

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

Skip counting patterns TERM 1 Week 1

1 Complete the skip counting number lines.

a $+2$ $+2$ $+2$ $+2$ $+2$ $+2$ $+2$ $+2$ $+2$ $+2$

b $+5$ $+5$ $+5$ $+5$ $+5$ $+5$ $+5$ $+5$ $+5$ $+5$

2 Write the missing numbers.

a 30 32 34 36 38 40 42 44 46 48 50

b 56 58 60 62 64 66 68 70 72 74 76

c 40 45 50 55 60 65 70 75 80 85 90

d 75 80 85 90 95 100

Fractions TERM 2 Week 2

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

a $\frac{1}{4}$ b $\frac{1}{2}$ c $\frac{1}{4}$

d $\frac{1}{2}$ e $\frac{1}{4}$ f $\frac{1}{2}$

2 Write 'more' or 'less'.

a $\frac{1}{2}$ than a half b $\frac{1}{4}$ than a half c $\frac{1}{2}$ than a half

d $\frac{1}{4}$ than a half e $\frac{1}{2}$ than a half f $\frac{1}{4}$ than a half

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

a $\frac{1}{2}$ b $\frac{1}{4}$ c $\frac{1}{2}$ d $\frac{1}{4}$

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.

Counting in fives TERM 2 Week 2

0 5 10 15 20 25 30 35 40 45 50

Count in 5s to find how many.

a $\frac{1}{2}$ b $\frac{1}{4}$ c $\frac{1}{2}$ d $\frac{1}{4}$

e $\frac{1}{2}$ f $\frac{1}{4}$

Challenge! 50 55 60 65 70 75 80 85 90 95 100

Problem solving TERM 2 Week 2

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.

1 dumpling weighs the same as 1 bun.

1 dumpling weighs the same as 1 bun.

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

Checkpoint 3

1 Write the missing numbers.

40 50 60 70 80 90 100

2 Colour each fraction.

a $\frac{1}{2}$ b $\frac{1}{4}$ c $\frac{1}{2}$

3 How many groups of 2?

4 How many groups of 5?

5 Match.

cone cylinder pyramid sphere

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

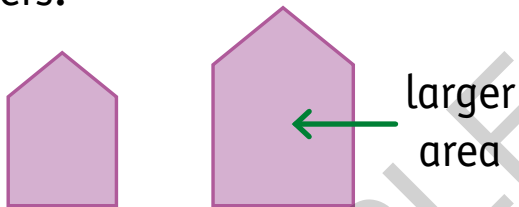
addition (+)

Six balls and two balls makes eight balls.


$$6 + 2 = 8$$

area

The amount of space something covers.



capacity

The amount it can hold.



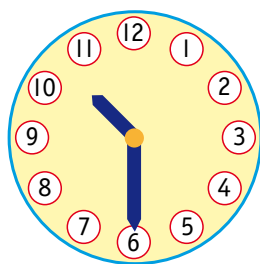
The jug holds more.

clocks

half-past ten



digital



analogue

days

Sunday

Monday

Tuesday

Wednesday

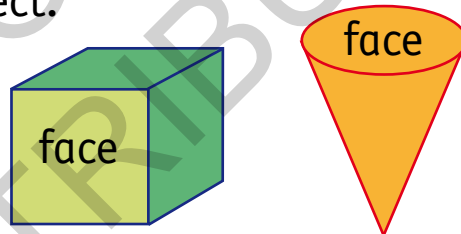
Thursday

Friday

Saturday

face

The flat surface of a solid object.

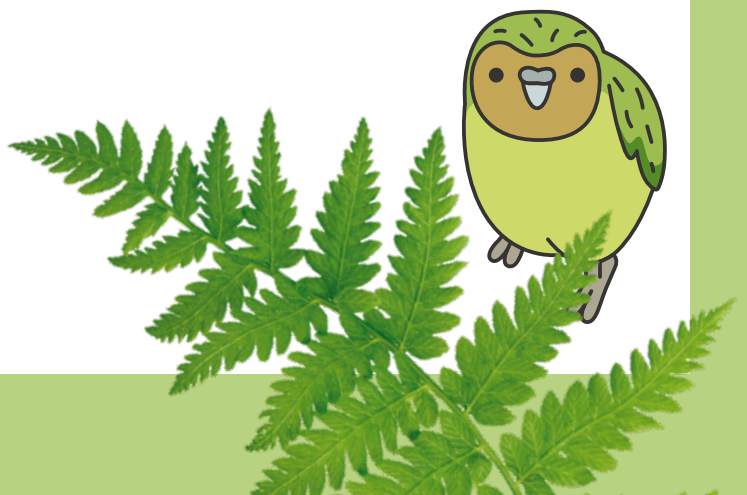


fractions

halves = two equal parts



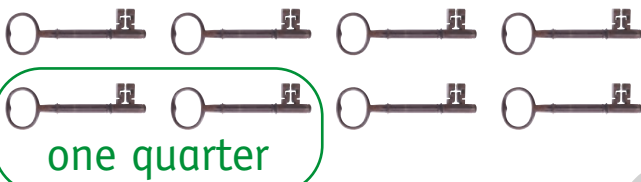
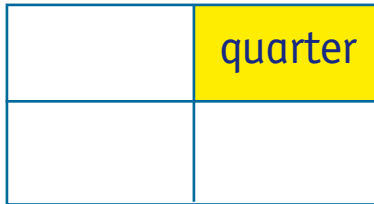
half a length



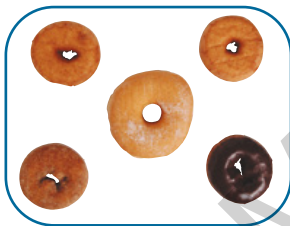
Dictionary

fractions

quarters = four equal parts



groups

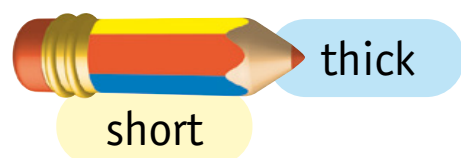


1 group of 5



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.



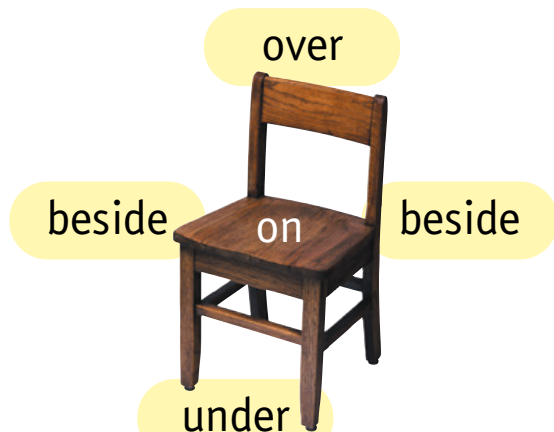
Odd



Ordinal numbers tell position.



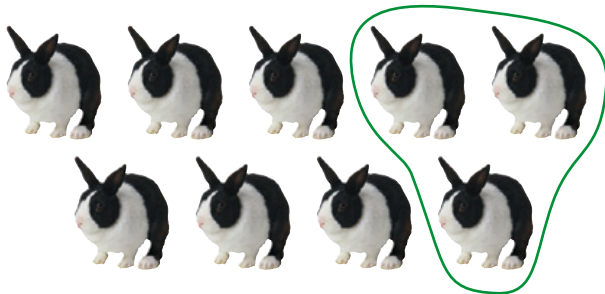
position



Dictionary

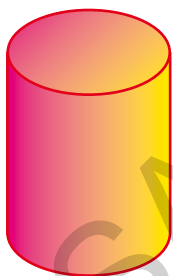
subtraction (-)

Nine rabbits take away three rabbits leaves six rabbits.



$$9 - 3 = 6$$

three-dimensional (3D) objects



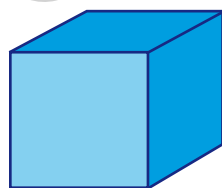
cylinder



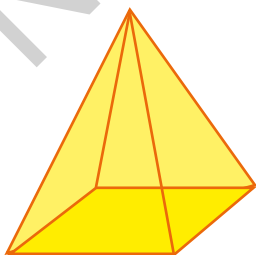
cone



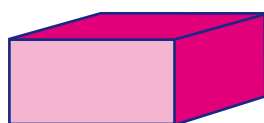
sphere



cube



square pyramid



rectangular prism

two-dimensional (2D) shapes

rectangle
tapawhā hāngai

square
tapawhā rite

circle
porowhita

oval
porotīhaha

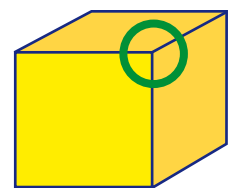
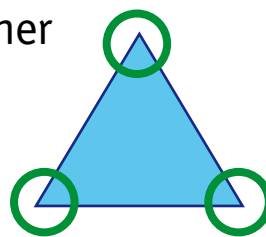
pentagon
taparima

hexagon
tapaono rite

triangle
tapatoru

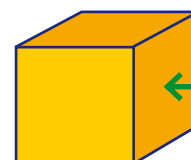
vertex

corner



volume

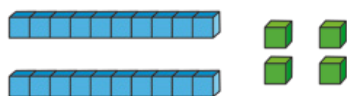
The space it takes up.



bigger
volume

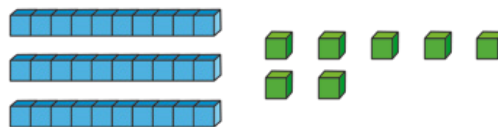
1 How many tens and ones? Write the number.

a



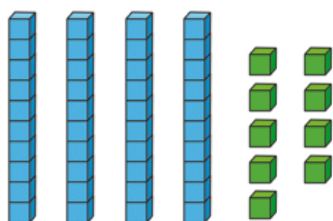
	tens		ones	=	
--	------	--	------	---	--

b



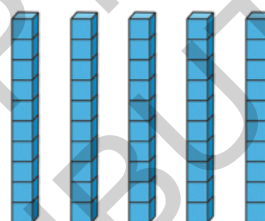
	tens		ones	=	
--	------	--	------	---	--

c



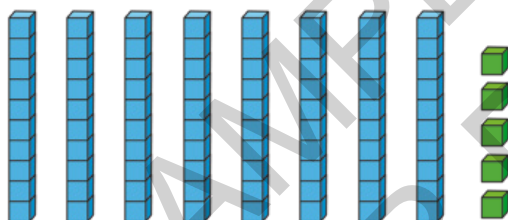
	tens		ones	=	
--	------	--	------	---	--

d



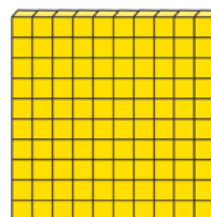
	tens		ones	=	
--	------	--	------	---	--

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

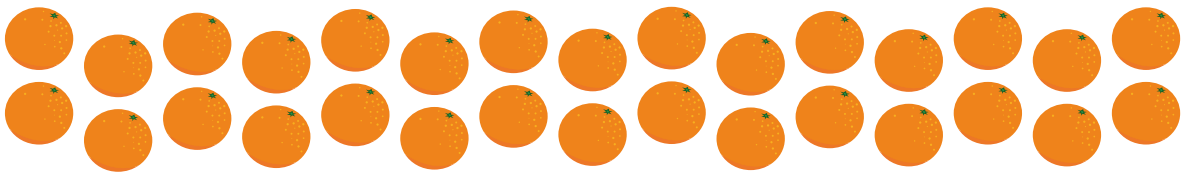
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b 86 76 66

