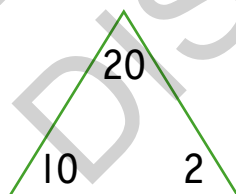


b $25 \div 5 = \square$

7 Write 4 facts.

$\square \times \square = \square$

$\square \times \square = \square$



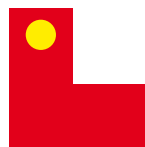
$\square \div \square = \square$

$\square \div \square = \square$

8 Turn the shape clockwise.



half turn



quarter turn

9 Round to the nearest ten?

a 18 $\square$

b 23 $\square$

c 35 $\square$

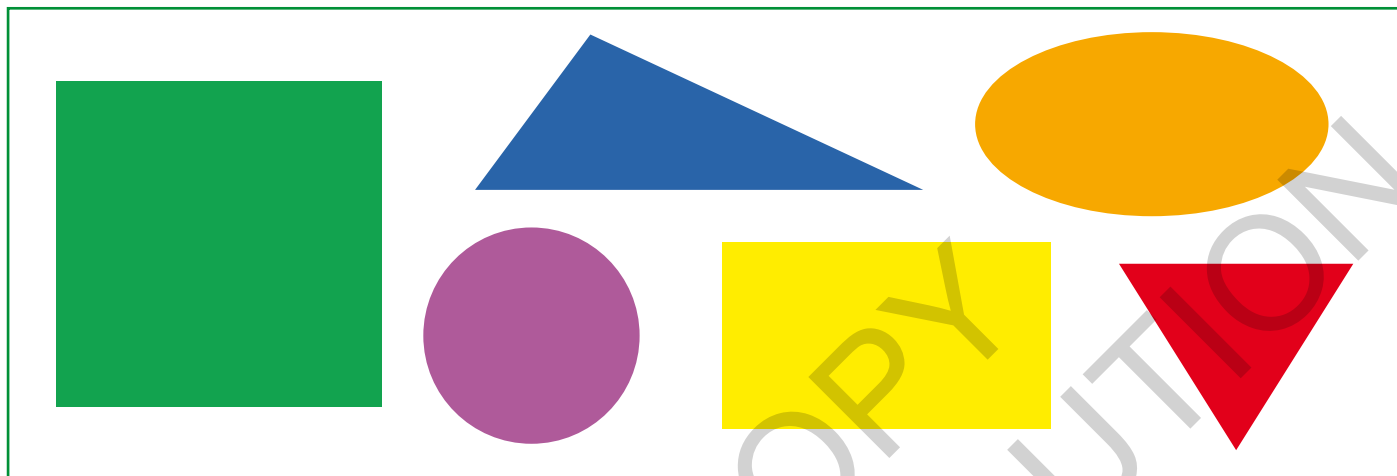
Area

TERM 3
Week 6

Area

TERM 3
Week 6

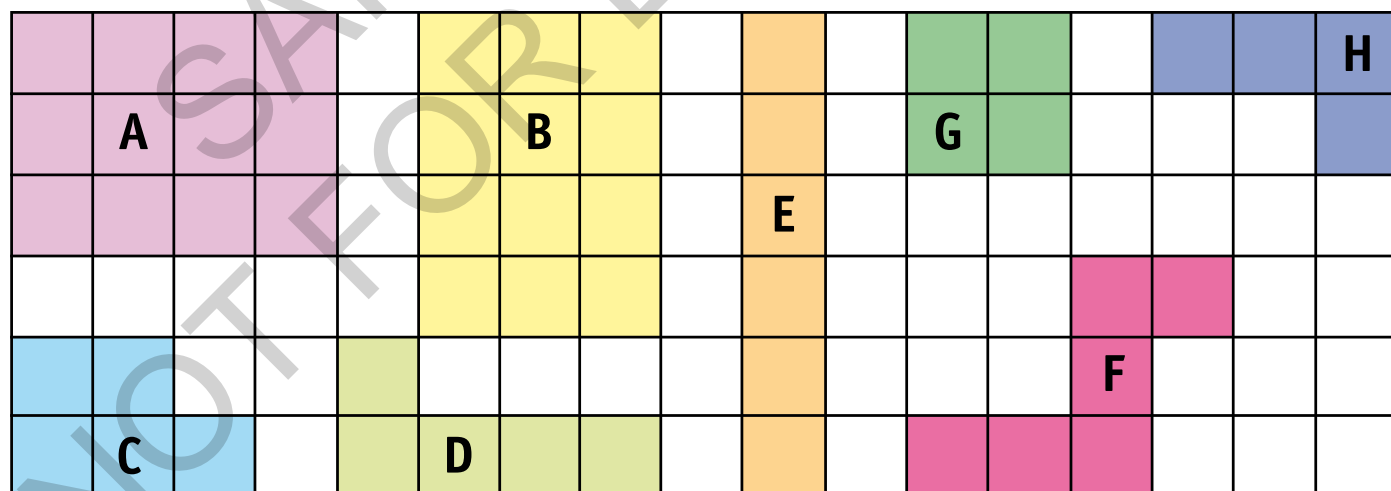
I  Circle the smallest shape.  Cross the largest shape.



2 Grab a handful of base-10 cubes. How many cover each shape?

A 2x3 grid of empty shapes for coloring. The shapes are: green square, blue triangle, orange oval, purple circle, yellow rectangle, and red triangle.

3 How many small squares cover each shape?

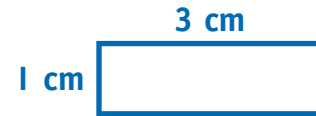


A **B** **C** **D** **E** **F** **G** **H**

Challenge! Which shapes above have the same area?

$$\boxed{} = \boxed{}, \boxed{} = \boxed{}, \boxed{} = \boxed{}, \boxed{} = \boxed{}$$

Perimeter is the distance around the outside of a shape. To find the perimeter, add the lengths of all the sides.



$$\text{Perimeter} = 1 + 3 + 1 + 3 = 8 \text{ cm}$$

1

$$3 + 2 + 3 + 2$$

= cm

2

$$2 + 2 + 2 + 2$$

= cm

3

$$1 + 5 + 1 + 5$$

= cm

4

= cm

5

= cm

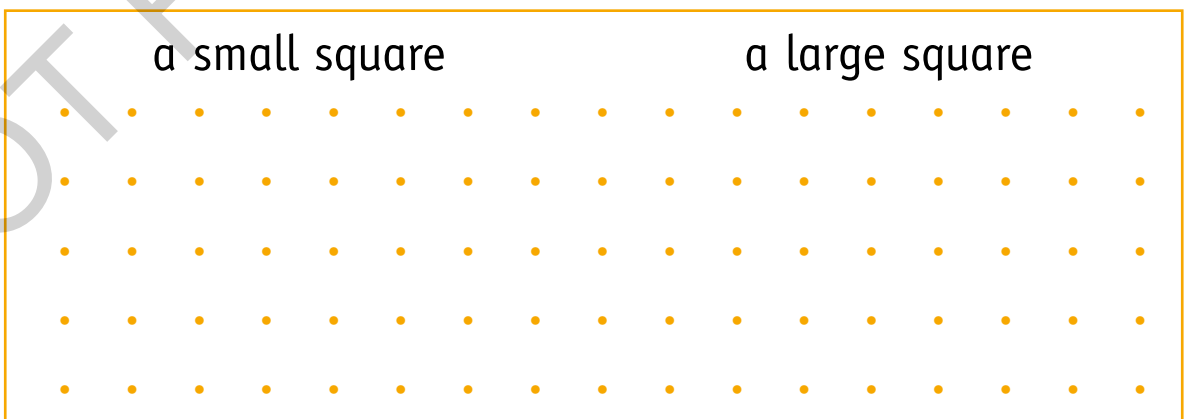
6

= cm

7 Draw.

a small square

a large square



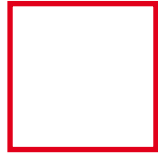
Perimeter = _____

Perimeter = _____

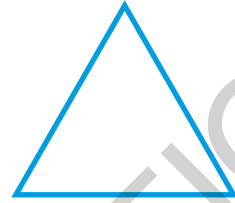
Challenge! Find the area of each shape.

Measure the sides of these shapes with a ruler.
Use these to find the perimeter.

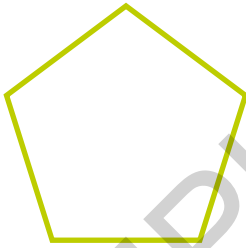
1



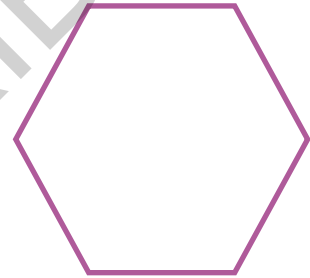
2



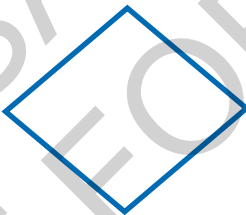
3



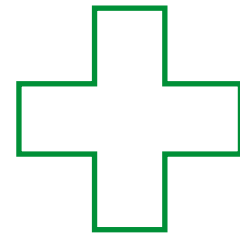
4



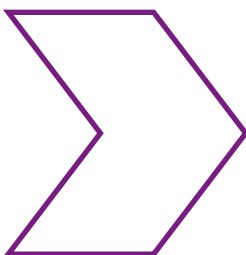
5



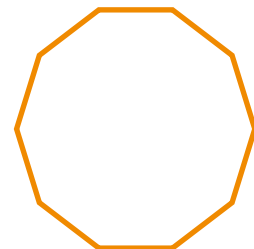
6



7



8



Perimeter of shapes

TERM 3
Week 6

1 Match.

triangle		tapawhā rite
square		tapatoru
rectangle		tapawaru
pentagon		tapaono rite
hexagon		taparima
octagon		tapawhā hāngai

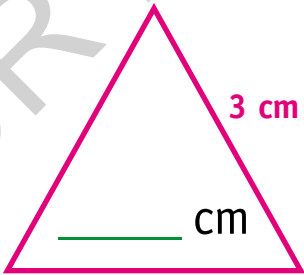
2 Name each shape and find the perimeter.

a



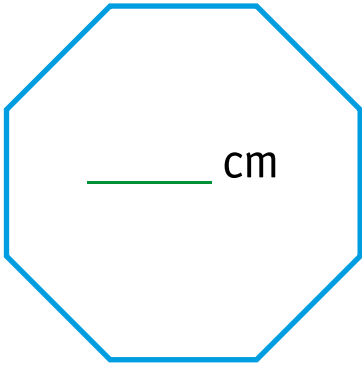
_____ cm

b



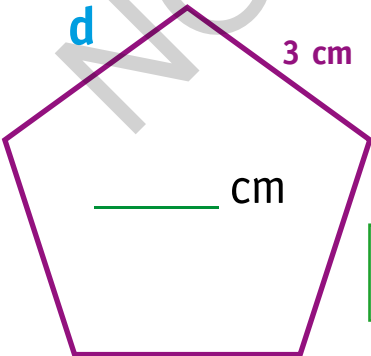
_____ cm

c



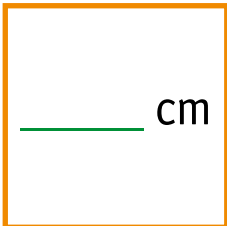
_____ cm

d

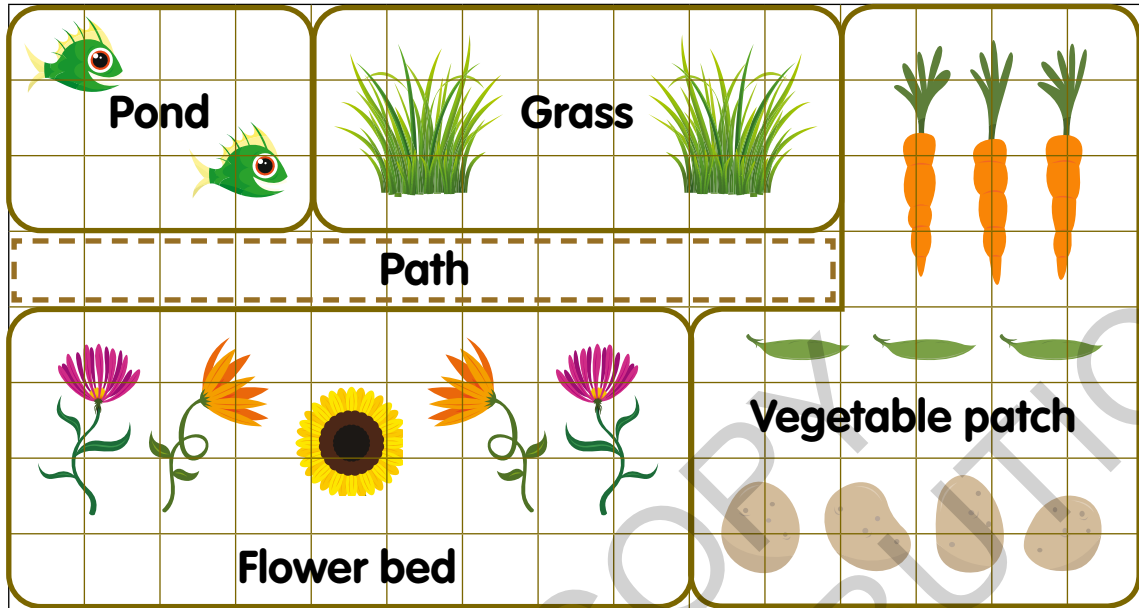


_____ cm

e



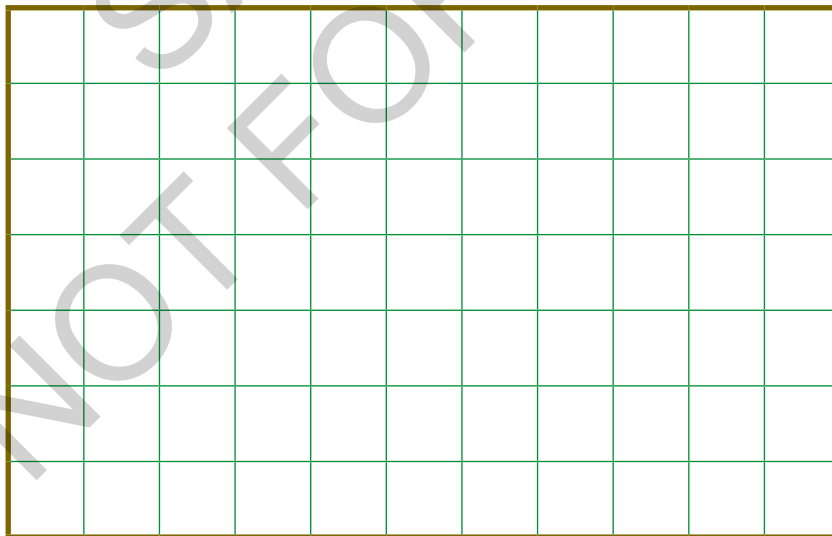
_____ cm



- 1 Find the perimeter of each part of Anna's garden.
Each square = 1 cm sides.