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

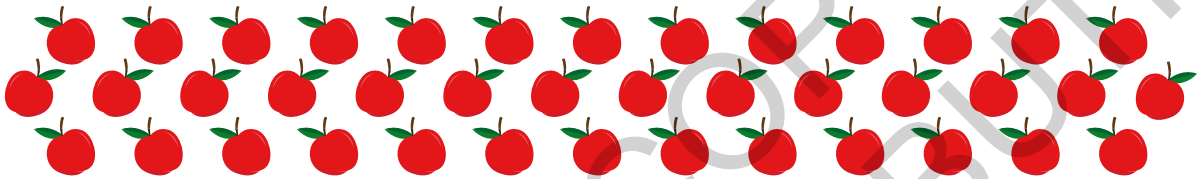
1 Circle groups of ten.

a



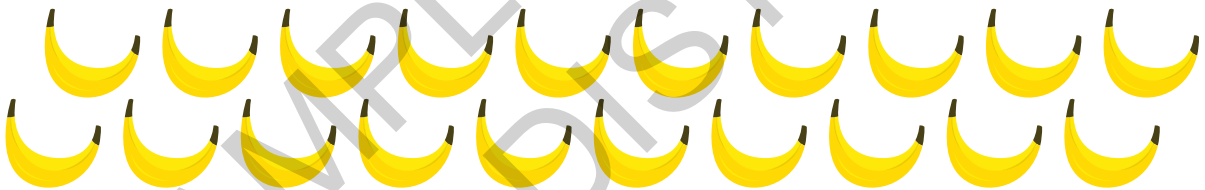
Count by 10s. How many altogether?

b



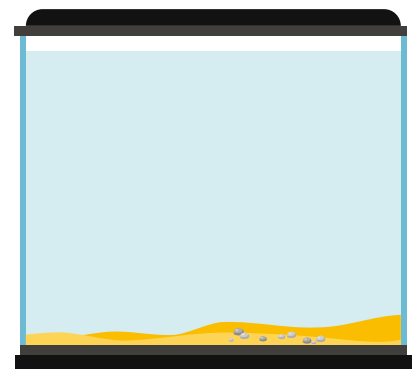
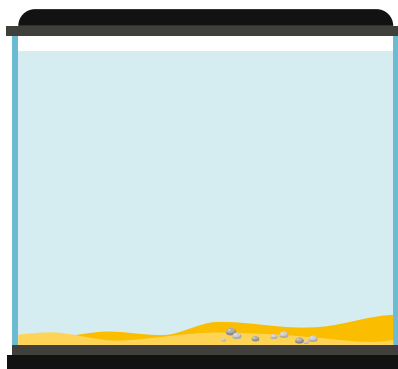
Count by 10s. How many altogether?

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
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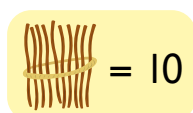
2 Write the number after.

99	
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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

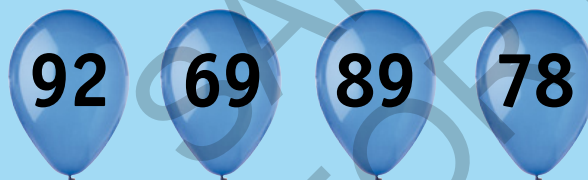
largest

2 Order from smallest to largest.



smallest

largest



smallest

largest



smallest

largest



smallest

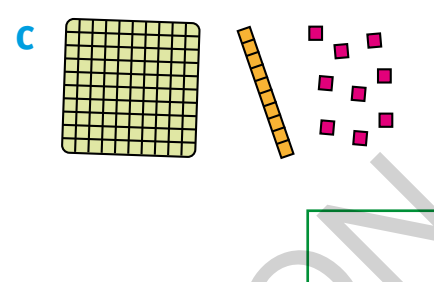
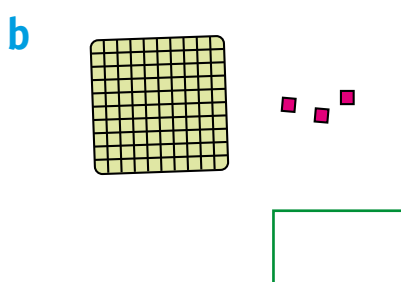
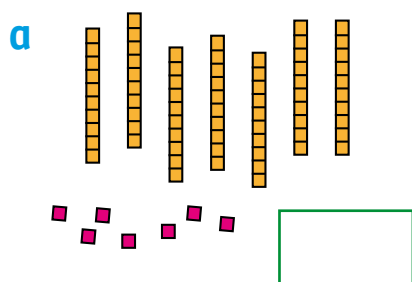
largest

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!

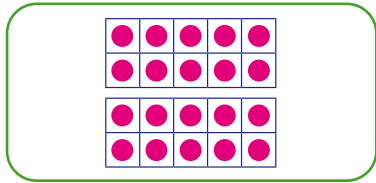
How many 2-digit numbers can be made with
Write them in order from smallest to largest.



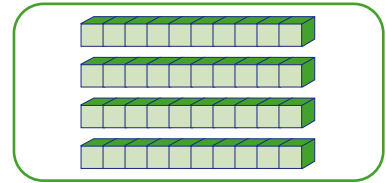
Counting by 10s to 120

TERM 1
Week 2

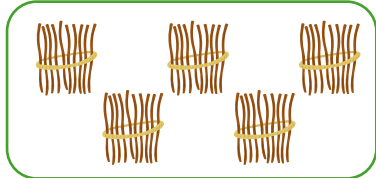
1 Match.



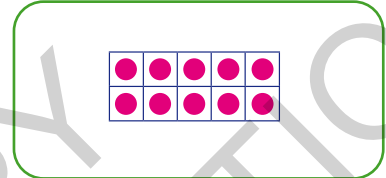
10



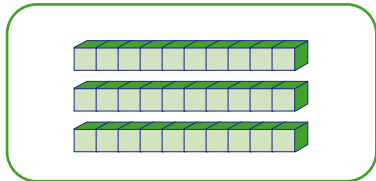
20



30



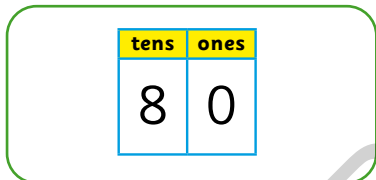
40



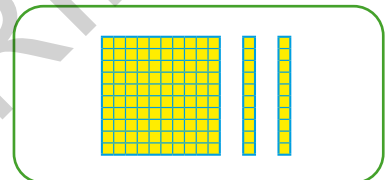
50



60



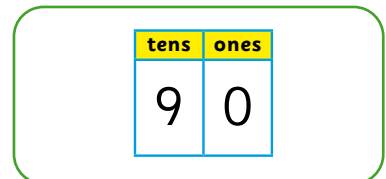
70



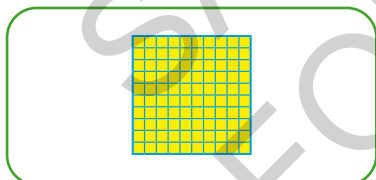
80



90



100



110

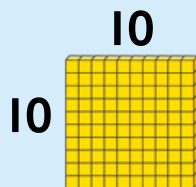


120

2 Match.



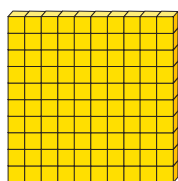
Counting to 120



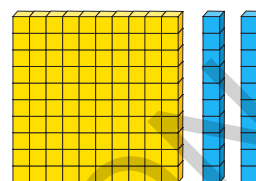
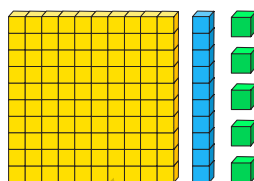
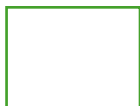
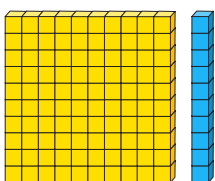
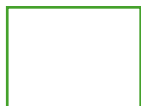
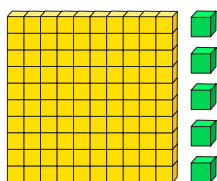
$$10 \times 10 = 100$$

TERM 1
Week 2

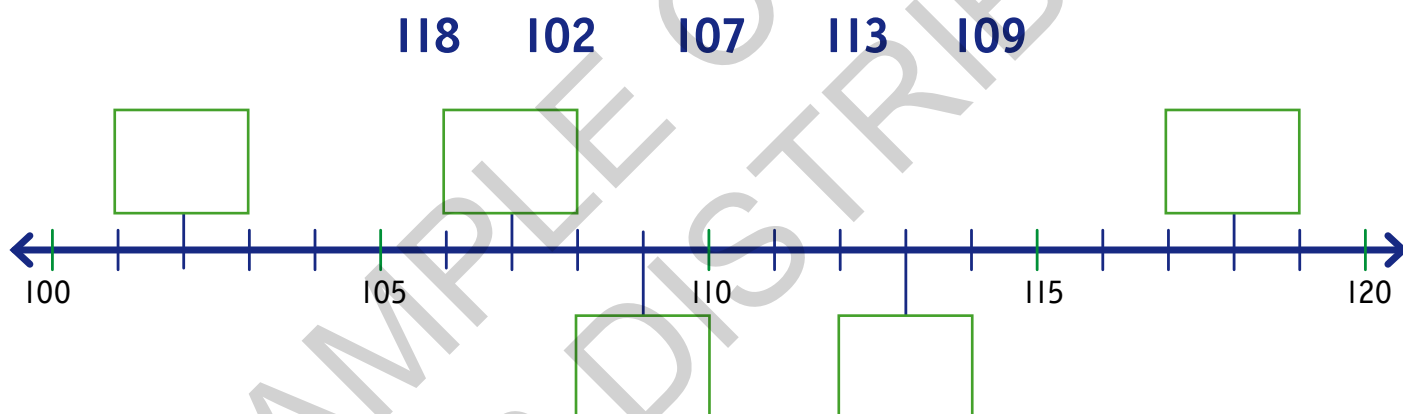
1 Continue counting by 5s to 120. Write the numbers.



100



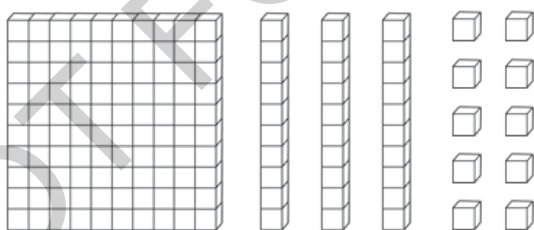
2 Place these numbers on the number line.



3 Colour to show the number.

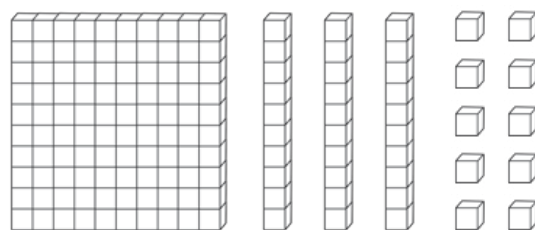
a

106



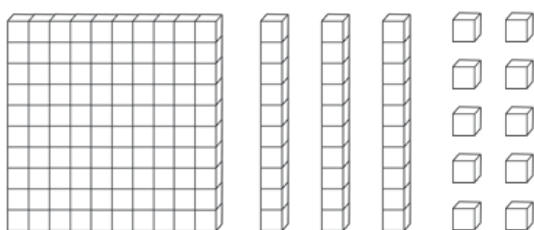
b

113



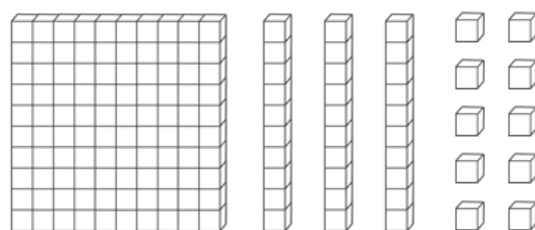
c

117

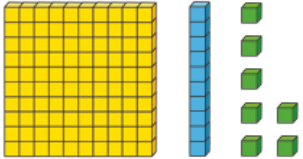


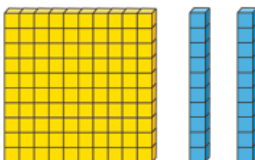
d

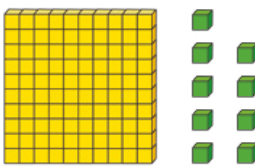
109



1 Complete.

a  _____ hundred _____ ten _____ ones = _____

b  _____ hundred _____ tens _____ ones = _____

c  _____ hundred _____ tens _____ ones = _____

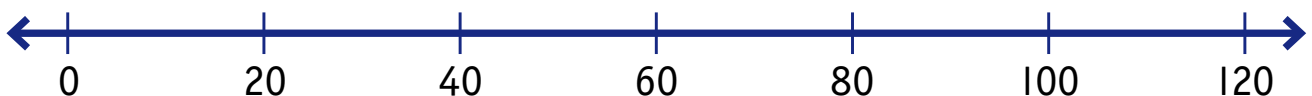
2 Complete.

	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

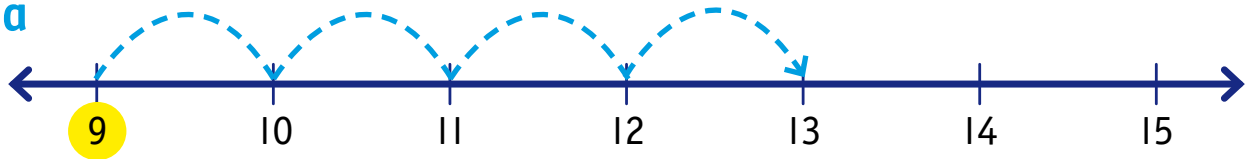
- I can: ☐ read and write numbers to 120
☐ count in 2s, 5s and 10s to 120
☐ compare and order numbers to 120
☐ understand the place value of each in a 3-digit number

Addition on a number line

TERM 1
Week 3

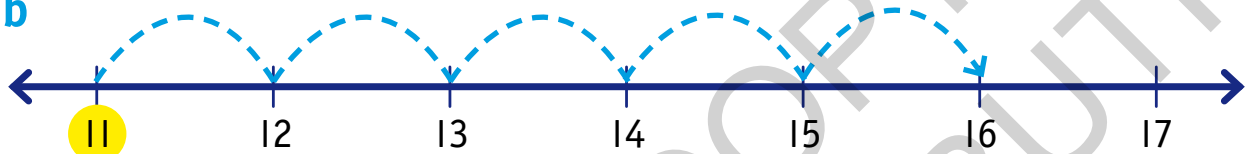
1 Use the number lines to find the answers.

a



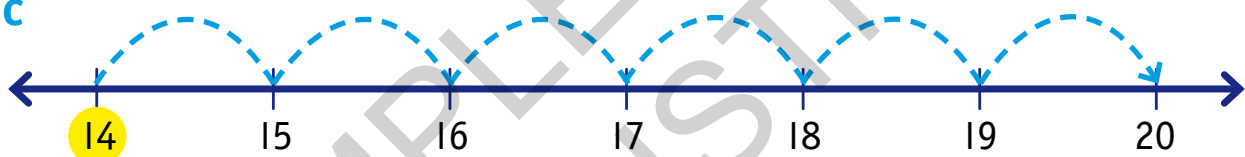
$$9 + 4 = \square$$

b



$$11 + 5 = \square$$

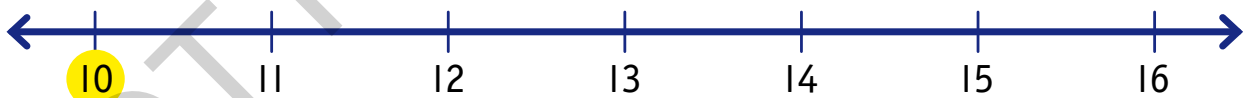
c



$$14 + 6 = \square$$

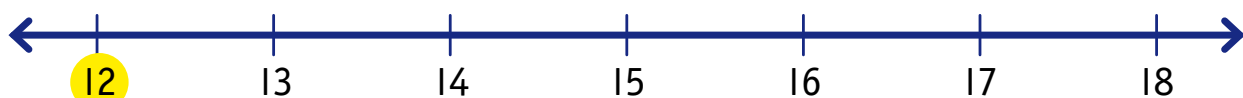
2 Find the answers.

a



$$10 + 4 = \square$$

b

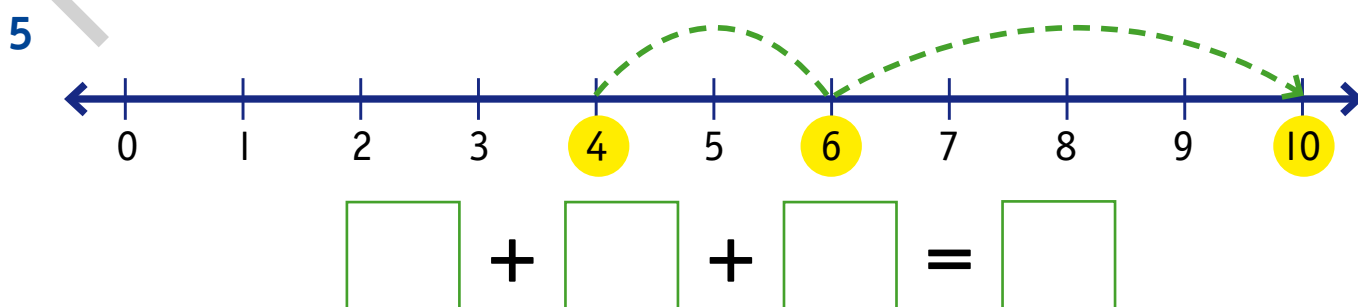
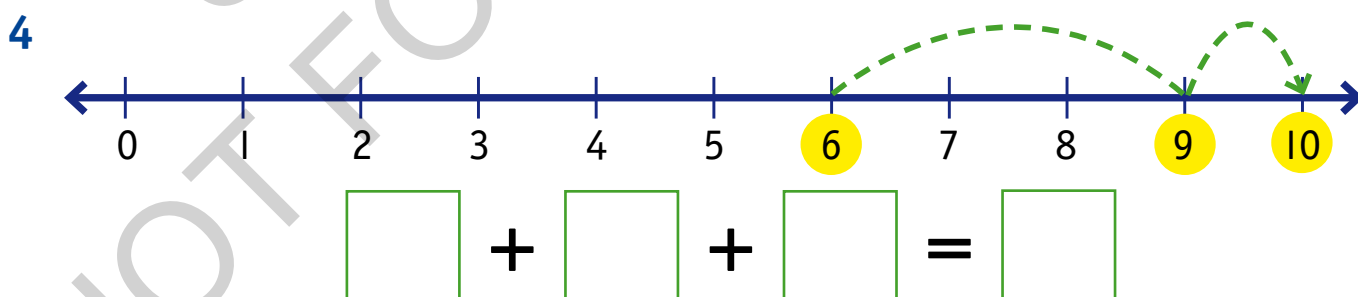
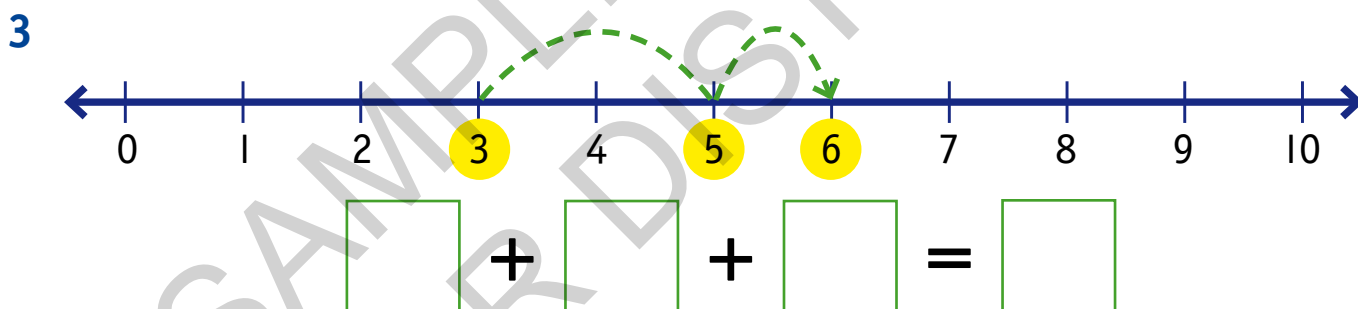
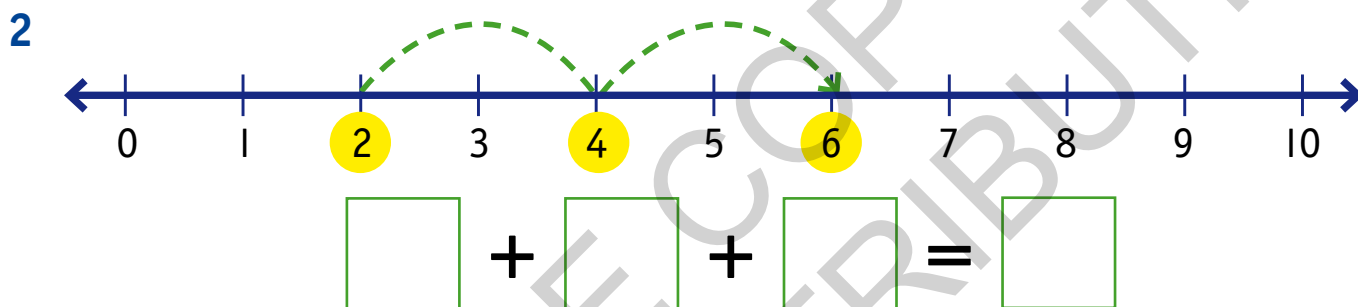
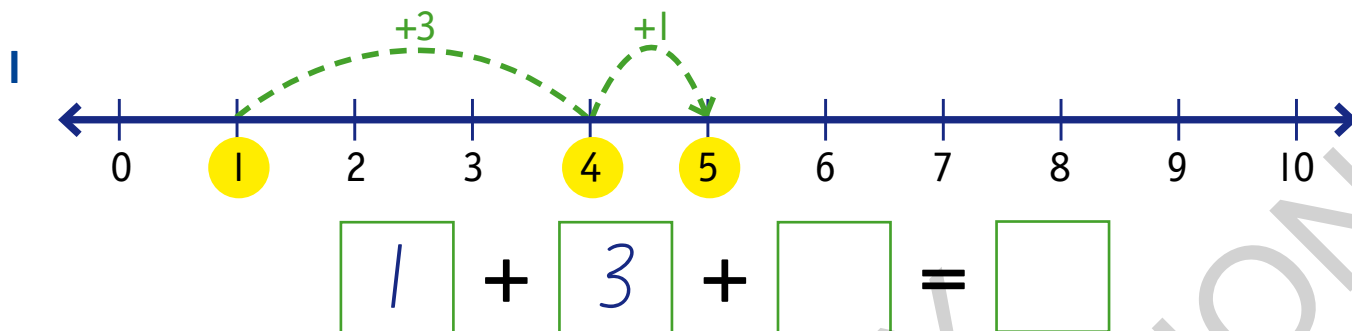


$$12 + 5 = \square$$

Adding 3 numbers on a number line

TERM 1
Week 3

Count the jumps. Complete the number sentences.