- | | | | |
|-------------|-------|--------------------|-------|
| a the pond | _____ | b vegetable patch | _____ |
| c the path | _____ | d flower bed | _____ |
| e the grass | _____ | f the whole garden | _____ |

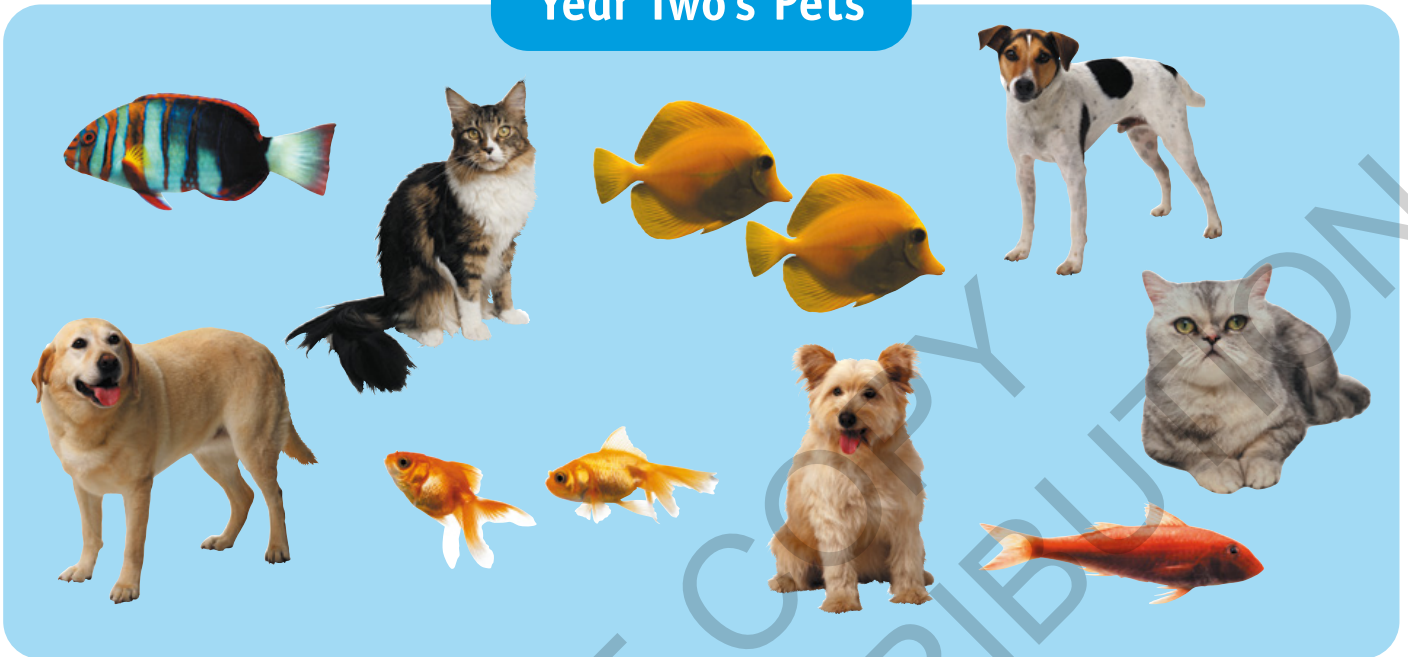
- 2 Design your own garden. Write the perimeters of all the sections.



Mastery Checklist

- I can: ☐ find the perimeter of many different shapes
☐ recognise regular shapes as having sides that are all the same length

Year Two's Pets



1 How many?







2 Complete the graph.

Pets of Year 2

How many more fish than cats?

Challenge! There are 2 fish in each fish tank.

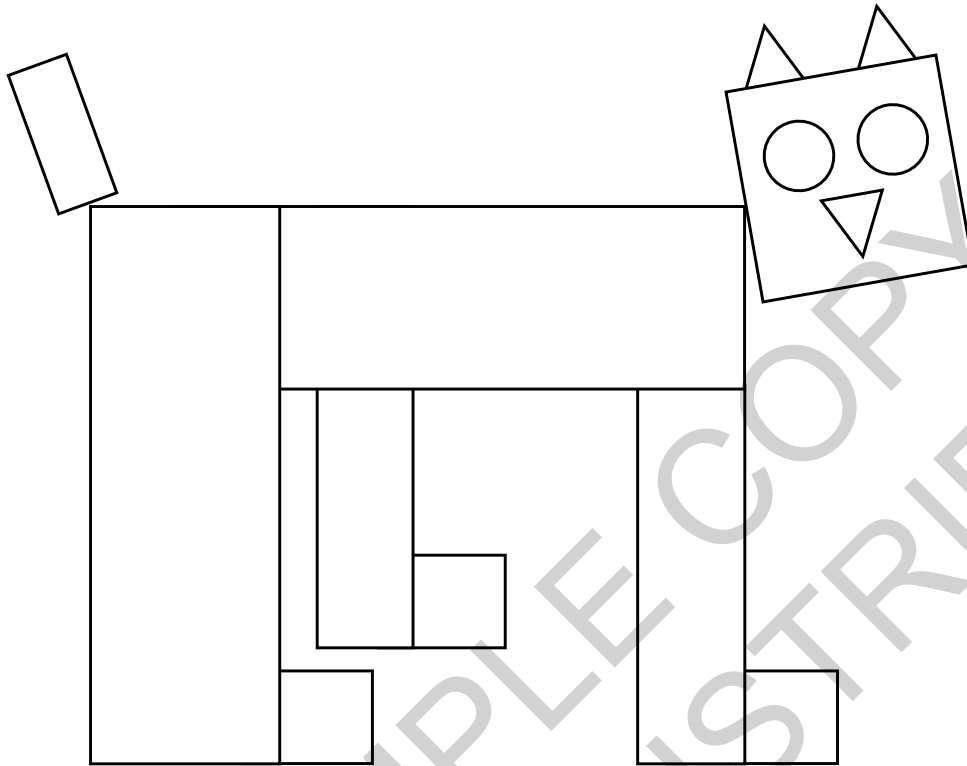
How many fish tanks?



Colour



How many?



a



b



c



d





2 Draw.

Shapes in the Cat

Number
of
shapes

5

4

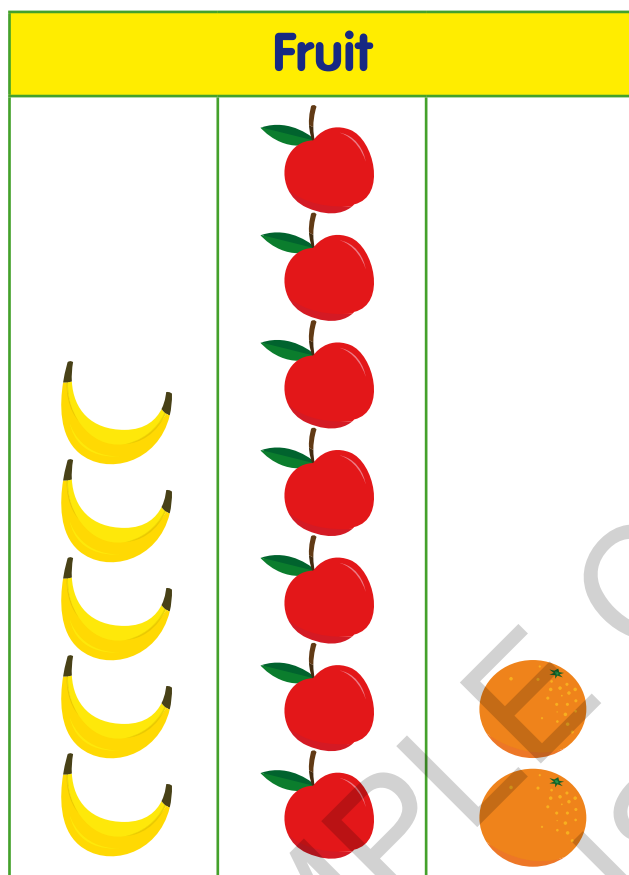
3

2

1



1 This is a graph of the Whetu family's fruit today.



How many  ?

How many  ?

How many  ?

How many pieces of fruit altogether?

Which fruit does the family have the **most** of?

Which fruit does the family have the **least** of?

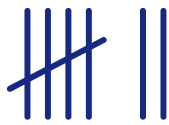
2 Use the graph to make a tally table.

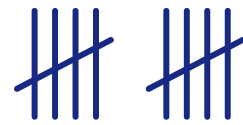
	Tally	Total
		
		
		

How many more apples than bananas?

1 Write the numbers for these tally marks.







2 Draw the tally marks for these numbers.

5 _____

8 _____

4 _____

3 Complete Doc's table. Give the table a title.



Foods	Tally marks	Total
Cereal		
Toast		7
Fruit		
Yoghurt		3

4 Use Doc's table to complete the picture graph.

Cereal



Toast



Fruit



Yoghurt



Collecting data

Tally marks
can help you
keep count.

|||| = 5

TERM 3
Week 7



What is our favourite type of pet?

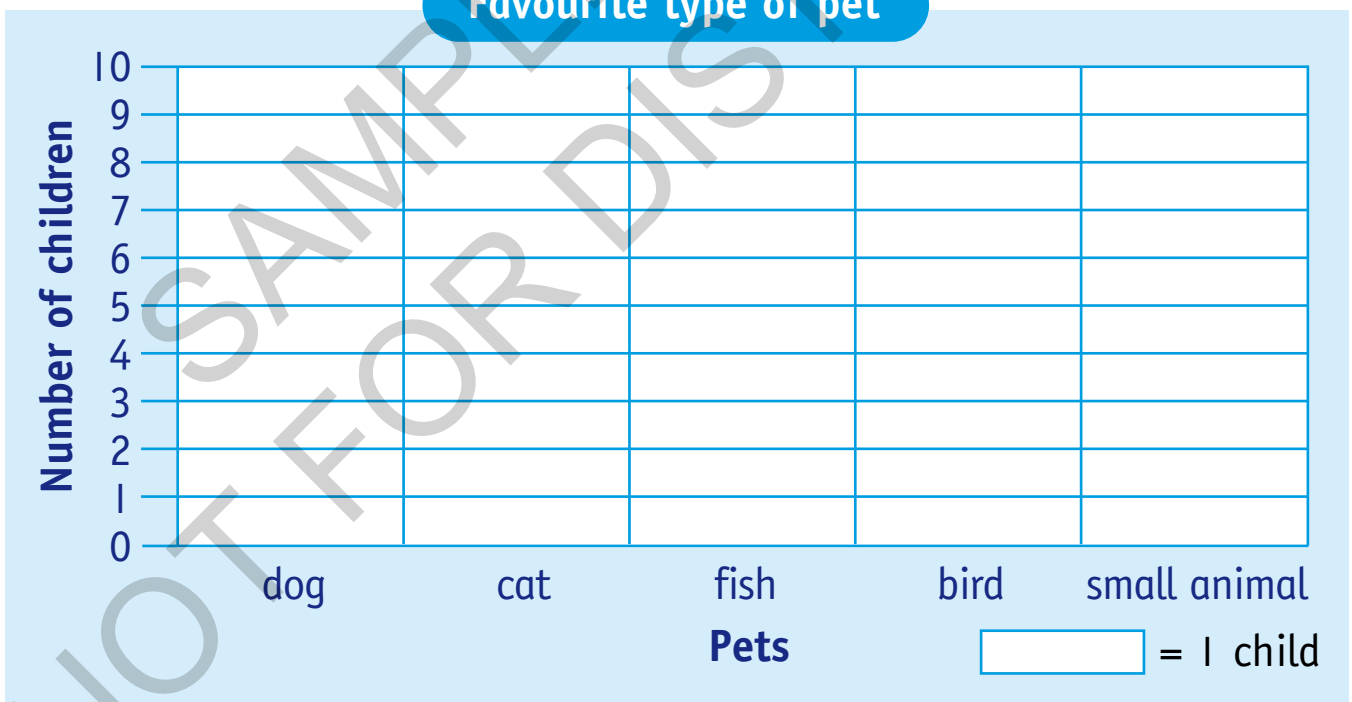
- 1 Ask the class and tally the results.

Pet	Tally	Total
dog		
cat		
fish		
bird		
small animal		

- 2 Graph the results.



Favourite type of pet



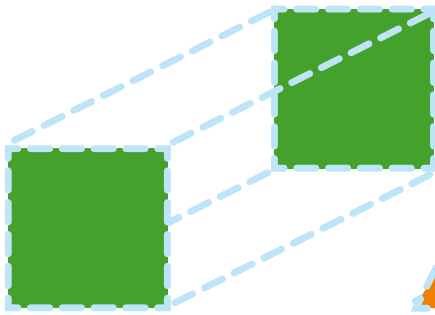
- 3 Which pet was:
 - a most popular? _____
 - b least popular? _____
- 4 How many children liked:
 - a dogs? _____
 - b cats? _____
 - c birds? _____
- 5 How many children altogether? _____

3D shapes – Prisms

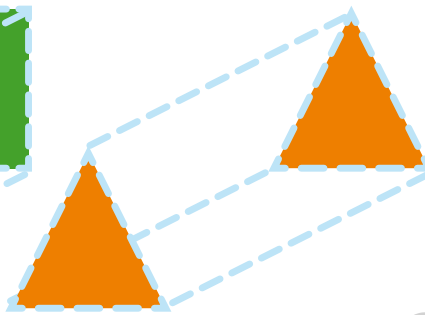
TERM 3
Week 8

Prisms are named from their bases. All other sides are rectangles.

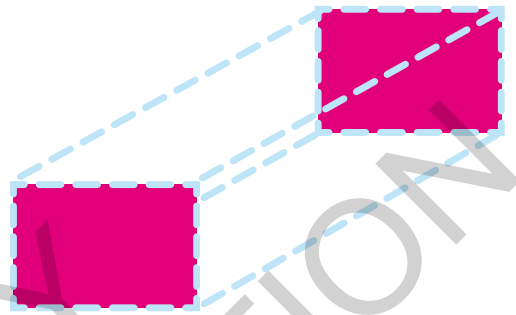
1 Trace.



square prism

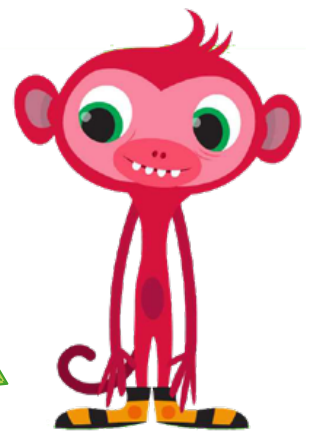
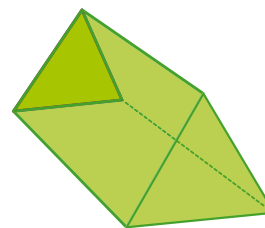
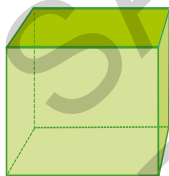
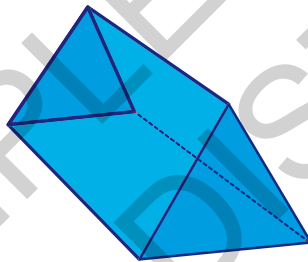
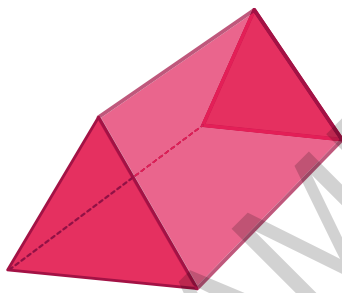


triangular prism

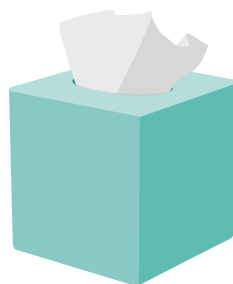


rectangular prism

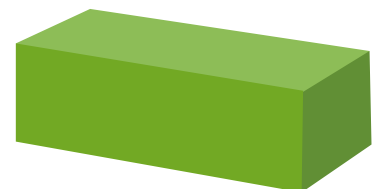
2 Trace the rectangular prisms. Join the triangular prisms to Mango.



3 Circle the square prism.



Name this shape.