1 Find each missing number.

$$\square + 10 = 10$$

$$0 + \square = 10$$

$$\square + 9 = 10$$

$$1 + \square = 10$$

$$\square + 8 = 10$$

$$2 + \square = 10$$

$$\square + 7 = 10$$

$$3 + \square = 10$$

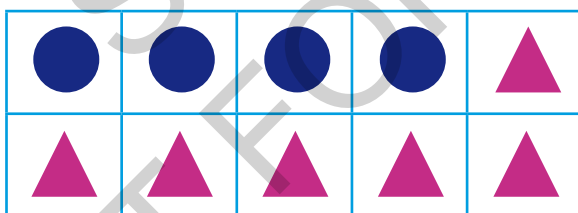
$$\square + 6 = 10$$

$$4 + \square = 10$$

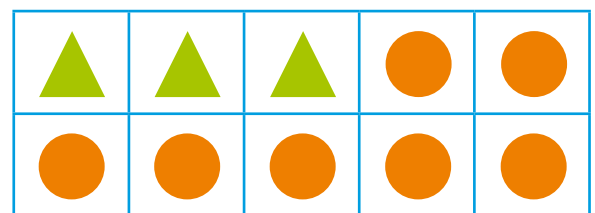
$$\square + 5 = 10$$

$$5 + \square = 10$$

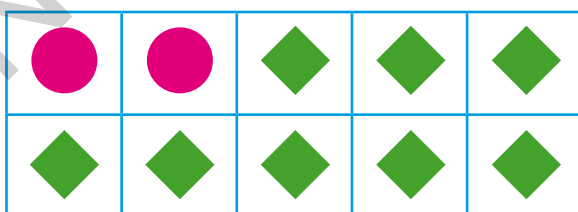
2 Write the matching equation.



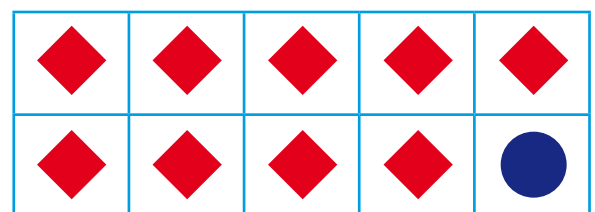
a $4 + \underline{\quad} = 10$



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.

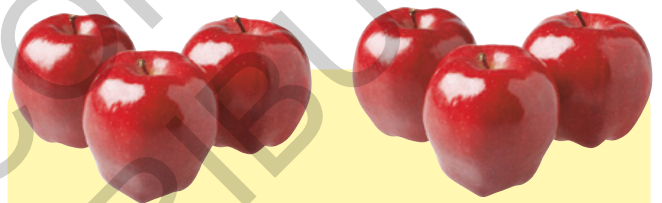


2 Write the double.



Double 4 is

2 groups of 4 =



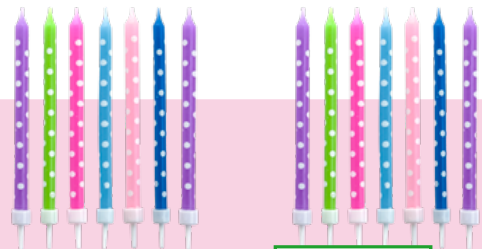
Double 3 is

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?

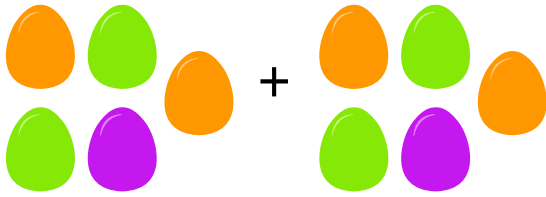


• \$1



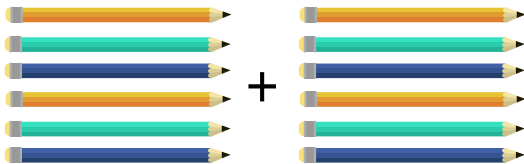
Write the missing numbers.

1



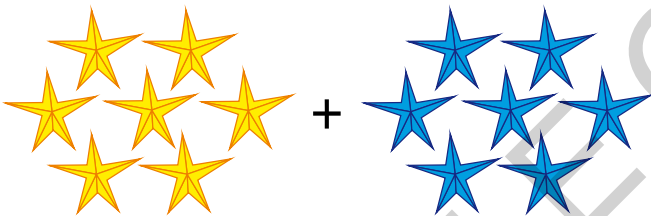
$$5 + 5 = \square$$

2



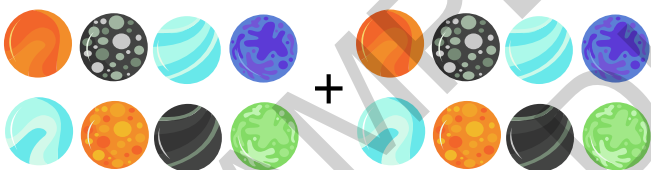
$$\square + 6 = \square$$

3



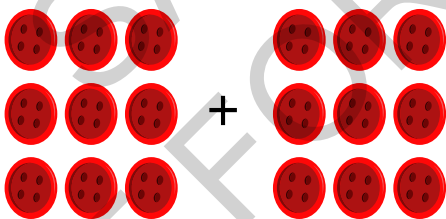
$$\square + \square = 14$$

4



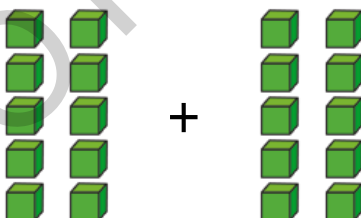
$$\square + \square = 16$$

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



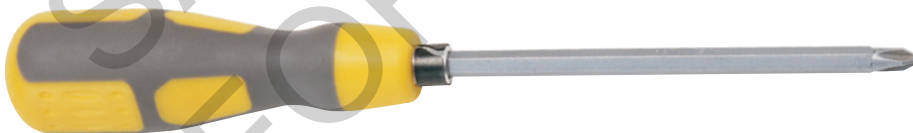
1 Find something that fits in this box.

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?

We measure longer lengths in metres.

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

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

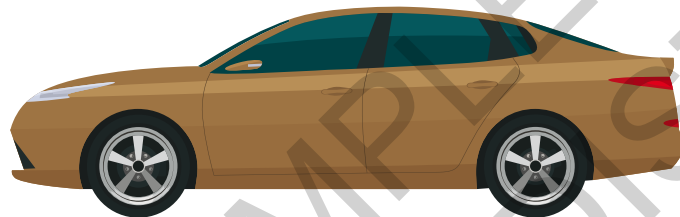


a



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

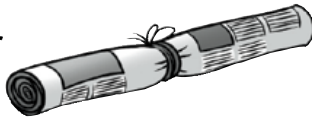


1 Make a metre long measure.

Use



or



or



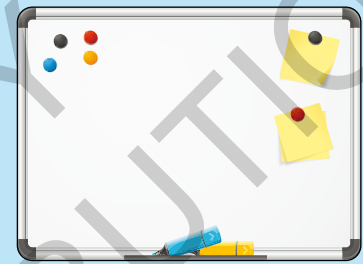
2 Use it to measure the following. Match each to a label.



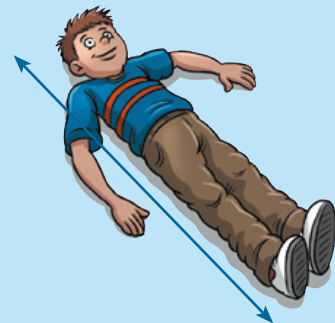
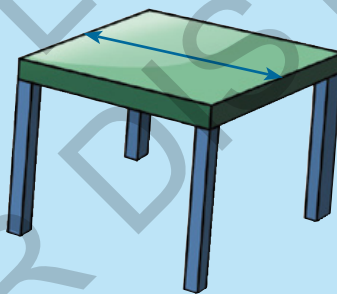
shorter than
1 metre



about
1 metre



longer than
1 metre



3 Measure other things.

shorter than 1 metre	about 1 metre	longer than 1 metre

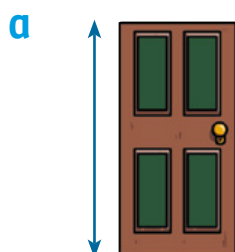
Challenge! Find something that is half a metre long.



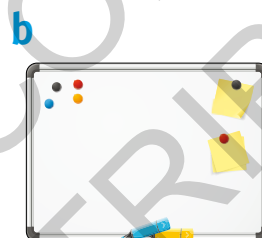
The tiger is about **3 metres** long.



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



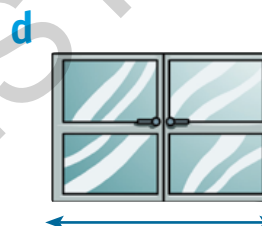
about metres
 metres



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	



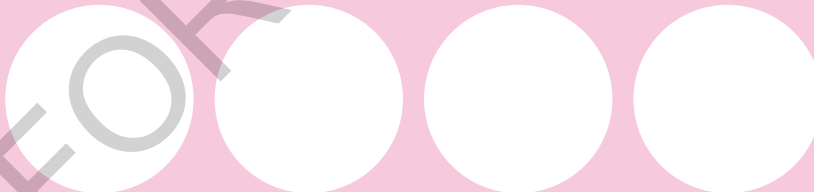
•	C
fifty	

2 Make 50c.

Use 3 coins.



Use 4 coins.



Use 5 coins.



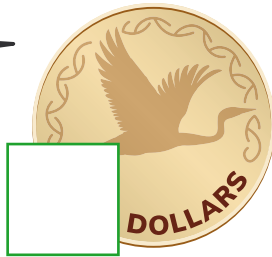
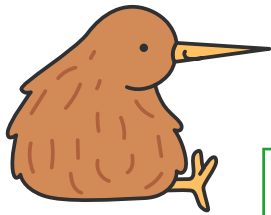
Challenge! How many ways can you make \$1?

--

1 Write the missing numbers.

New Zealand dollars

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



2 How many dollars?



\$



\$



\$



\$



\$



\$

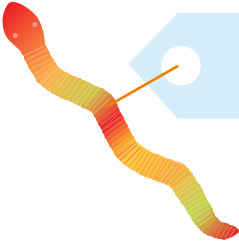
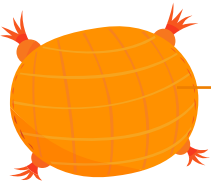
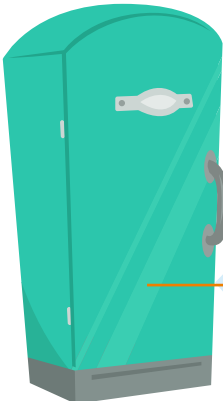
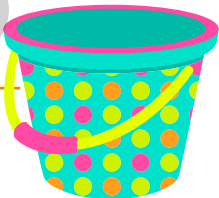
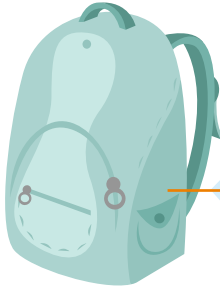
Mastery Checklist

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



Match.

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

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

Central money items (from top to bottom):

- 10c coin
- 20c coin
- 50c coin
- One dollar coin
- Two dollars coin
- 5 dollar note
- 10 dollar note
- 20 dollar note
- 50 dollar note
- 100 dollar note

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

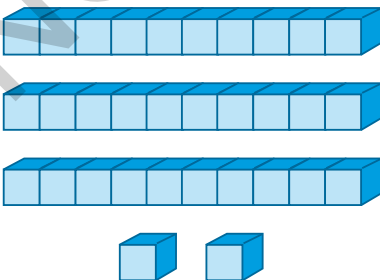
eighteen

eighty

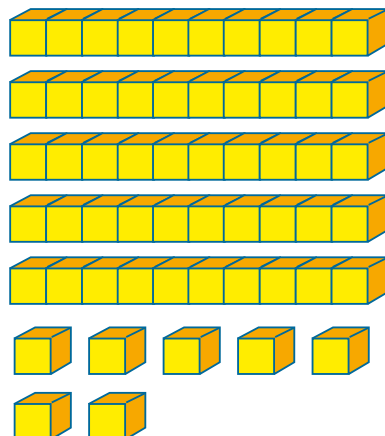
fifty-one

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

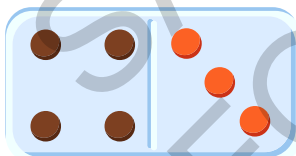
1 Find each missing number.

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



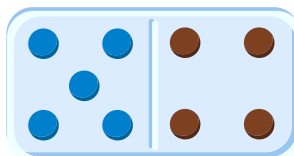
2

a



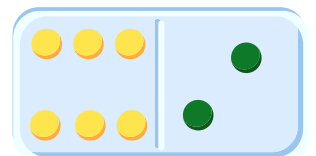
$$7 - 3 = \square$$

b



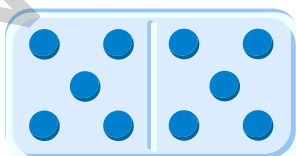
$$9 - 4 = \square$$

c



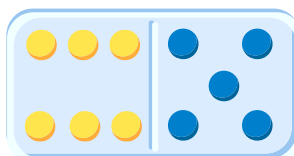
$$8 - 2 = \square$$

d



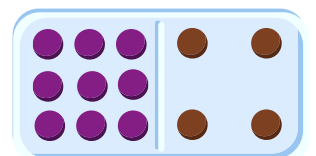
$$10 - 5 = \square$$

e



$$11 - 5 = \square$$

f

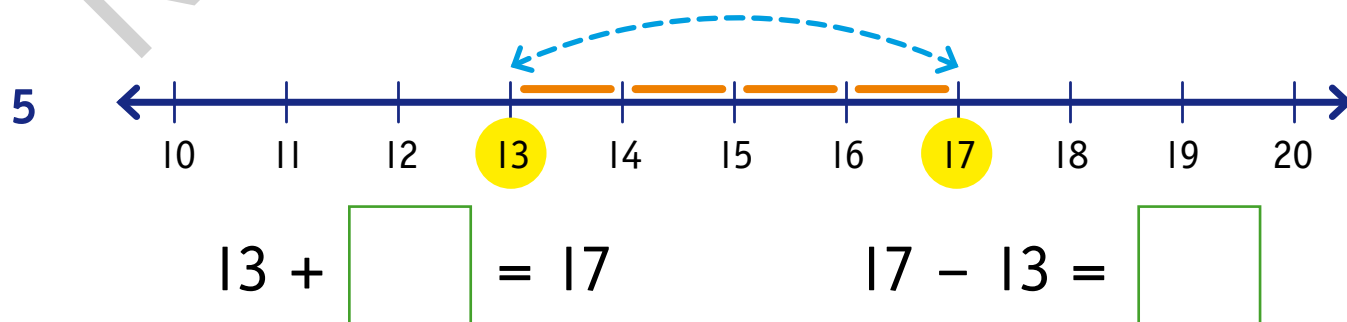
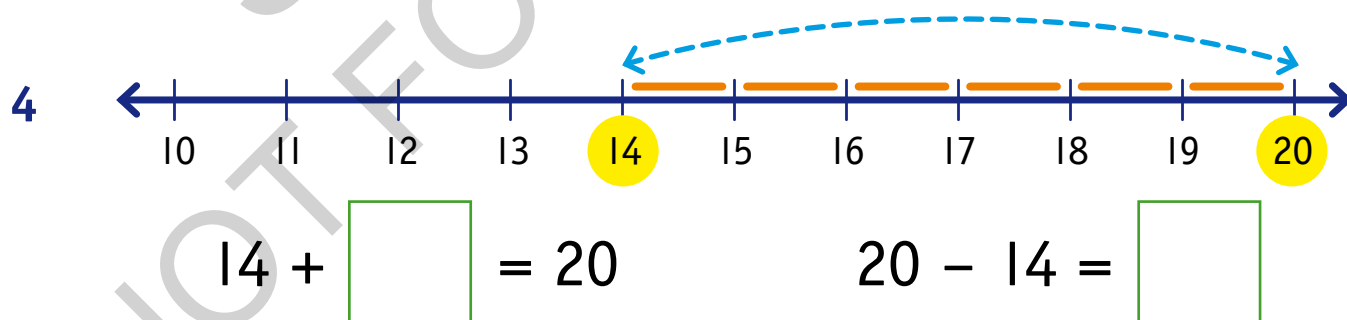
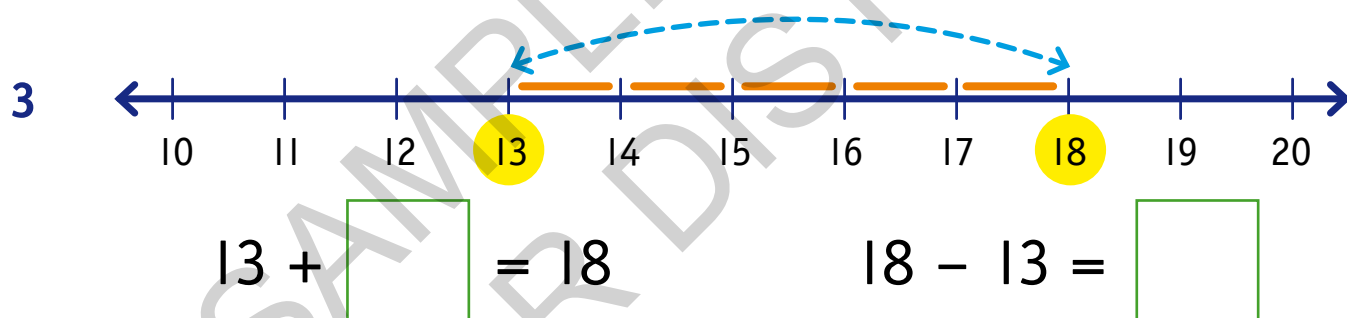
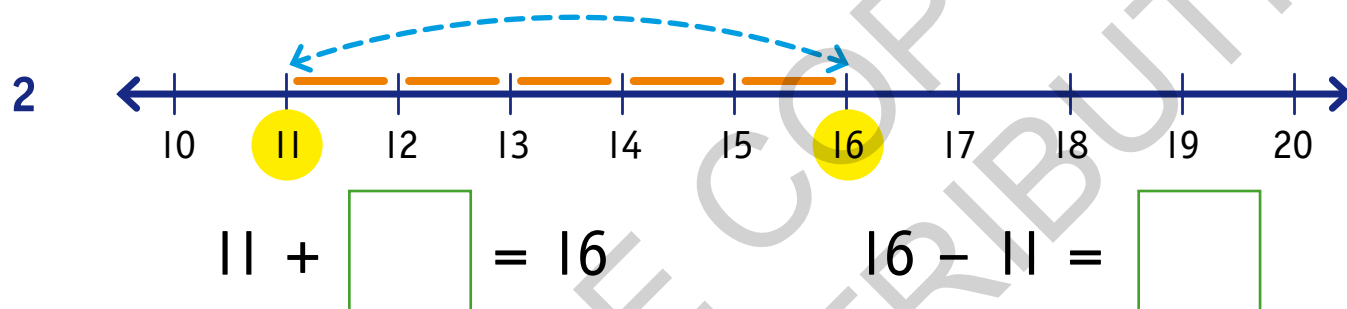
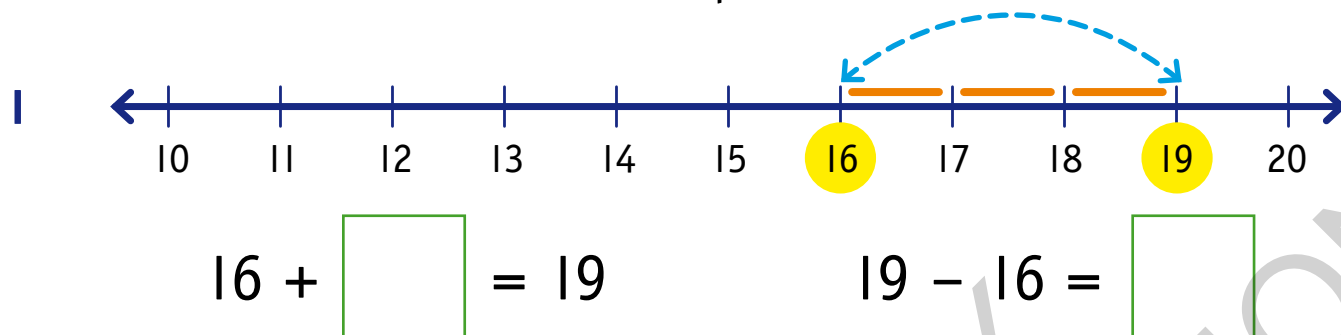


$$13 - 4 = \square$$

Add and subtract

TERM 1
Week 6

Use the number lines to solve the problems.



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

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



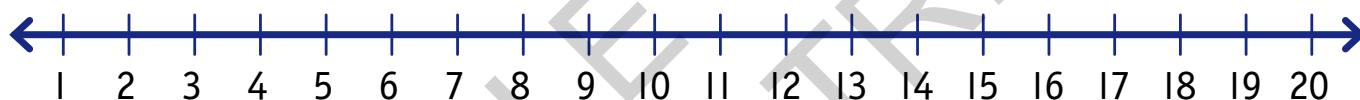
$$- \text{ (pot) } \$11 = \boxed{}$$



b



$$- \text{ (rolling pin) } \$14 = \boxed{}$$



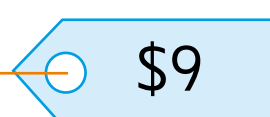
2 Find the change from \$20.

a



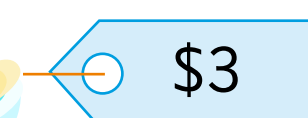
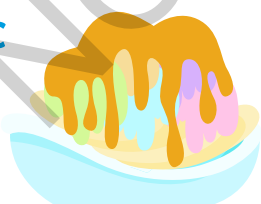
$$\$20 - \$5 = \boxed{}$$

b



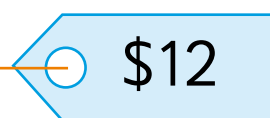
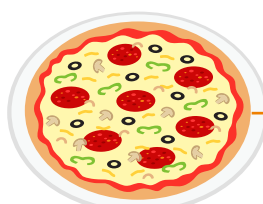
$$\$20 - \boxed{} = \boxed{}$$

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.