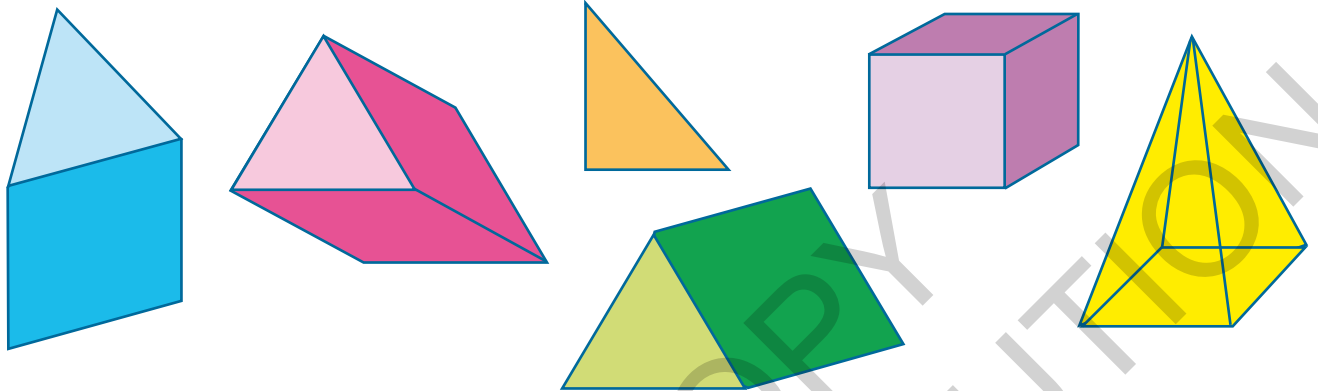


Prisms

TERM 3
Week 8

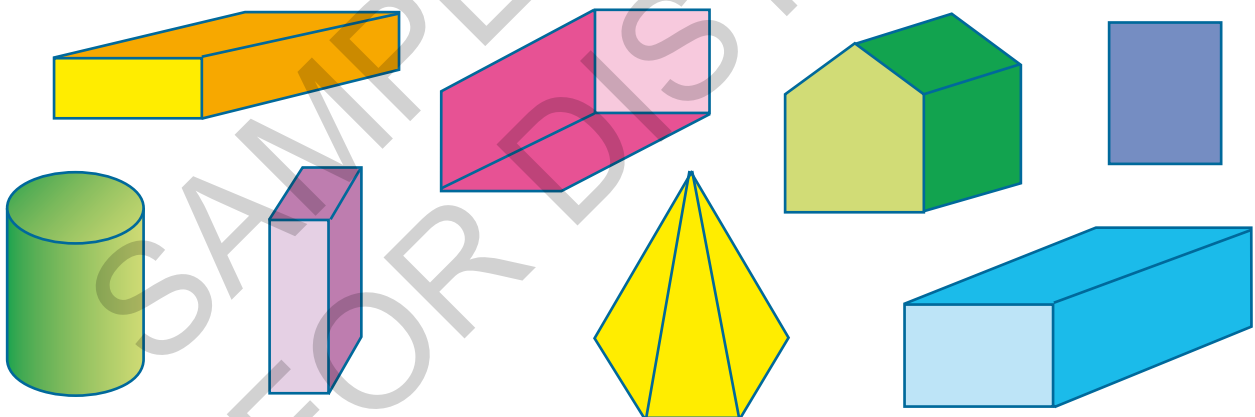
Prisms have 2 ends that are the same shape. All the other faces are rectangles.

1 a Circle the triangular prisms.



b Write a description. A triangular prism has _____

2 Circle the rectangular prisms.



3 Cross out the objects that are not prisms.



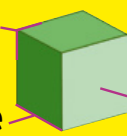
Faces, edges and vertices

TERM 3
Week 8

Faces are flat surfaces.

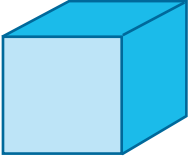
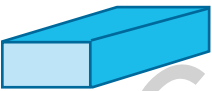
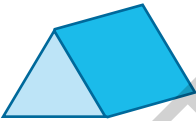
vertex

edge

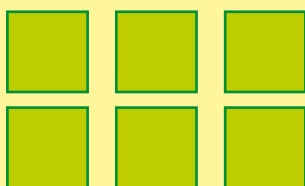


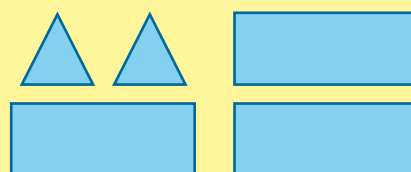
face

Look at 3D objects and complete the table.

Shape	Number of faces	Number of edges	Number of vertices	Number of curved surfaces
 cube				
 cylinder				
 cone				
 rectangular prism				
 triangular prism				

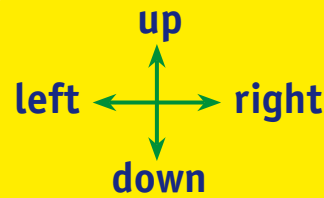
Challenge Which 3D objects could you make from these faces?





Following directions

TERM 3
Week 8



1 Follow the directions. Start at 😊.

Move:

up 3

left 2

up 4

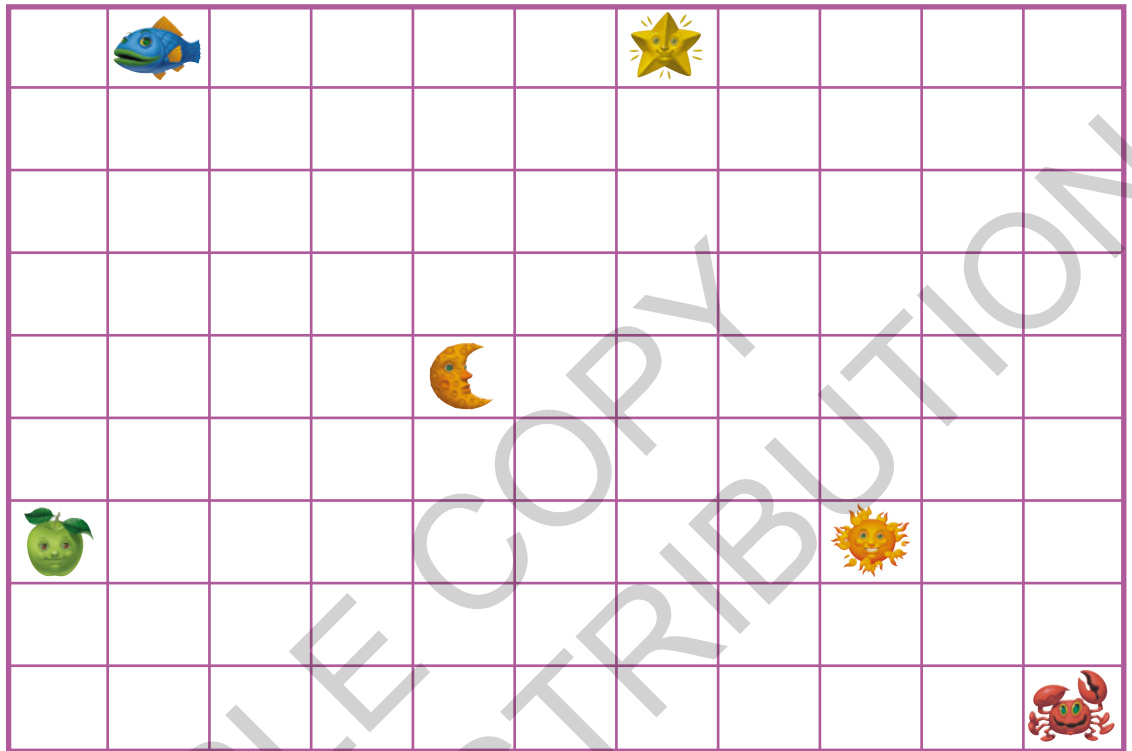
right 5

down 2

right 2

up 4

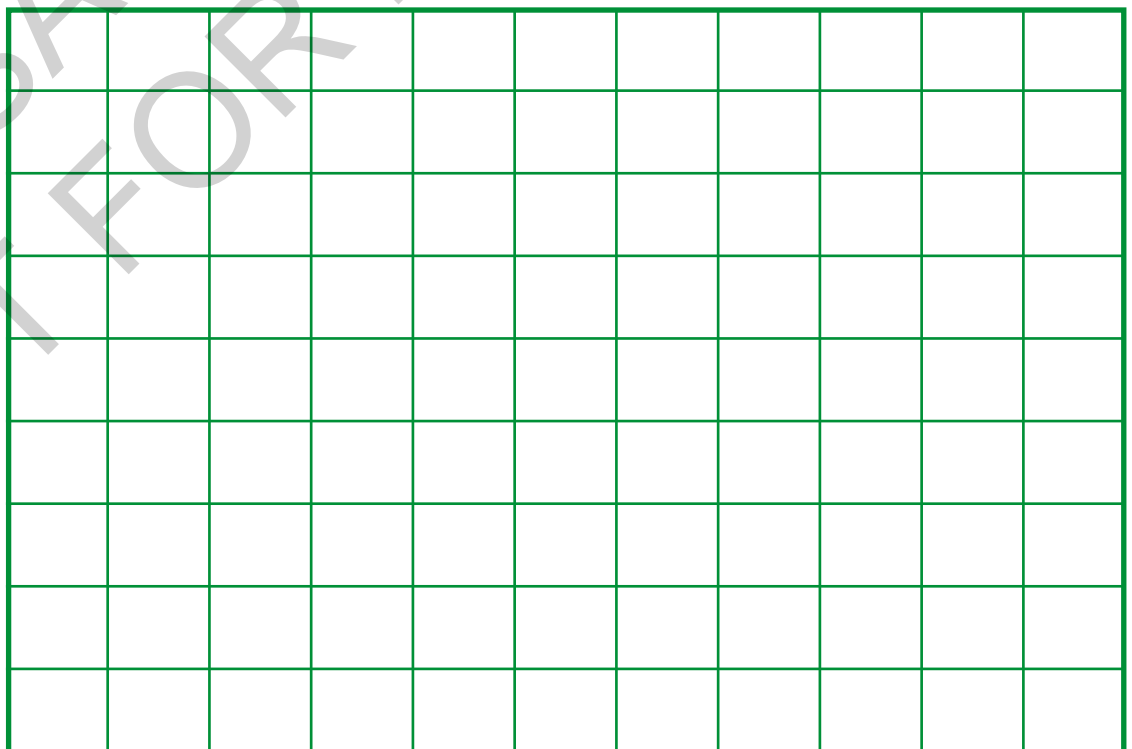
left 3

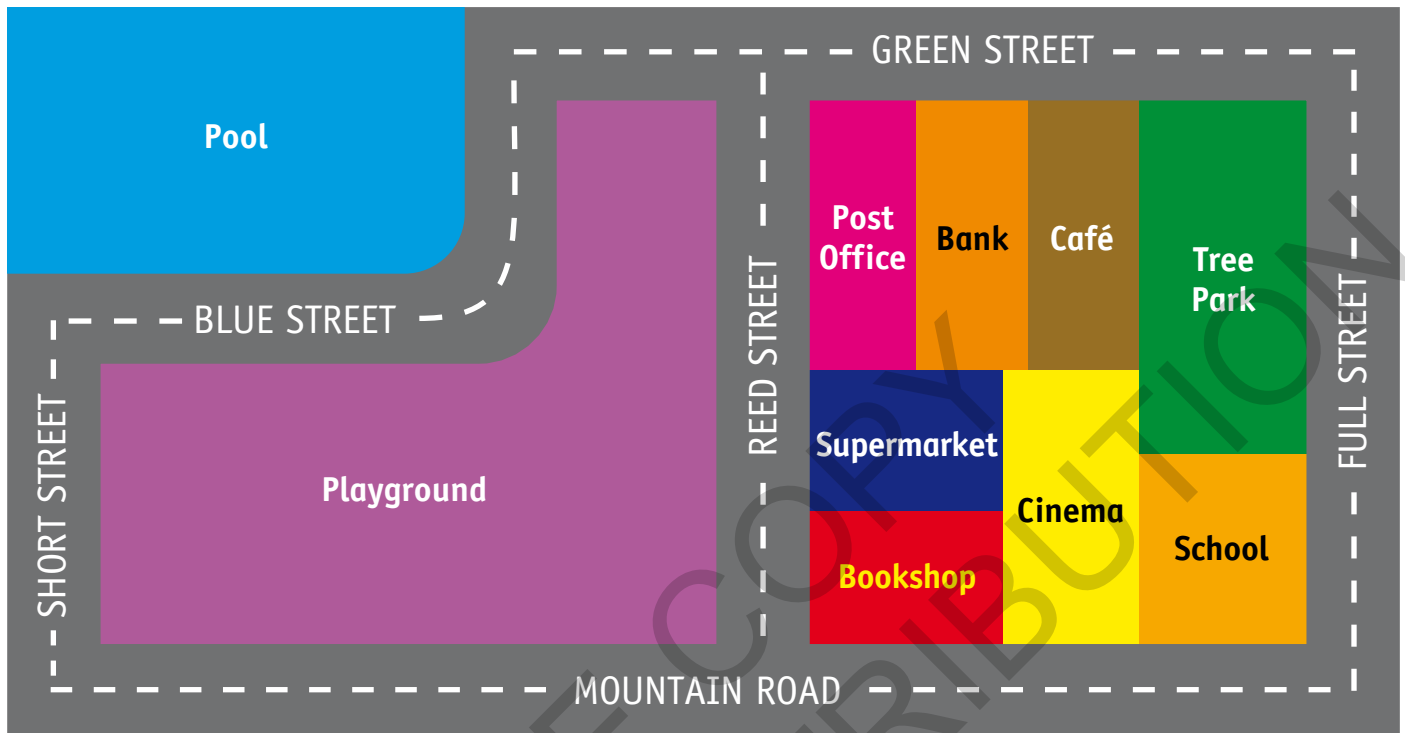


Where did
you end up?



2 Draw your own path. Write the directions.





- 1
 - a The bank is on _____ Street.
 - b The school is on the corner of _____ Road and _____ Street.
 - c On which road is the pool? _____
 - d If you turn left from Full Street onto Green Street, what is the first shop? _____
- 2 Answer true or false.
 - a The post office and the café are on the same road. _____
 - b Tree Park is next to the school. _____
 - c The cinema is near the pool. _____
- 3 Write directions to get from the school to the pool.

1 Colour squares (■) **red**, triangles (▲) **green** and circles (●) **blue**.



Draw the shape that comes:

a 1st

b 2nd

c 3rd

2 Colour to make a pattern. Draw the next 4 shapes.

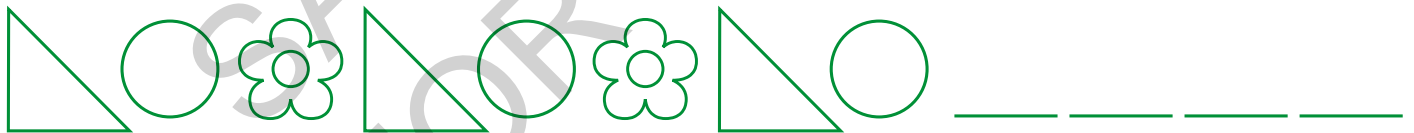
a



b



c



3 Write the next 4 letters.



a How many letters in the pattern? _____

b The first letter is _____

c The second letter is _____

d The third letter is _____



What is a repeating pattern?

TERM 3
Week 9

The repeating part of a pattern is called the **unit of repeat**.



Unit of repeat =



1 Circle and draw the unit of repeat.



Unit of repeat = _____

2



Unit of repeat = _____

3



Unit of repeat = _____

4 Draw a repeating pattern using 3 different shapes.

Unit of repeat = _____

Challenge!

A B C D A B C D

In this pattern which letter is:

4th? 10th? 16th?

1 Continue this pattern.



a Unit of repeat = _____

b What is the 6th shape? _____

c What is the 10th shape? _____

2 What comes next?



a Unit of repeat = _____

b What is the 3rd item? _____

c What is the 6th item? _____

d What is the 9th item? _____

e What is the 12th item? _____

3 Think ahead.



a What is the 6th shape? _____

b What is the 9th shape? _____

c What is the 15th shape? _____

Mastery Checklist

- I can: ☐ continue a shape pattern
☐ find the unit of repeat in a pattern

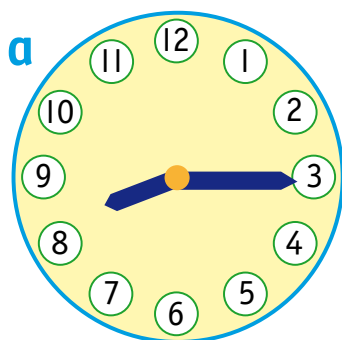


Checkpoint 6

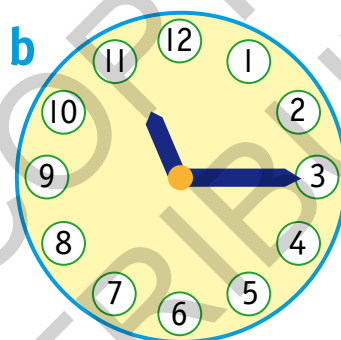
1 Circle the numbers that round to 50.