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

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

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

$7 + 7 = \square$

$5 + 5 = \square$

$9 + 9 = \square$

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

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

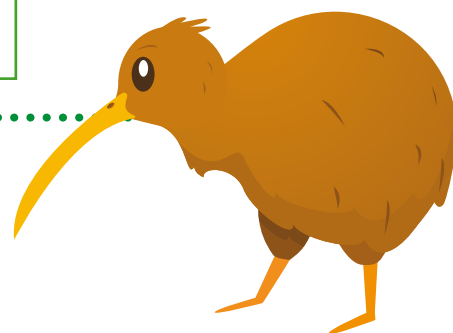
$\text{Half of } 20 = \square$

$10 + 10 = \square$

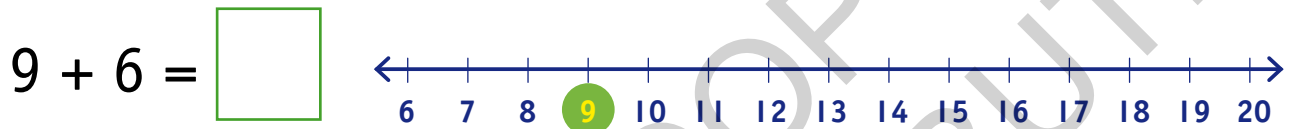
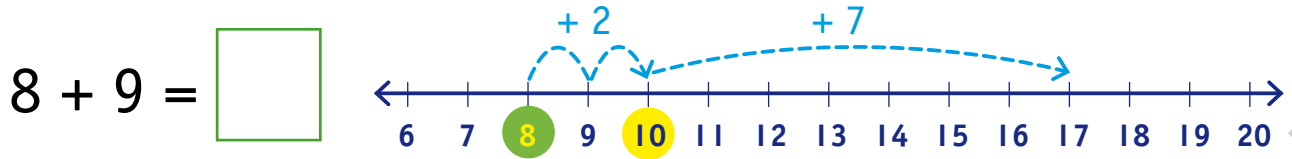
$\text{Half of } 18 = \square$

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.

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

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

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

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

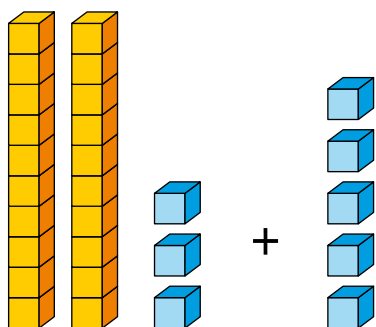
$$3 + 6 + 7 = \square + \square = \square$$

This makes adding easier!



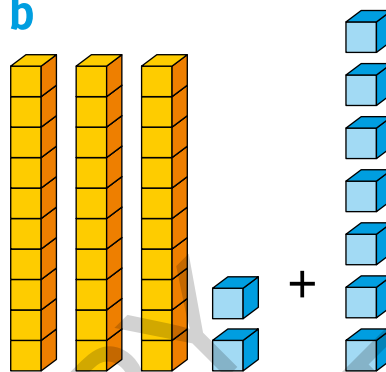
1 Add.

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

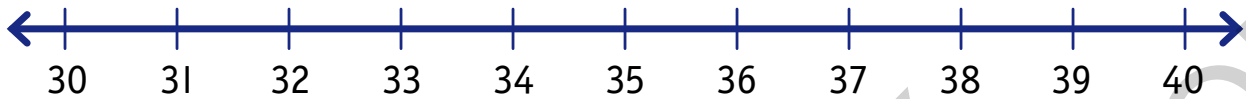
Adding to 2-digit numbers

TERM 1
Week 7

1 Count on to add.

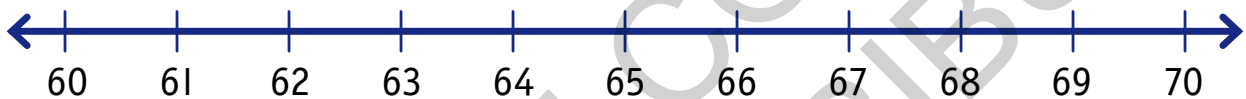
a $34 + 3 =$

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

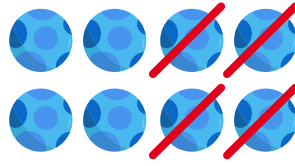
Mastery Checklist

- 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.



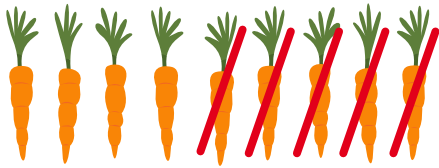
$$5 - 1 = \square$$



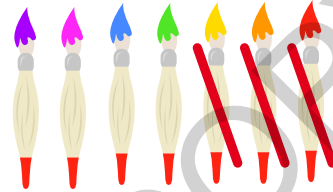
$$8 - 4 = \square$$



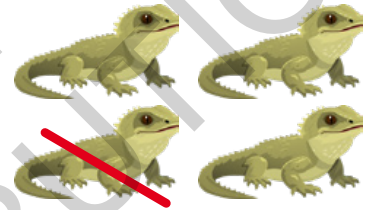
$$6 - 3 = \square$$



$$9 - 5 = \square$$

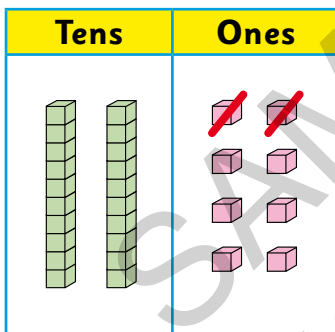


$$7 - 3 = \square$$

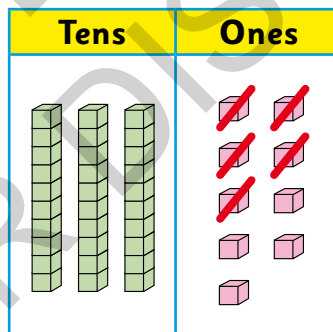


$$4 - 1 = \square$$

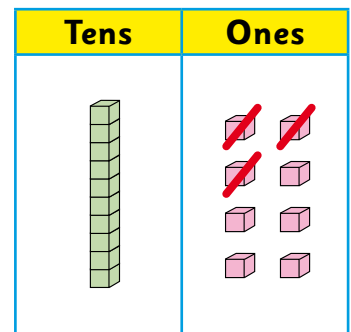
2 Subtract.



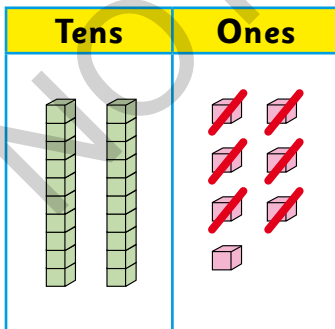
$$28 - 2 = \square$$



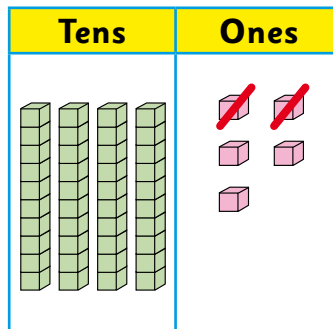
$$39 - 5 = \square$$



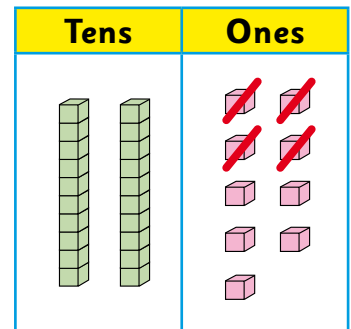
$$18 - 3 = \square$$



$$27 - 6 = \square$$

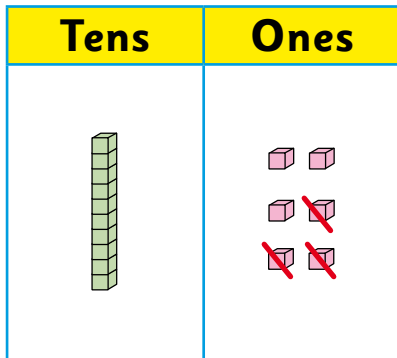


$$45 - 2 = \square$$

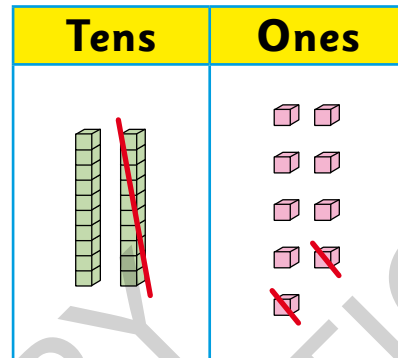


$$29 - 4 = \square$$

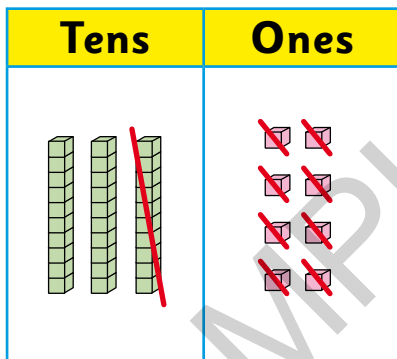
1 Complete the subtraction.



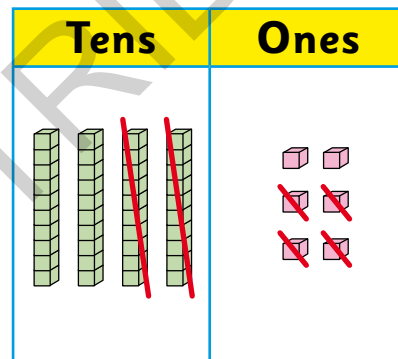
$$\boxed{16} - \boxed{3} = \boxed{}$$



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



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



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

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

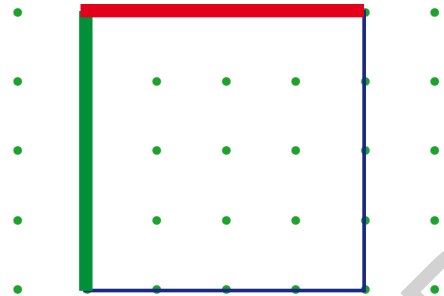
Week 8

I Draw the shape.

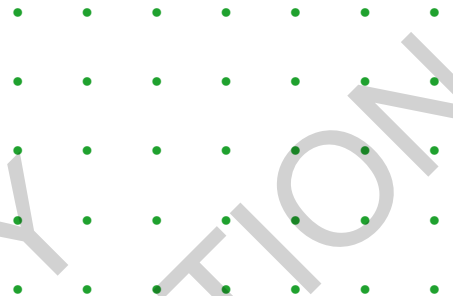


square
tapawhā rite

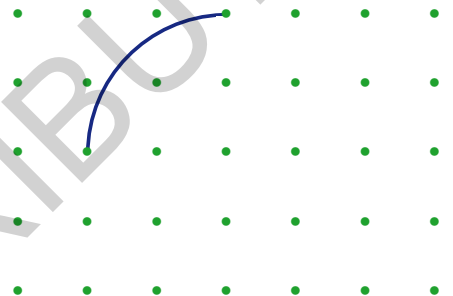
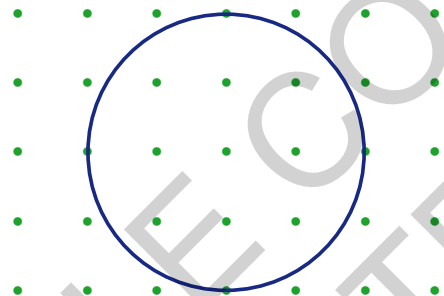
Colour vertical lines **green**. |
Colour horizontal lines **red**. —



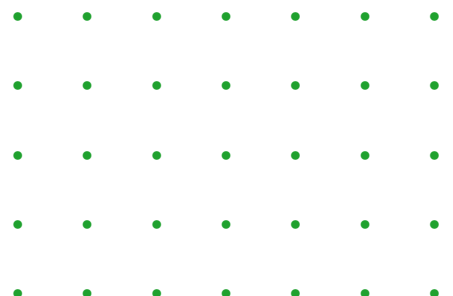
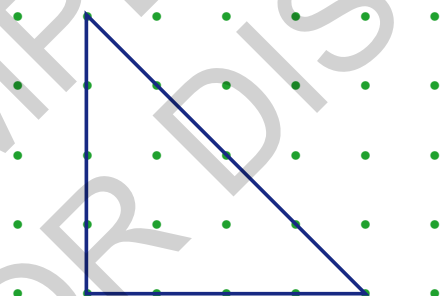
Draw the shape



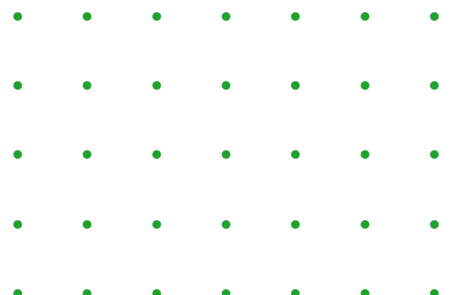
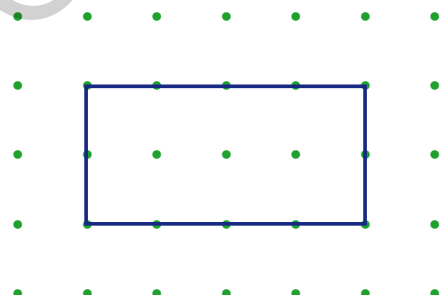
circle
porowhita



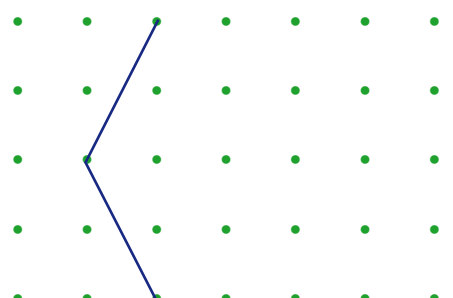
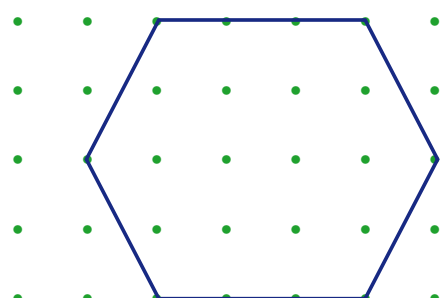
triangle
tapatoru



rectangle
tapawhā hāngai



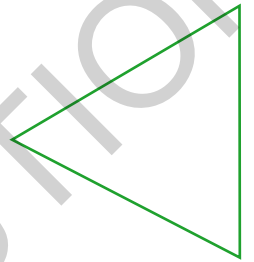
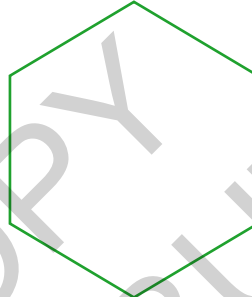
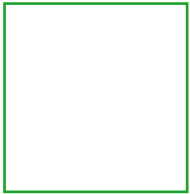
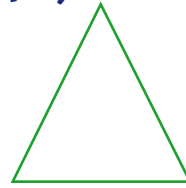
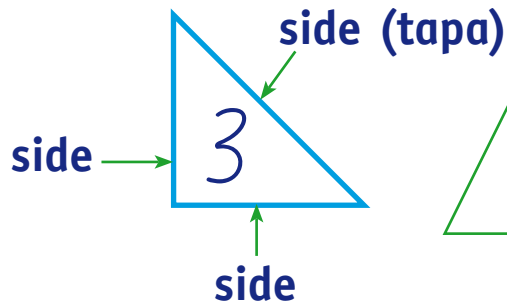
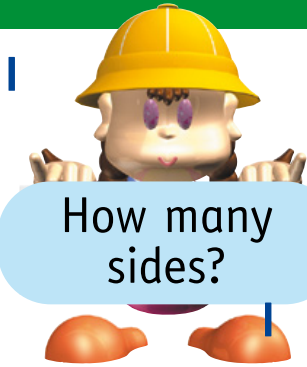
hexagon
tapaono rite



Sides and vertices

Quadrilaterals have
4 straight sides.

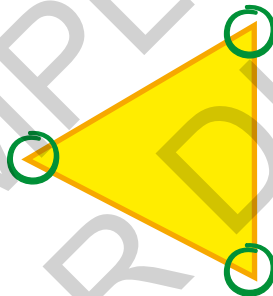
TERM 1
Week 8



2



Circle vertices. Count them.



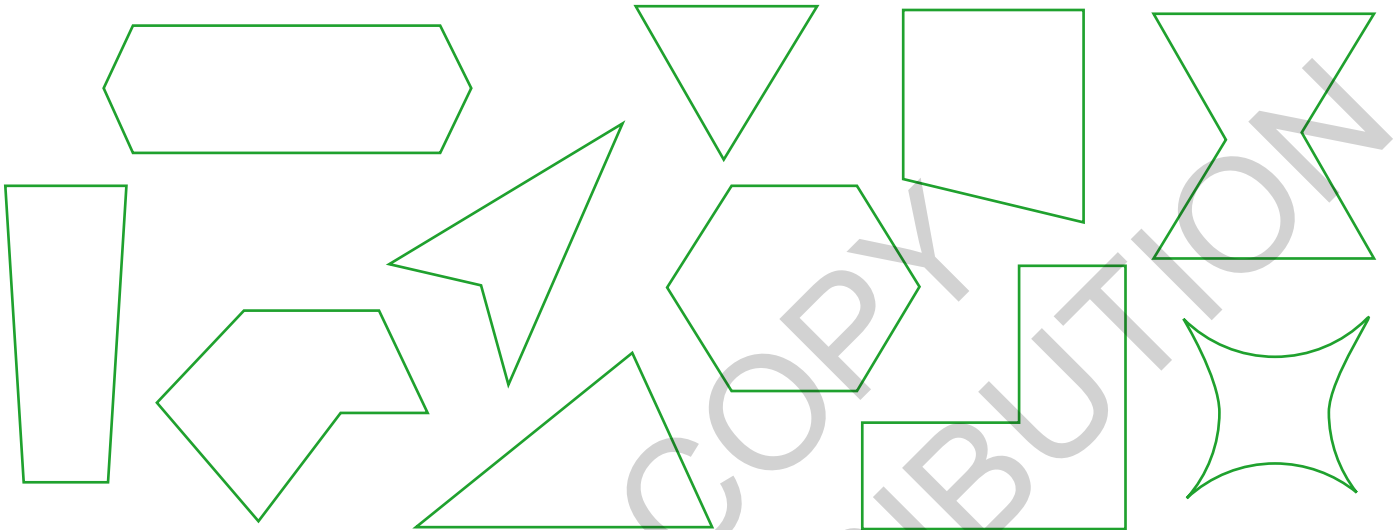
3

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

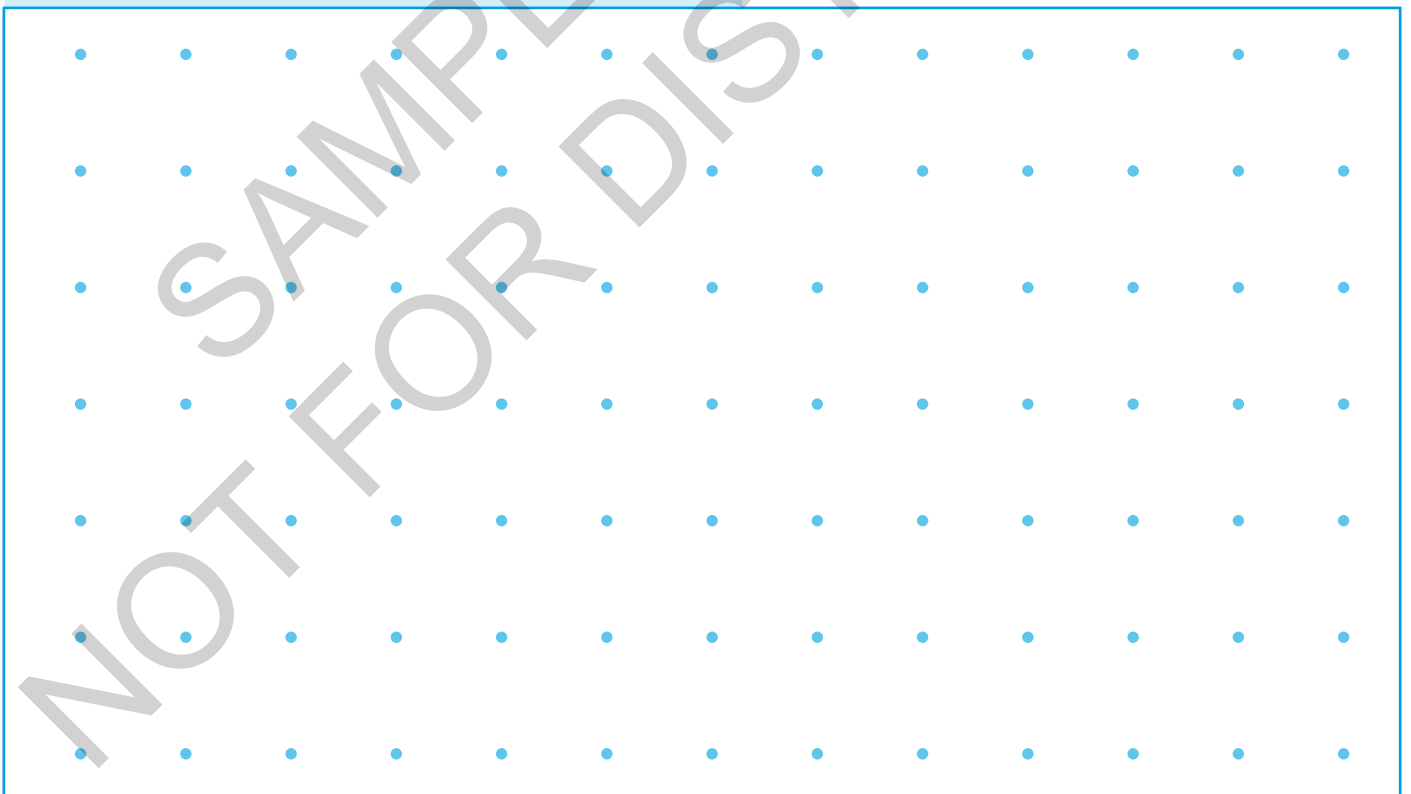
1 Colour the hexagons.



tapa = edge/side
ono = six



2 Draw four different hexagons.

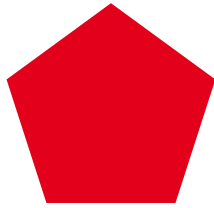


Challenge! Parallel lines are like train tracks. They are straight lines that never meet. Find the parallel lines on this page. Draw over them in red.