57 48 55 52 46

2 What time is it?



quarter-past



quarter-past

3:45

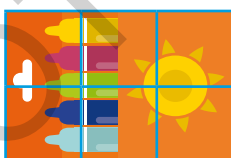
12:15

c

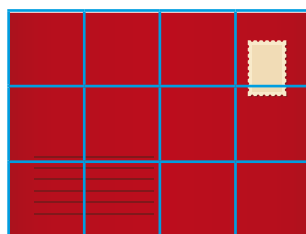
d

3 Each square has 1 cm sides. What is the perimeter?

a



b



c



d



Checkpoint 6

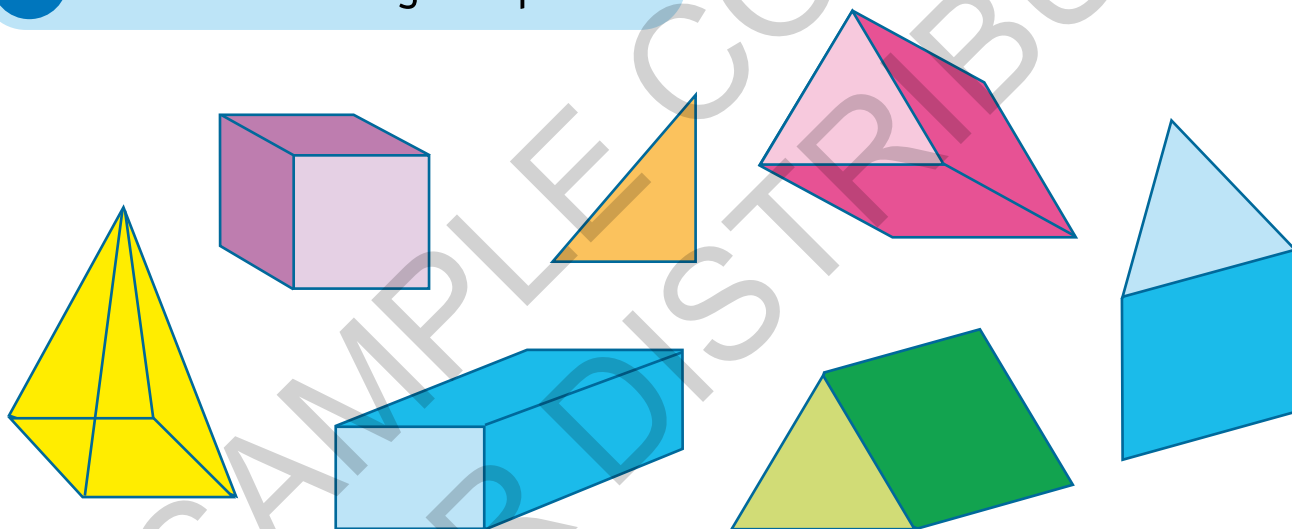
4



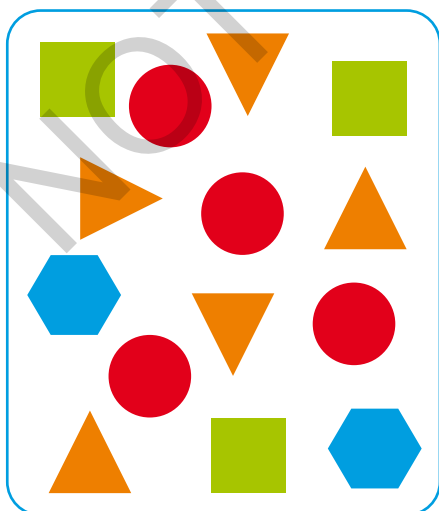
a Draw a leaf above the crab.

b Start at the star .
Move up 2 then right 1.
Draw a  where you land.

5 Circle the triangular prisms.



6 Complete the table. Use tally marks and numbers.



		4
		
		
		

Comparing numbers

TERM 4
Week 1

< looks like L for
Less than

1 Match the equal numbers.

eleven

52

$40 + 8$

forty-eight

70

$10 + 1$

seventy

11

$50 + 2$

fifty-two

48

$70 + 0$



2 Write the correct symbol in the box:



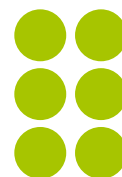
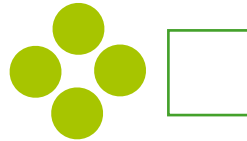
a



b



c



d

9



4

e

3



7

f

15



12

g

69



96

h

71



71

i

23



twenty-three

j

eighty



8

k

66



$60 + 6$

l

$80 + 5$



88

m

37



73

n

fifteen



15

3 Why is 17 less than 71? _____

The equals sign

TERM 4
Week 1

Are these sums equal? Work out both sides to check.
Colour true or false.

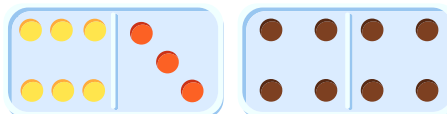
1



$$5 + 1 = 3 + 3$$

true false

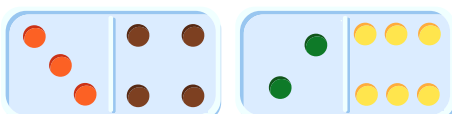
2



$$6 + 3 = 4 + 4$$

true false

3



$$3 + 4 = 2 + 6$$

true false

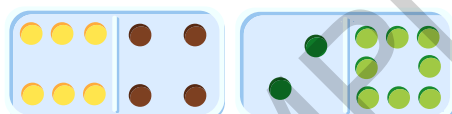
4



$$7 + 3 = 5 + 5$$

true false

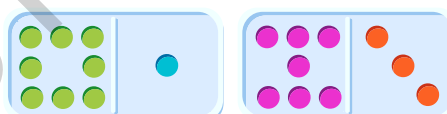
5



$$6 + 4 = 2 + 8$$

true false

6



$$8 + 1 = 7 + 3$$

true false

7 Complete each number sentence.

a $3 + 4 = \square + 2$



b $5 + 2 = 6 + \square$



c $7 + 1 = \square + 4$



d $6 + 3 = 5 + \square$



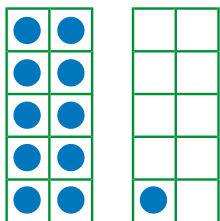
8 Circle the equal pair.

$4 + 5$ $6 + 2$ $3 + 6$

Make them equal

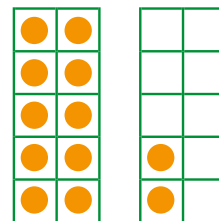
TERM 4
Week 1

1



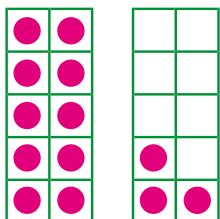
$$10 + 1 = 7 + \square$$

2



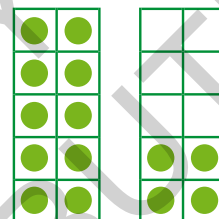
$$10 + 2 = 6 + \square$$

3



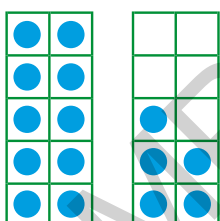
$$10 + 3 = \square + 5$$

4



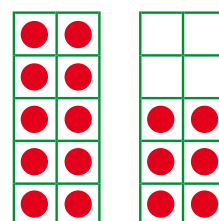
$$10 + 4 = 8 + \square$$

5



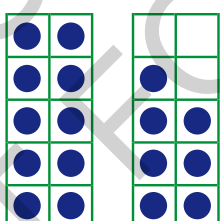
$$10 + 5 = \square + 6$$

6



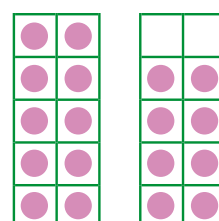
$$10 + 6 = \square + 9$$

7



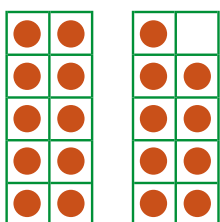
$$10 + 7 = 5 + \square$$

8



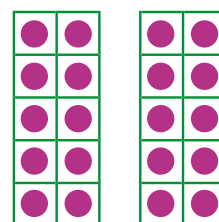
$$10 + 8 = \square + 4$$

9



$$10 + 9 = 8 + \square$$

10



$$10 + 10 = 15 + \square$$

The equals sign

TERM 4
Week 1

Are these equal? Colour true or false.

1



$$7 - 4$$

=



$$10 - 7$$

true

false

2



$$9 - 3$$

=



$$7 - 2$$

true

false

3



$$10 - 6$$

=



$$5 - 2$$

true

false

4



$$8 - 5$$

=



$$9 - 6$$

true

false

5



$$9 - 4$$

=



$$10 - 5$$

true

false

Are these equal? Draw dots to show each side.

6

$$2 + 2 + 2 = 2 \times 3$$

true

false

7

$$4 \times 5 = 2 \times 10$$

true

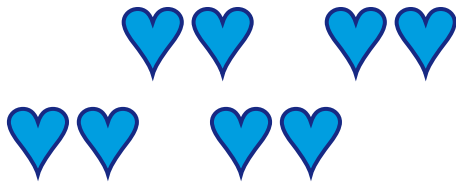
false

Make them equal: + ×

TERM 4
Week 1

1 Write the multiplication that is equal to:

a



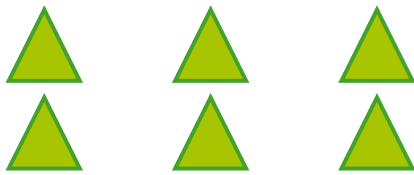
$$2 + 2 + 2 + 2 = 4 \times \underline{\hspace{2cm}}$$

b



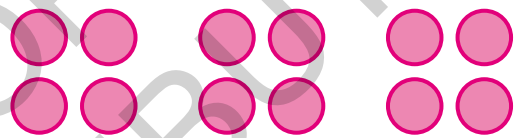
$$5 + 5 + 5 = 3 \times \underline{\hspace{2cm}}$$

c



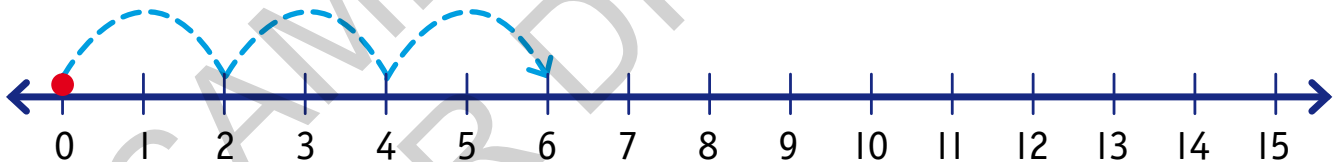
$$2 + 2 + 2 = \underline{\hspace{2cm}} \times \underline{\hspace{2cm}}$$

d

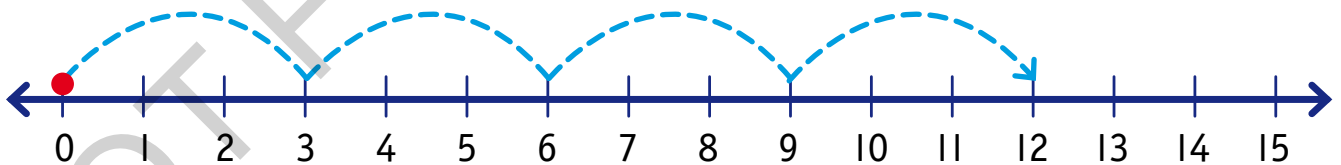


$$4 + 4 + 4 = \underline{\hspace{2cm}} \times \underline{\hspace{2cm}}$$

2 $2 + 2 + 2 = \underline{\hspace{2cm}} \times \underline{\hspace{2cm}}$

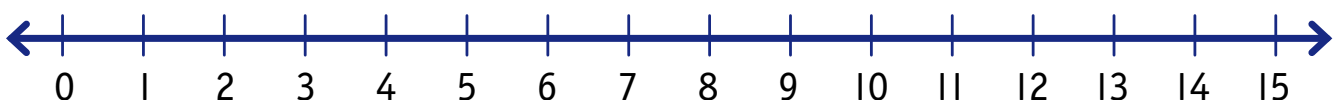


3 $3 + 3 + 3 + 3 = \underline{\hspace{2cm}} \times \underline{\hspace{2cm}}$

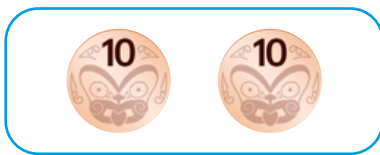


4 Draw the jumps. Write the multiplication that is equal to:

$$5 + 5 + 5 = \underline{\hspace{2cm}} \times \underline{\hspace{2cm}}$$



1 Match the coins to the correct amount of money.



20c



50c



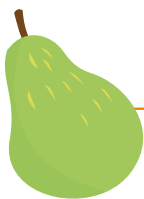
\$1



\$2

2 Circle the correct coins to make the amount.

a



30c



b



70c



c



80c



d



90c



1 Circle \$1.60 in each set.

a



b

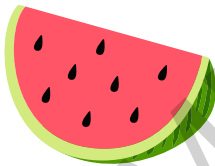


c



2 How much?

a



b



c



3 Find the total amount.

a



\$ _____

b



\$ _____

Circle the correct amount of money.

1 **\$10**



2 **\$15**



3 **\$20**



4



☐ \$25.50



5



☐ \$65.20



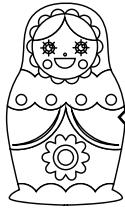
6



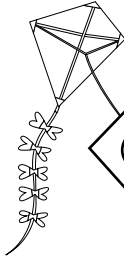
☐ \$10.70



1 Circle the most expensive toy, box the cheapest toy.



\$20



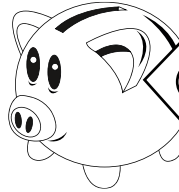
\$12



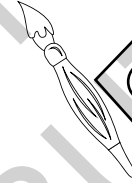
\$5



\$17



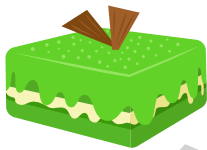
\$9



\$1

2 Colour the 3 toys that cost \$18 altogether.

3 How much altogether? Write the totals.



\$11

+



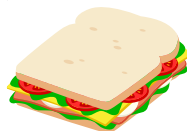
\$3

=



\$14

+



\$5

=



\$18

+



\$2

=



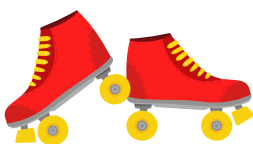
\$15

+



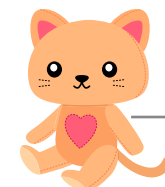
\$1

=



\$12

+



\$7

=

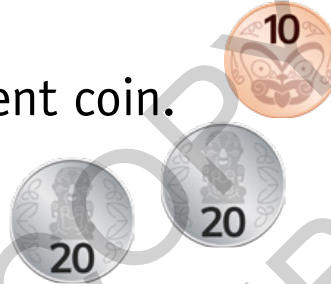
Money problems

TERM 4
Week 2

- 1 Ruby paid for her drink with a 20 cent coin and a 10 cent coin. How much did her drink cost?



- 2 Dizzy bought a new ball with two 20 cent coins and a 10 cent coin. How much did the ball cost?



- 3 Mango gave Waldo a 10 cent coin and four 20 cent coins. How much altogether?



- 4 Doc wants to buy a new book for \$1. Circle the coins he needs.



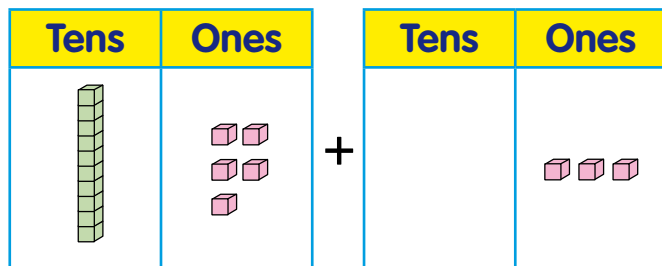
- 5 Waldo needs a new hat. It costs \$3.20. Circle the money he needs.



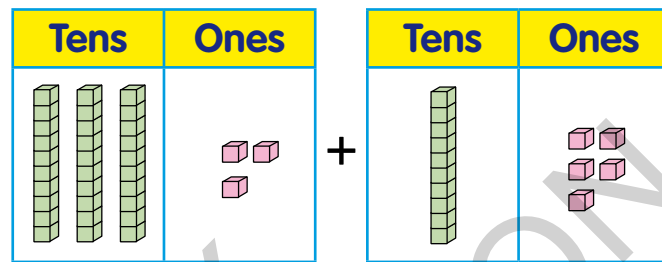
Mastery Checklist

I can: ☐ identify which coins and notes make a given amount

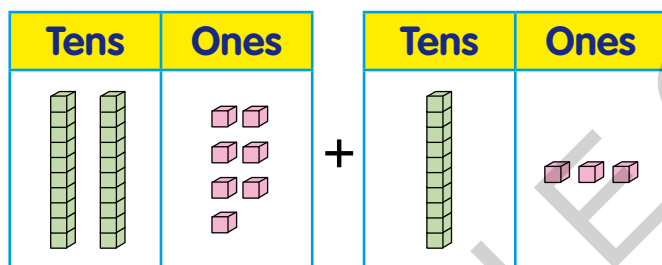
1 Write the sum and then add.



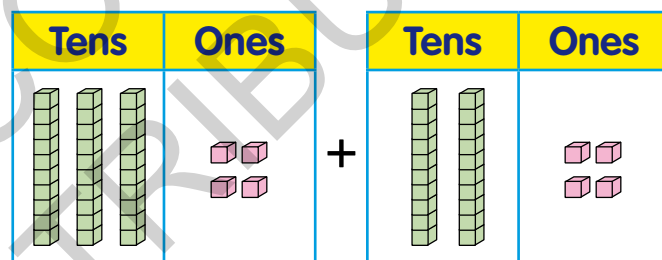
a + =



b + =



c + =



d + =

2 Complete. Match each answer to a box.



a $35 + 20 =$

b $54 + 20 =$

c $45 + 14 =$

d $82 + 11 =$

- 1 Find the answers. Match each answer to a letter.
Find the secret word.

Code

68	k
37	y
26	m
85	n
88	e
58	o

a

$$15 + 11 = \boxed{}$$

letter:

b

$$32 + 26 = \boxed{}$$

letter:

c

$$53 + 32 = \boxed{}$$

letter:

d

$$46 + 22 = \boxed{}$$

letter:

e

$$73 + 15 = \boxed{}$$

letter:

f

$$27 + 10 = \boxed{}$$

letter:



Write the secret word _____

2 Add.

a $46 + 30 = \boxed{}$

b $81 + 8 = \boxed{}$

c $60 + 27 = \boxed{}$

d $73 + 20 = \boxed{}$

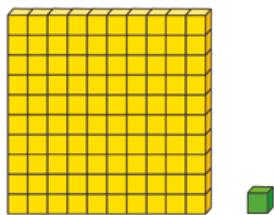
e $50 + 26 = \boxed{}$

f $45 + 14 = \boxed{}$

g $33 + 22 = \boxed{}$

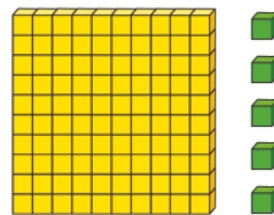
h $25 + 23 = \boxed{}$

1 a



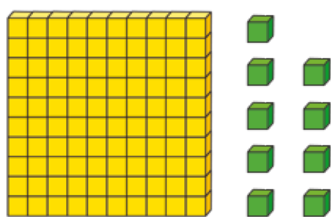
$$101 = \boxed{100} + \boxed{}$$

b



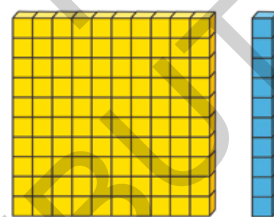
$$105 = \boxed{} + \boxed{}$$

c



$$109 = \boxed{} + \boxed{}$$

d



$$110 = \boxed{} + \boxed{}$$

- 2 Mango had 100 marbles in a jar. Dizzy gave her six more.
How many marbles altogether?



- 3 100 animal books in the library. The library buys 8 more books.
How many animal books now?



4 a $100 + 4 = \boxed{}$

b $100 + 9 = \boxed{}$

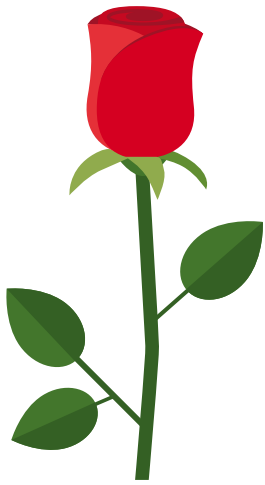
c $100 + 7 = \boxed{}$

d $100 + 3 = \boxed{}$

Two step word problems

TERM 4
Week 3

Complete the algorithms. Find the answer.



1 Mango picks 12 red roses and 6 pink roses.

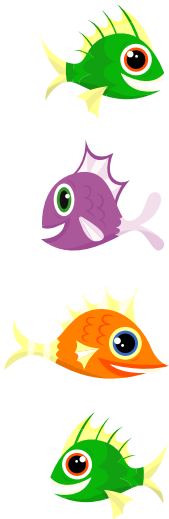
She gives 5 away.

How many are left?

$$\begin{array}{rcl} 12 + 6 & = & \boxed{} \\ & \downarrow & \\ & - 5 & = \boxed{} \end{array}$$

step 1

step 2



2 Waldo caught 18 fish in the morning. 4 swam away.

Waldo caught 5 more fish in the afternoon.

How many fish does Waldo have now?

$$\begin{array}{rcl} 18 - 4 & = & \boxed{} \\ & \downarrow & \\ & + 5 & = \boxed{} \end{array}$$

step 1

step 2



3 Dizzy made 11 snowballs. Ruby made 6 snowballs.

They threw 8 snowballs at each other.

How many snowballs are left?

$$\begin{array}{rcl} 11 + 6 & = & \boxed{} \\ & \downarrow & \\ & - 8 & = \boxed{} \end{array}$$

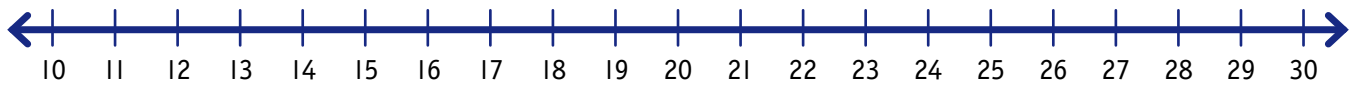
step 1

step 2

Two step word problems

TERM 4
Week 3

- 1 Use the number line to find the answer.



Sam made 12 sandwiches and 7 wraps for lunch.
His friends ate 14 of them.
How many are left? _____



Kim bought 29 marbles.
She lost 8, then found 2.
How many does she have now? _____



Jamie has \$14 in his wallet. He has \$15 in his
money box. Jamie buys a robot for \$8.
How much is left? _____

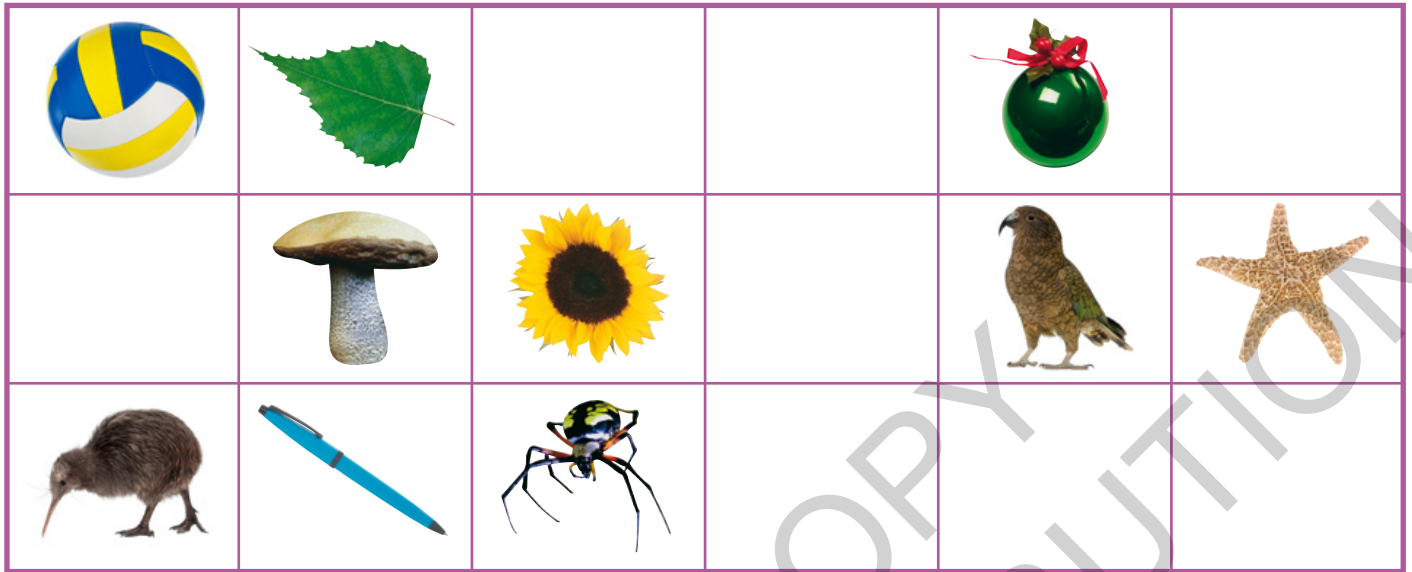


- 2 Alex picks 13 apples and 15 peaches. She eats 5 over the next week.
How many are left? _____



Li read 35 pages on Monday and 21 pages on Tuesday. The book has 78 pages. How many pages are left? _____

Mastery Checklist I can: ☐ add 2-digit numbers within 100
☐ add a 1-digit number to 100
☐ solve 2-step word problems



1 Draw what is:

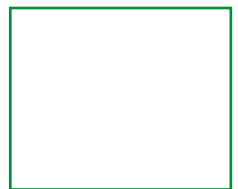
a above



b below



c next to



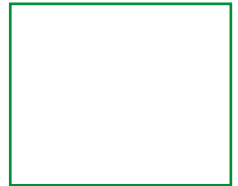
d below



e beside



f under



2 Draw:

a a fish under the starfish.

b a tree next to the leaf.

c a butterfly above the kiwi.

d a worm beside the spider.

3 Draw what is to the left and right.

a left



right



b left



right



4 Do you write with your right or left hand?

Follow each set of directions.

				D
				C
				B
				A

- 1 Start at the star .
Move 4 steps forward.
Where do you land?

A **B** **C** **D**

- 2 Start at the circle .
Move 4 steps forward.
Then turn right (quarter turn). Move 2 steps.
Where do you land?

A **B** **C** **D**

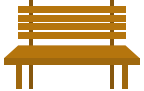
- 3 Start at the square . Move 3 steps forward.
Turn left (quarter turn). Move 2 steps forwards.

Where do you land?

- 4 Start at the house .
Move 2 steps down.
Turn left (quarter turn).
Move 3 steps right.
Circle where do you land.

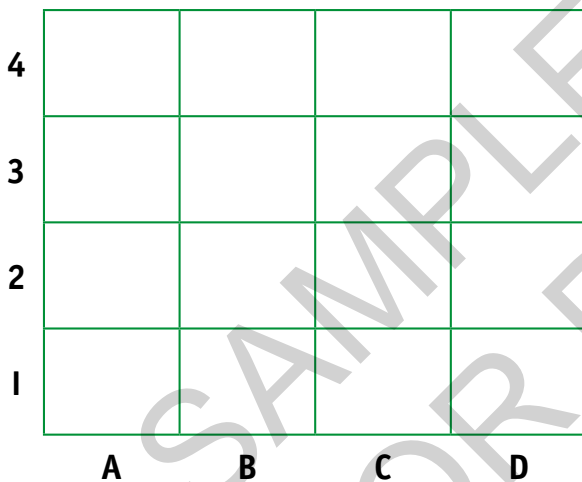
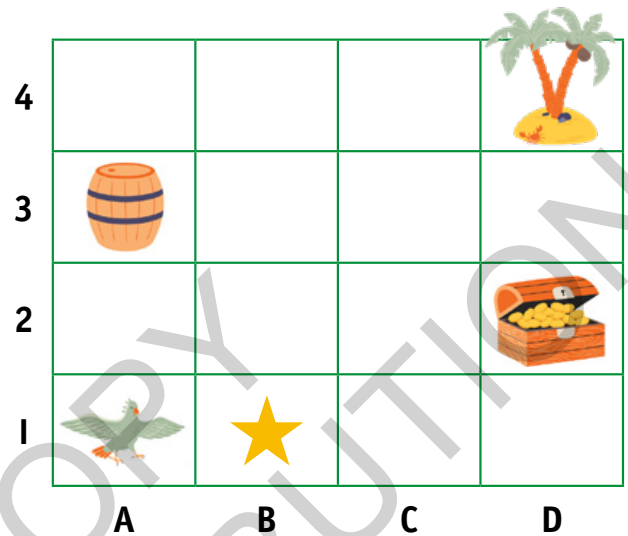
4				
3				
2				
1				
	A	B	C	D

Give directions

TERM 4
Week 4

Write directions using steps and turns. Use forward, back, left, right and turns.

- 1 Look at the map. Start at the star ★ and finish at the treasure. Write the directions.

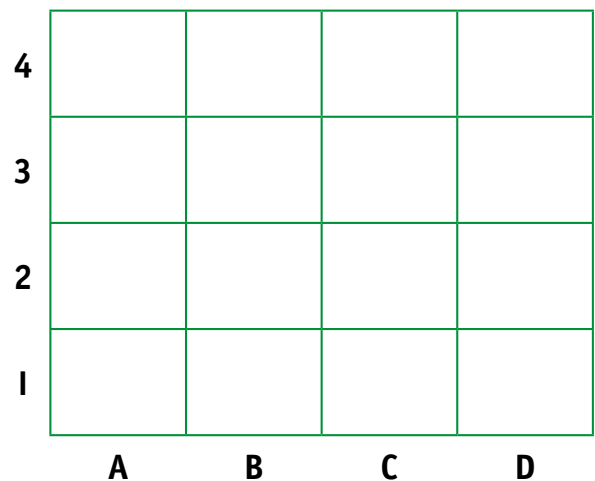


- 2 Draw and write.
Draw a path using:

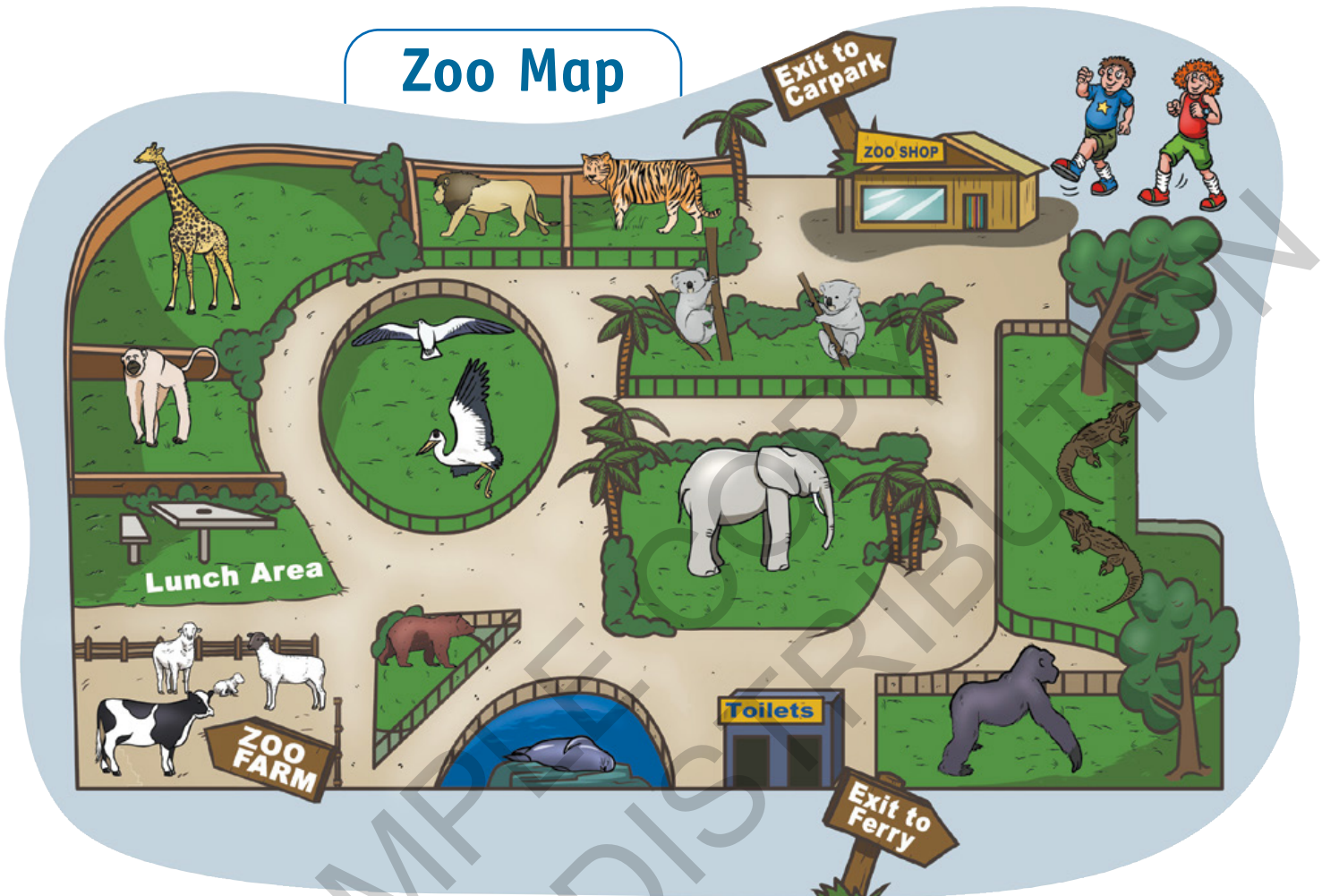
- 3 steps forward.
- 1 quarter turn.
- 2 more steps.

Now write your directions.

- 3 Create your own map.
Draw 3 places (e.g. house, tree, shop). Write directions from one place to another.



Zoo Map



Draw Katy's path in **red**. Draw Bryn's path in **blue**.

- 1 Katy wants to see the elephants, lions and giraffes. Then she will stop for lunch.
- 2 Bryn wants to see the birds, tuatara and bears. Then he will stop for lunch.
- 3 After lunch, Katy wants to see the bears and the koalas. Then she will look in the shop before going home by car.
- 4 After lunch, Bryn wants to see the farm and the seals. Then he will go to the toilet before going home by ferry.

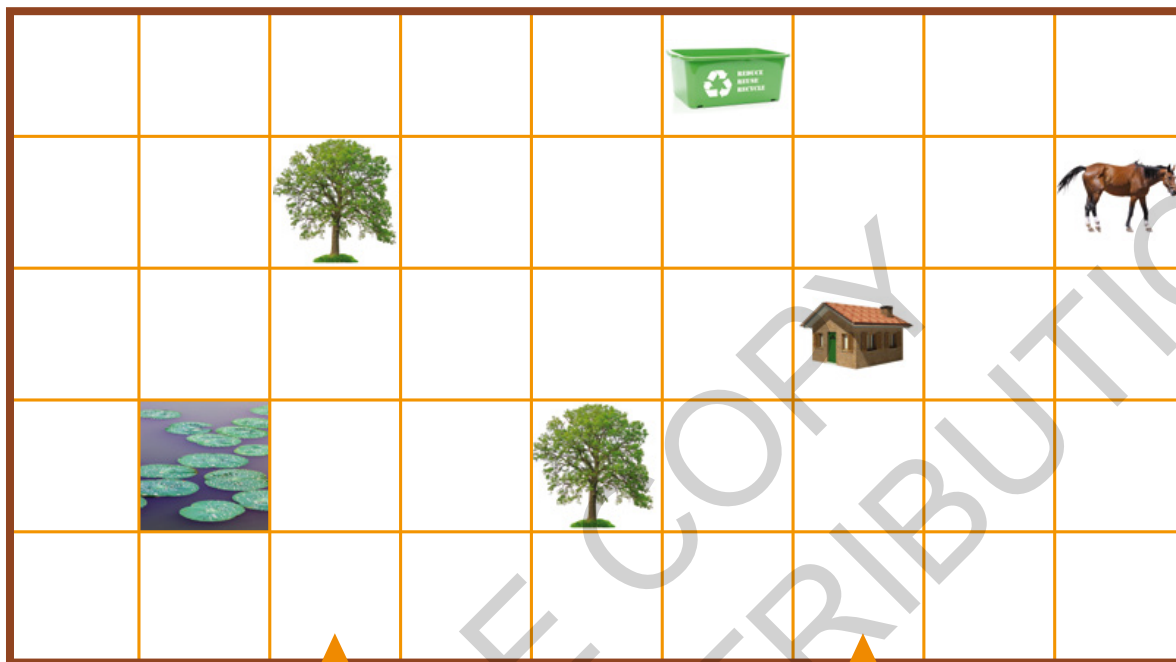
Challenge!

What animals would you like to see? Draw your own path in green. Write where you went.

Mastery Checklist

- I can: ☐ describe position
☐ write and follow directions

Buried treasure



1 Start here to find treasure.
Up 3. Left 2. Up 2. Right 3.

2 Draw an ✕ above the horse.
Write how to get there.



Draw an ✕ in
the square.

3 Draw one more item on the map. Write how to get there.

I can solve a problem by:

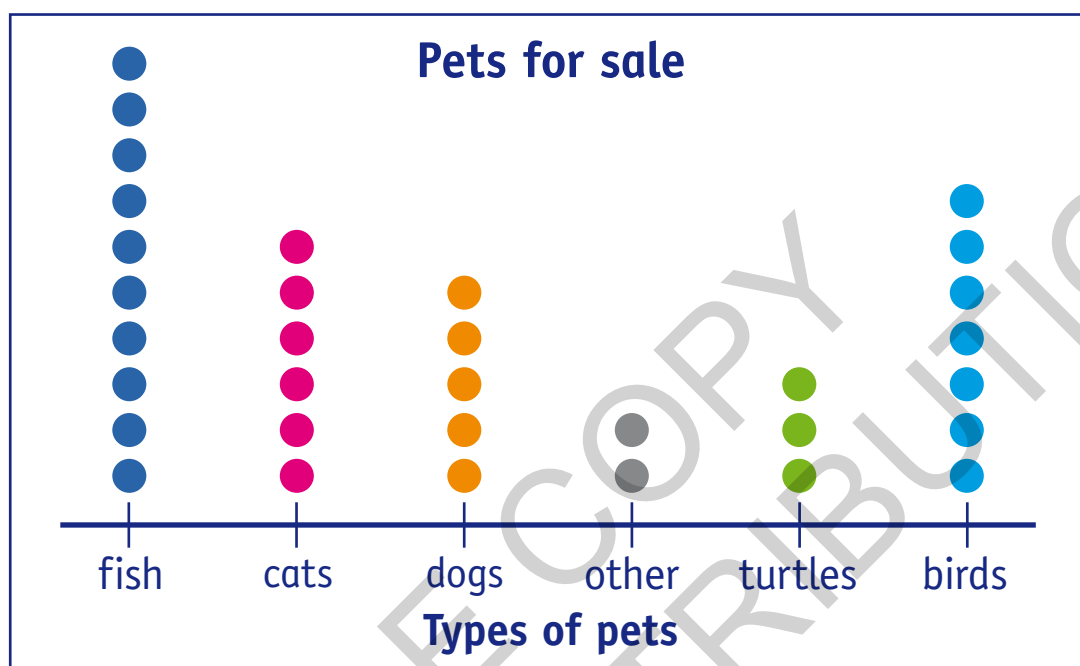
☐ giving and following directions ☐ using a grid map

Dot plots

A dot plot is a graph that shows data using dots.

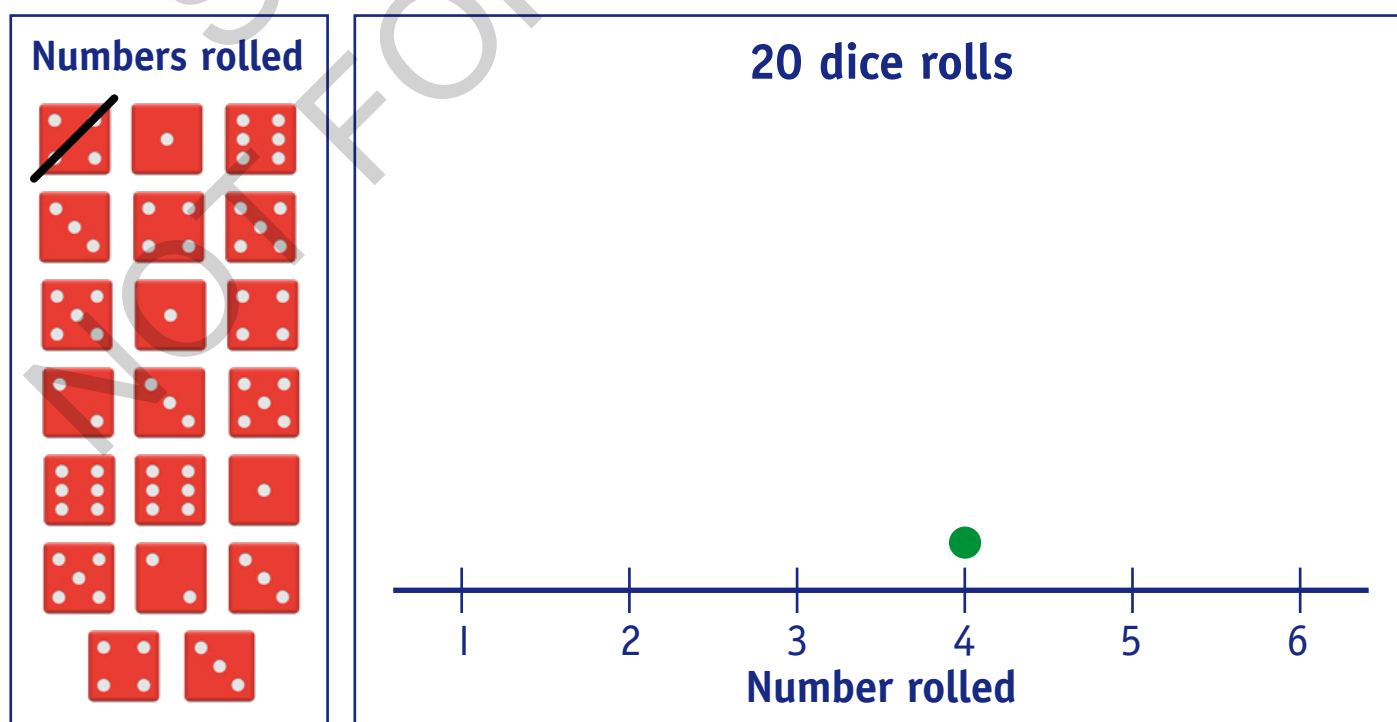
TERM 4
Week 5

- 1 This dot plot shows the number of pets for sale.



How many? **a** fish? _____ **b** birds? _____ **c** cats? _____
d pets altogether? _____

- 2 Jai rolled one six-sided dice 20 times. Show each number on the dot plot. The first one has been done for you.



1 This table shows the number of books read by Blue Group.

Name	Books read	Number
Aroha	 	2
Colin	   	4
Matiu	     	6
Amiria	  	3

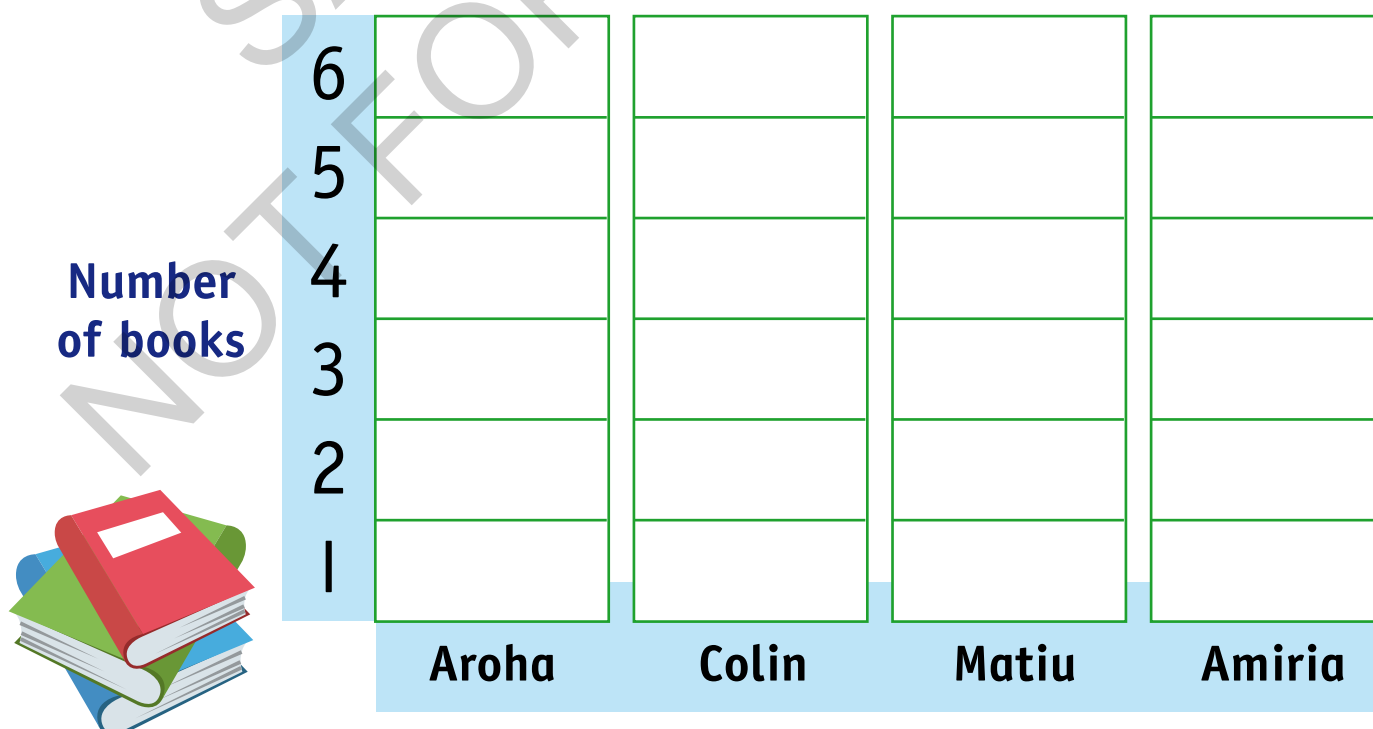
How many books did Amiria read? _____

Who read the most books? _____

Who read 4 books? _____

How many books did Matiu and Aroha read altogether? _____

2 Colour 1 ☐ for each book read.



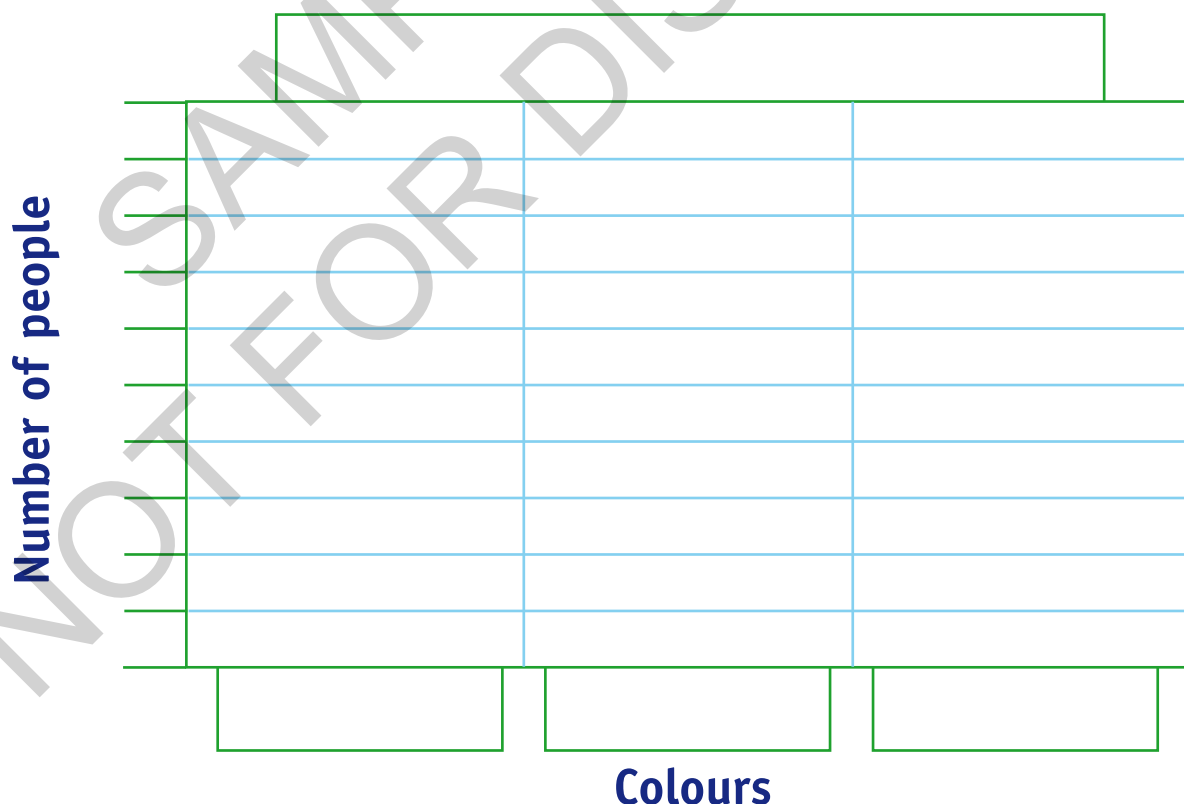
Graphing

Choose 3 colours. Write them in the table. Ask at least 10 people to answer this question. *Which colour do you like best?*

Tally the answers.

Colours	Number of people

Draw a graph of your results. Add numbers and labels.



I can solve a problem by:

☐ collecting data ☐ making a graph

Checkpoint 7

1 Match the numbers that are equal.

sixteen

86

$50 + 3$

eighty-six

16

$80 + 6$

fifty-three

53

$10 + 6$

2 Compare numbers using $<$, $>$ or $=$.

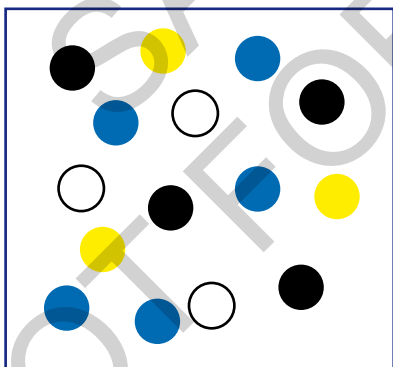
a $73 \square 37$

b $87 \square 91$

c $64 \square 60 + 4$

d $20 + 5 \square$ twenty-three

3 Liz picked 15 counters from a bag.
Show each on the dot plot.



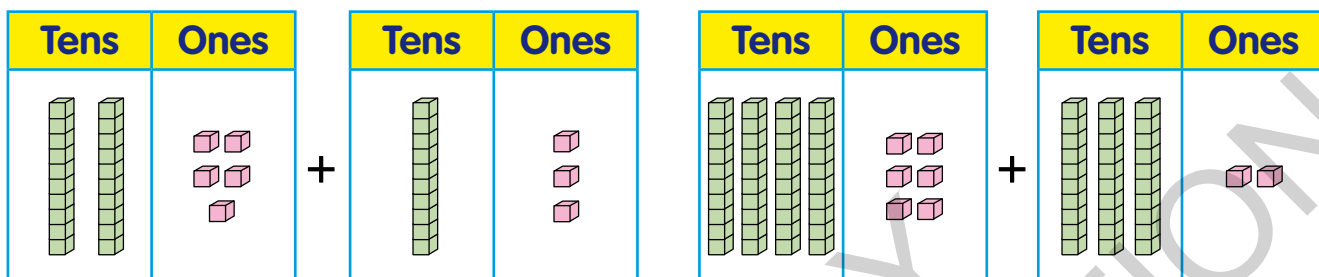
4 Circle and draw the unit of repeat.



Unit of repeat _____

Checkpoint 7

5 Write the numbers. Find the answer.



a + =

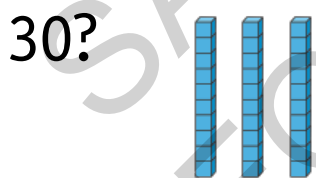
b + =

6 a **60** $\xrightarrow{\text{add } 10}$ $\xrightarrow{\text{add } 10}$ $\xrightarrow{\text{add } 10}$

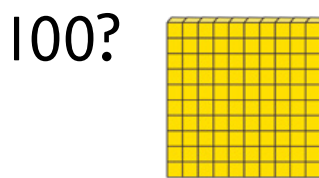
b $4 \times 10 =$

c $7 \times 10 =$

7 How many tens in:



a $30 \div 10 =$



b $100 \div 10 =$

8 Are these sums equal? Yes or no?



$6 + 3 = 5 + 4$

Yes

No

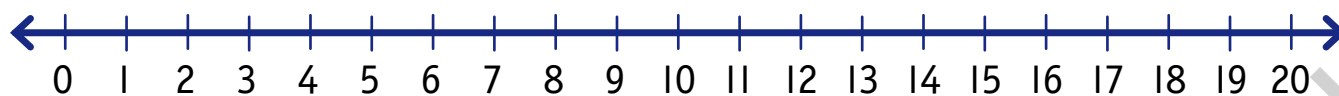


$9 + 3 = 6 + 6$

Yes

No

1 Multiply or divide? Check what each question is asking you to do.



a $10 \div 2 = \square$ b $15 \div 3 = \square$ c $4 \times 5 = \square$
d $10 \times 2 = \square$ e $3 \times 5 = \square$ f $20 \div 2 = \square$
g $10 \times 5 = \square$ h $18 \div 3 = \square$ i $10 \times 2 = \square$

2 Read the problem. Do you need to multiply or divide?

a Mango picked 18 flowers. She puts an equal number into 3 vases. How many flowers in each vase?



$$\square \square \square = \square$$

b Dizzy has 5 shelves. Each shelf holds 10 books. How many books altogether?



$$\square \square \square = \square$$

c Thirty apples packed equally into 5 boxes. How many apples in each box?



$$\square \square \square = \square$$

d Doc planted some seeds. Two new plants pop up every day for 7 days. How many plants altogether?



$$\square \square \square = \square$$

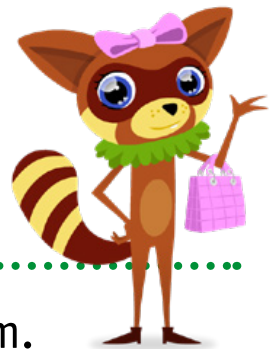
- 1 Use counters to act out the problem. Write the sum.
Find the answer.

- a Mango has 12 bananas. Doc has 10 apples.
Ruby has 7 pears. How much fruit altogether?



- b Waldo packed 18 sandwiches. Doc ate 5.
Dizzy ate 2. How many are left for Waldo?

- c For her party Ruby has 21 balloons, 12 party hats
and 6 plates. How many party things altogether?



- 2 Use play money to act out the problem. Write the sum.
Find the answer.

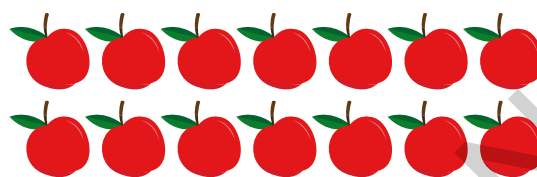
- a Pencils cost 30c each. Dizzy buys 5 pencils.
How much does he spend?

- b Doc had \$35 for a day at the zoo. The bus ride cost \$4.
The zoo ticket cost \$21. A toy lion cost \$7.
How much money does Doc have left?

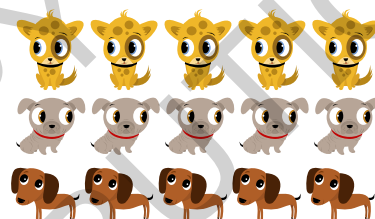


1 Multiply by 2s, 5s or 10s to find the answer.

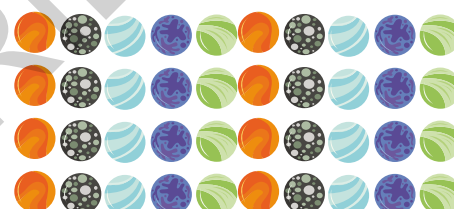
- a Waldo ate two apples every day for seven days. How many apples did he eat in total? _____



- b Ruby has three dogs. They each have five puppies. How many puppies altogether? _____



- c Dizzy bought four packets of marbles. There were ten marbles in each pack. How many marbles in total? _____



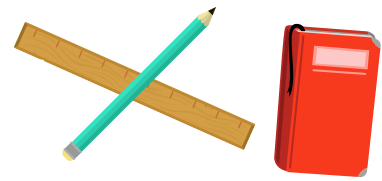
2 Skip count along the number line to find the answer.



- a Mango made three flowers each day for six days. How many flowers altogether? _____
- b Doc writes five letters every week. After four weeks, how many letters has he written in total? _____
- c Mango has eight pairs of gloves. How many gloves does she have altogether? _____

Solve the word problems.

- 1 Ruby buys a pencil for \$1, a ruler for \$2 and a note pad for \$4.



a How much does she spend?

$$\square + \square + \square = \square$$

b How much change does she get from \$10?

$$\square - \square = \square$$

- 2 Waldo buys a ball for \$3, a skipping rope for \$4 and a drink bottle for \$8.



a How much does he spend?

$$\square + \square + \square = \square$$

b How much change does he get from \$20?

$$\square - \square = \square$$



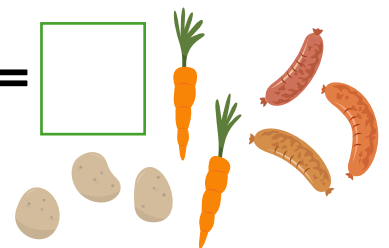
- 3 Dizzy buys carrots for \$2, potatoes for \$4 and sausages for \$5.

a How much does he spend?

$$\square + \square + \square = \square$$

b How much change does he get from \$20?

$$\square - \square = \square$$



Mastery Checklist

I can: ☐ add amounts to find the total

☐ subtract to find the change from \$10 and \$20

Subtraction problems



Ben has 20 tennis balls. Jen has 16.
What is the difference? How many altogether?



1 - = 2 + =

Manaaki makes 18 pies. The dog eats 5 of them.
How many pies are left?



3 - =

Polly has 17 dolls. She gives 3 to Matiu.
Then she gives 3 to Jane. How many does she have now?



4 - - =

I can solve a problem by:

☐ counting back to subtract ☐ using a number line



1 Match. Write the missing months.

May

February

July

October

December

August

January

March

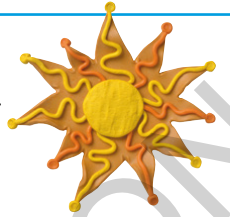
April

June

September

November

Summer



Autumn



Winter



Spring



Summer

2 Which month is:

a

1st?

b

4th?

c

6th?

d

11th?

JANUARY

MON

TUE

WED

THU

FRI

SAT

SUN

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

FEBRUARY

MON

TUE

WED

THU

FRI

SAT

SUN

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

MARCH

MON

TUE

WED

THU

FRI

SAT

SUN

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

APRIL

MON

TUE

WED

THU

FRI

SAT

SUN

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

MAY

MON

TUE

WED

THU

FRI

SAT

SUN

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

JUNE

MON

TUE

WED

THU

FRI

SAT

SUN

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

JULY

MON

TUE

WED

THU

FRI

SAT

SUN

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

AUGUST

MON

TUE

WED

THU

FRI

SAT

SUN

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

SEPTEMBER

MON

TUE

WED

THU

FRI

SAT

SUN

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

OCTOBER

MON

TUE

WED

THU

FRI

SAT

SUN

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

NOVEMBER

MON

TUE

WED

THU

FRI

SAT

SUN

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

DECEMBER

MON

TUE

WED

THU

FRI

SAT

SUN

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



1 Colour the months in each season.

Spring = **green** 🌱 Summer = **yellow** ☀️ Autumn = **orange** 🍂

Draw a snowflake ❄️ on the Winter months.

2 Which month of the year is:

a

2nd?

b

5th?

c

7th?

d

9th?

e

10th?

f

12th?

3 Which month comes:

before

after

a

April

b

c

December

d

The calendar

TERM 4
Week 7

Order the months of the year. Number them from 1 to 12.

January 1 August December

May _____ November _____ March _____

September _____ June _____ July _____

February _____ October _____ April _____

2 Match.

January

February

March

April

May

June

Summer

Autumn

Winter

Spring

July

August

September

October

November

December

3 Write **yes** if it is true and **no** if it is false.

a March is the 3rd month.

b August is the 5th month.

c December is the last month.

d February is the first month.

e June is the first month of winter.

f January is in winter.

g Summer begins in December.

h September is the first month of spring.

1 Match.

a

12 hours

a fortnight

b

7 days

a season

c

2 weeks

between birthdays

d

3 months

a week

e

1 year

a night



2 Number these events 1-5, shortest to longest time.
How long do they take?

a

☐

a weekend

b

☐

lunchtime

c

☐

a month

d

☐

a school week

e

☐

a school day



My Favourite Date

What is your favourite day of the year? _____

What month is your favourite day in? _____

Fill in the calendar for the month of your favourite day.

Add your favourite day to the calendar.

Month:						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

What day of the week is your favourite day?

What is the number of your favourite day? _____

Fill in the date for your favourite day:

Day of the week Number Month

I can solve a problem by:

☐ identifying a date ☐ using a calendar

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 Finish colouring the count by 3s pattern.

2 Write the next four numbers.

- 15, 18, 21, _____, _____, _____, _____
- 36, 39, 42, _____, _____, _____, _____
- 69, 72, 75, _____, _____, _____, _____
- 84, 87, 90, _____, _____, _____, _____

3 Is each number odd or even?

3

6

9

12

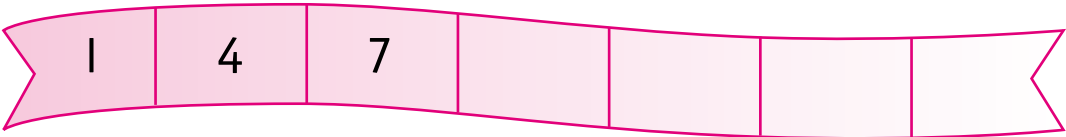
15

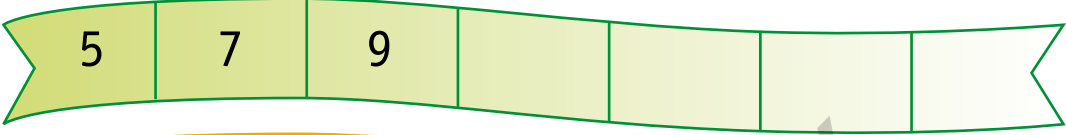
Counting in 2s, 3s and 5s

TERM 4
Week 8

1 Continue each number pattern.

What is the rule?

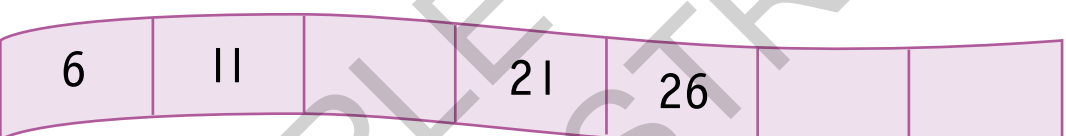
a 

b 

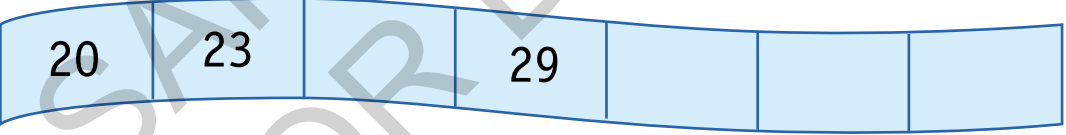
c 

d 

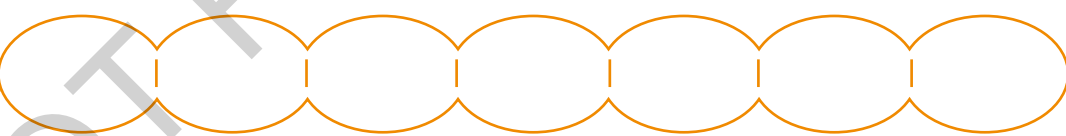
2 Write the missing numbers.

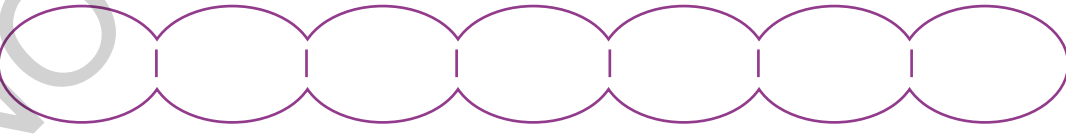
a 

b 

c 

3 Write your own number patterns.

a 

b 

Challenge!

Two children are skip counting.

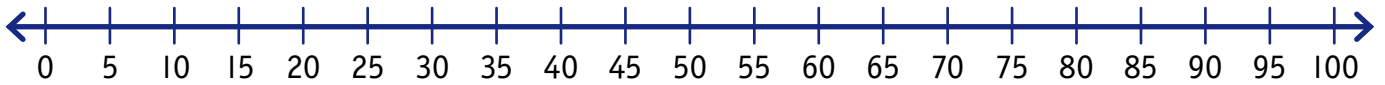
Ella: 1, 4, 7, 10, ...

Leo: 5, 10, 15, 20, ...

They both say 10. Will they ever say the same number again?

If so, which numbers?

1 Use the number line to find the total.



- a** Ruby has 20 cents. She is given another 20 cents. Then she spends 30c. How much does she have now?

 c


- b** Waldo has 80c. He buys a toy for 50c. Then he buys lollies for 30c. How much money is left?

 c


2 How much change?

- a** You have



You spend



change

- b** You have



You spend



change

- c** You have



You spend

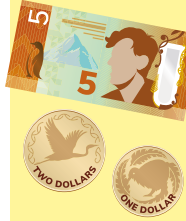


change

- d** You have



You spend



change

3



The pencil is

cm long.

1 Find the answer.

a

$$35 + 14 = \boxed{}$$

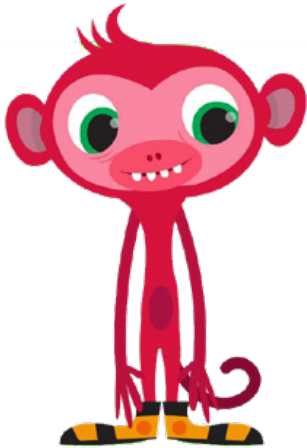
b

$$42 + 27 = \boxed{}$$

c

$$56 + 39 = \boxed{}$$

2 Mango watched a TV show for twenty-two minutes and then switched to another program for thirty-five minutes. How long was he watching TV for?

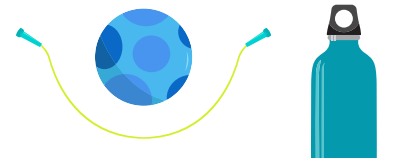


$$\boxed{} + \boxed{} = \boxed{}$$

3 Dizzy has thirty-three cars. His grandma gives him fifteen more. How many toy cars does he have now?

$$\boxed{} + \boxed{} = \boxed{}$$

4 Waldo buys a ball for \$3, a skipping rope for \$4 and a drink bottle for \$8.



a How much does he spend?

$$\boxed{} + \boxed{} + \boxed{} = \boxed{}$$

b How much change does he get from \$20?

$$\boxed{} - \boxed{} = \boxed{}$$

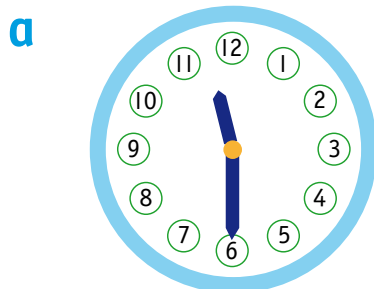
1 What time does the clock show?

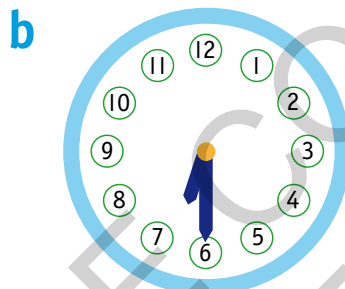


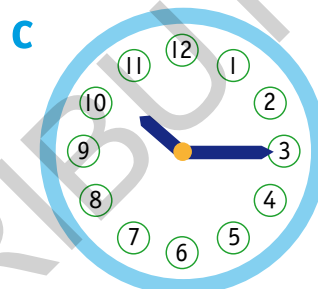




2 Write the matching time on the digital clock.

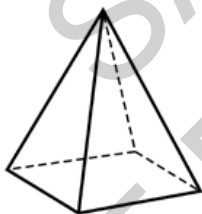




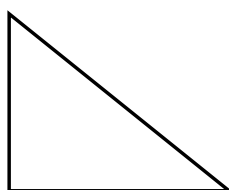


3 Colour the **2D shapes green**. Colour the **3D shapes blue**.
Name each shape.

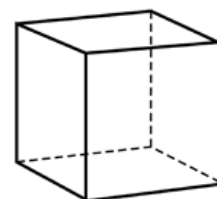
A



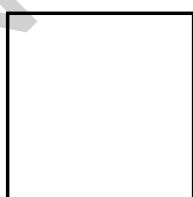
B



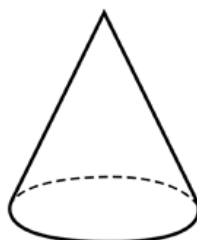
C



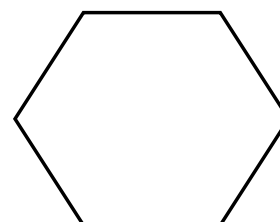
D



E



F



Number facts + – practice

TERM 4
Week 9



You have one minute for each set.
Complete as many questions as you can.

1

$3 + 2 = \square$

$5 + 5 = \square$

$7 + 3 = \square$

$7 - 3 = \square$

$10 - 5 = \square$

$6 + 4 = \square$

$8 - 4 = \square$

$10 - 7 = \square$

$10 - 0 = \square$

$9 + 1 = \square$

Score

2

$10 + 7 = \square$

$14 - 7 = \square$

$15 - 5 = \square$

$20 - 11 = \square$

$14 + 2 = \square$

$17 + 3 = \square$

$12 - 6 = \square$

$11 + 9 = \square$

$10 + 10 = \square$

$18 - 7 = \square$

Score

3

$9 + 3 = \square$

$12 - 3 = \square$

$8 + 8 = \square$

$14 - 6 = \square$

$7 + 5 = \square$

$15 - 8 = \square$

$9 + 9 = \square$

$16 - 9 = \square$

$8 + 7 = \square$

$11 - 4 = \square$

Score

Number facts $\times \div$ practice

TERM 4
Week 9



You have one minute for each set.
Complete as many questions as you can.

1

$3 \times 2 = \square$

$25 \div 5 = \square$

$4 \times 5 = \square$

$20 \div 10 = \square$

$30 \div 5 = \square$

$2 \times 2 = \square$

$5 \times 2 = \square$

$5 \div 5 = \square$

$5 \times 10 = \square$

$10 \times 10 = \square$

Score

2

$10 \times 2 = \square$

$10 \times 2 = \square$

$10 \times 5 = \square$

$10 \div 10 = \square$

$50 \div 5 = \square$

$8 \times 2 = \square$

$8 \div 2 = \square$

$25 \div 5 = \square$

$80 \div 10 = \square$

$0 \times 10 = \square$

Score

3

$3 \times 5 = \square$

$6 \times 5 = \square$

$4 \times 10 = \square$

$100 \div 10 = \square$

$30 \div 10 = \square$

$7 \times 2 = \square$

$25 \div 5 = \square$

$10 \div 5 = \square$

$10 \times 5 = \square$

$2 \times 10 = \square$

Score

Mixed number facts practice

TERM 4
Week 9



You have one minute for each set.
Complete as many questions as you can.

1

$4 \times 5 =$

$17 + 3 =$

$10 - 7 =$

$70 \div 10 =$

$12 + 9 =$

$12 - 6 =$

$30 \div 10 =$

$16 + 4 =$

$8 + 8 =$

$25 \div 5 =$

Score

2

$20 \div 10 =$

$20 - 11 =$

$4 \times 10 =$

$2 \times 5 =$

$17 + 3 =$

$14 - 6 =$

$6 \times 5 =$

$8 + 7 =$

$19 - 12 =$

$9 \times 5 =$

Score

3

$50 \div 5 =$

$9 + 9 =$

$6 \times 10 =$

$8 \times 2 =$

$18 - 4 =$

$20 \div 10 =$

$40 \div 5 =$

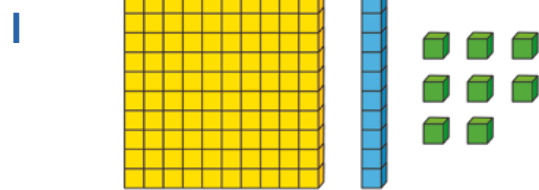
$16 - 9 =$

$8 + 8 =$

$7 \times 5 =$

Score

Checkpoint 8



a _____ hundred _____ tens _____ ones

b _____ + _____ + _____ = _____

2 Write in numerals.

a one hundred and nine _____

b one hundred and five _____

3 Write 110 in words.

4 Continue each pattern.

a 2, 4, 6,

b 5, 10, 15,

5 a $16 + 13 =$

b $24 + 33 =$

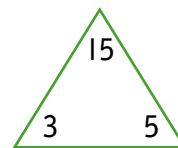


a 2 groups of 5 = _____

b $3 \times 5 =$ _____

c $4 \times 5 =$ _____

7 Write number sentences.



a _____ $\times$ _____ = _____

b _____ $\times$ _____ = _____

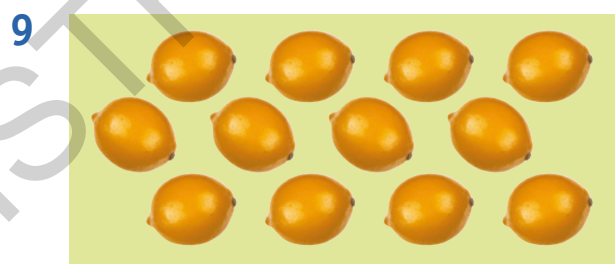
c _____ $\div$ _____ = _____

d _____ $\div$ _____ = _____

8  10c

Jim has 50c.

He can buy strawberries.



a One half of 12 = _____

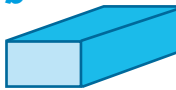
b One quarter of 12 = _____

10 How long is your textbook?

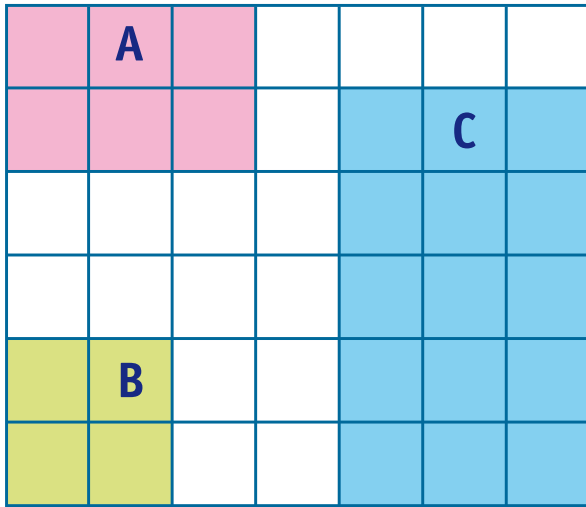
Estimate: _____ cm

Measure: _____ cm

11 Number of

	faces	edges	vertices
a 			
b 			

Checkpoint 8



12 What is the perimeter in cm of:

a A b c

Which shape has:

b the smallest area? _____

c the largest area? _____

13 Split this shape into 2 triangles.



14 The pencil weighs 5 blocks.
The scissors weigh 10 blocks.

a The pencil weighs _____
than the scissors.

b The difference is _____
blocks.

15 Circle the one that takes about 30 minutes.



16 Circle 4 equal quarters.



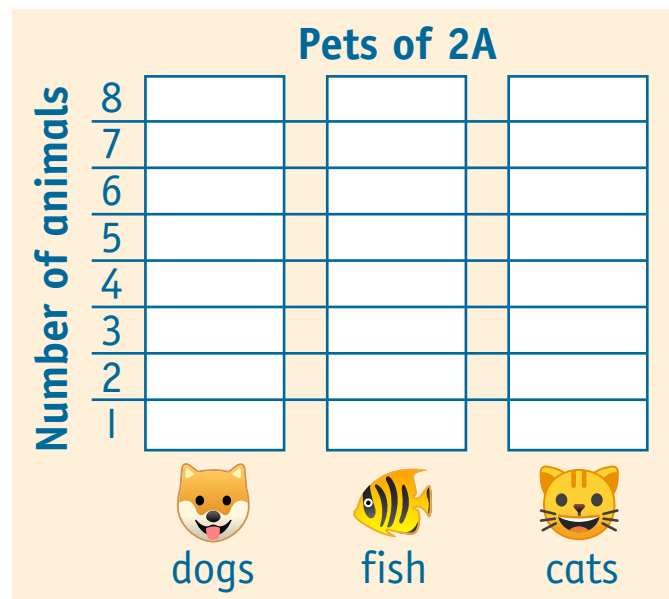
$$\frac{1}{4} \text{ of } 8 = \boxed{}$$

17 Use the tallies to complete the table and the graph.

a

	Tally	Total
dogs		
fish		
cats		

b





Mathletics

Well Done!

Ka pai!



You made it to
the end of Year 2,
congratulations!
Are you looking
forward to
Year 3?