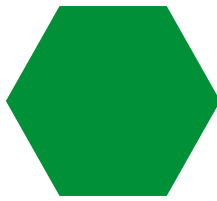
1

taparima



pentagon

tapaono rite



hexagon

tapawaru



octagon

Polygons are
2D shapes with
straight sides.

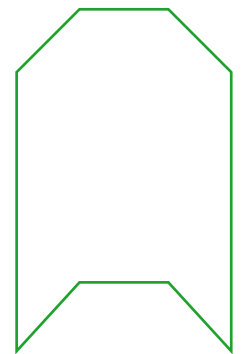
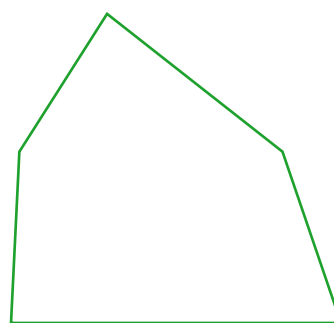
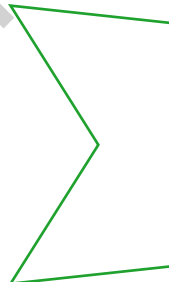
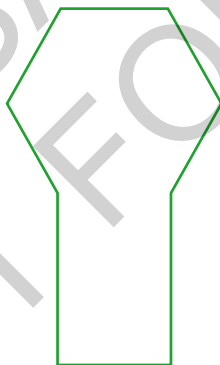
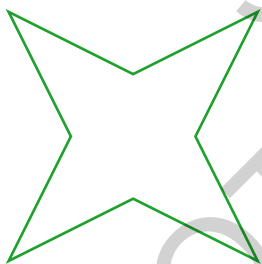
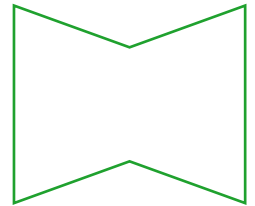
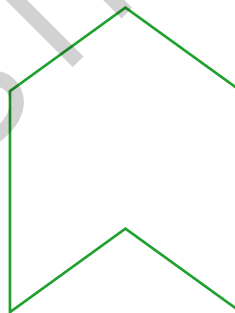
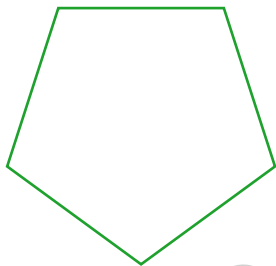
Sides:
(tapa)

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

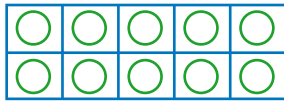
Te reo Māori numbers

toru tekau → three tens
kotahi rau → one hundred

TERM 1
Week 9

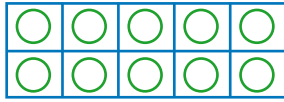
1 Colour the correct number.

1



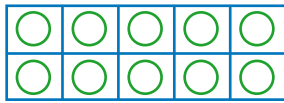
tahi

2



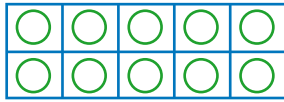
rua

3



toru

4



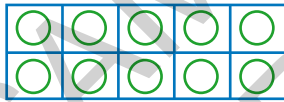
whā

5



rima

6



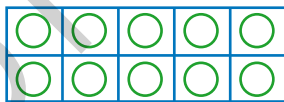
ono

7



whitu

8



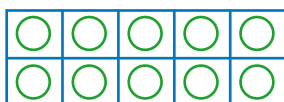
waru

9



iwa

10



tekau

2 Write the number in te reo Māori.

10

20

30

40

50

60

70

80

90

100

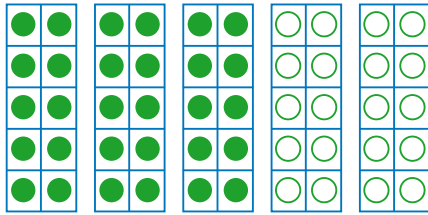
Te reo Māori numbers to 50

TERM 1
Week 9

1 Colour the correct number.

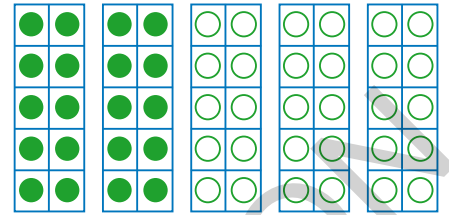
tekau → ten
tekau mā rima → ten and five
toru tekau → three tens

31



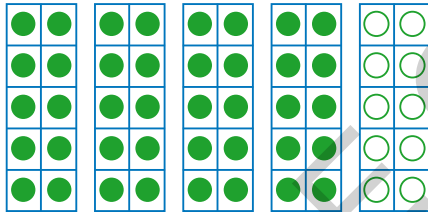
30 + _____
toru tekau mā tahi

26



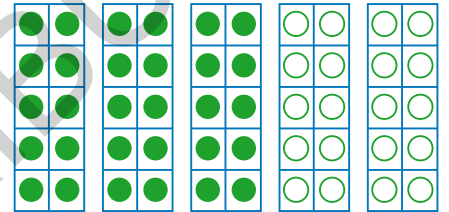
20 + _____
rua tekau mā ono

43



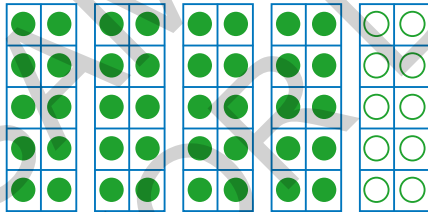
40 + _____
whā tekau mā toru

37



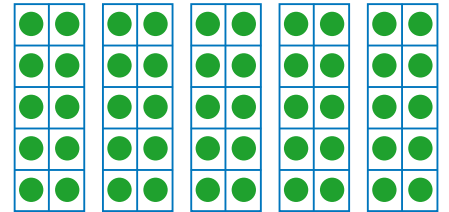
30 + _____
toru tekau mā whitu

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

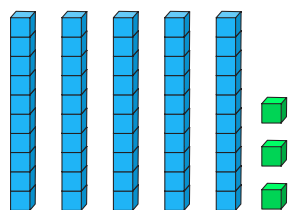
whā tekau

Counting to 100: Te reo Māori

TERM 1
Week 9

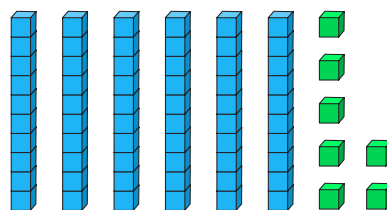
tekau mā rima → ten and five
whitu tekau → seven tens
kotahi rau → one hundred

1 Complete.



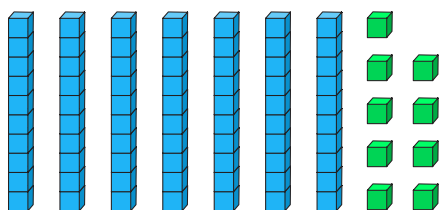
50 + _____

rima tekau mā _____



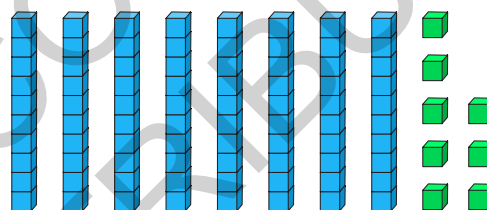
60 + _____

ono tekau mā _____



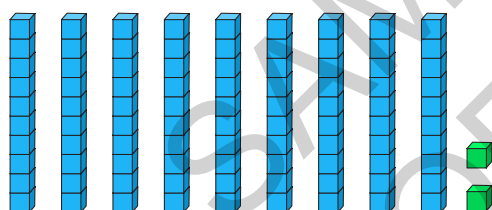
70 + _____

whitu tekau mā _____



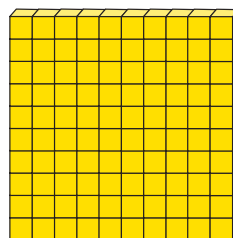
80 + _____

waru tekau mā _____



90 + _____

iwa tekau mā _____



2 Match.

waru tekau mā iwa

whitu tekau mā rima

61

75

89

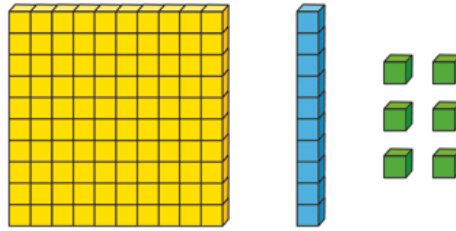
94

iwa tekau mā whā

ono tekau mā tahi

Checkpoint 2

1 How many?

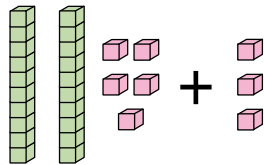


a _____ hundred _____ tens _____ ones

b _____ + _____ + _____ = _____

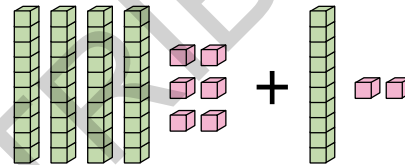
2 Write both numbers. Add them together.

a



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

b



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

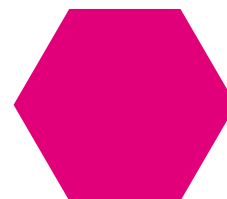
3 Name each shape. How many vertices?

a



--	--

b



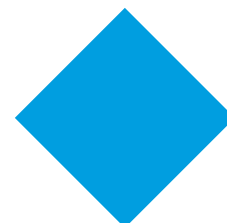
--	--

c



--	--

d



--	--

Checkpoint 2

4 Write the numbers.

whitu _____

ono _____

toru tekau _____

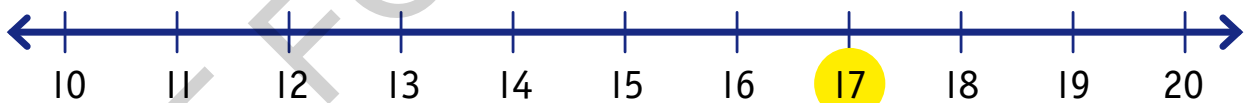
rima tekau mā tahi _____

5 How long is each line?





6 Subtract.



$$17 - 6 = \square$$

7

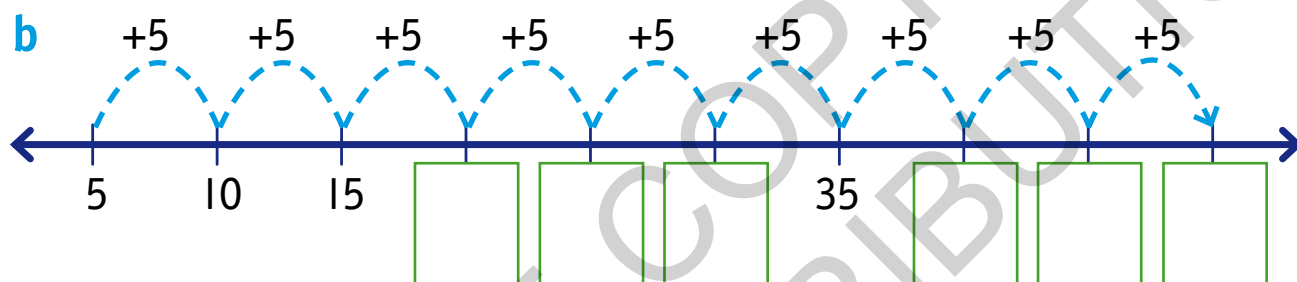
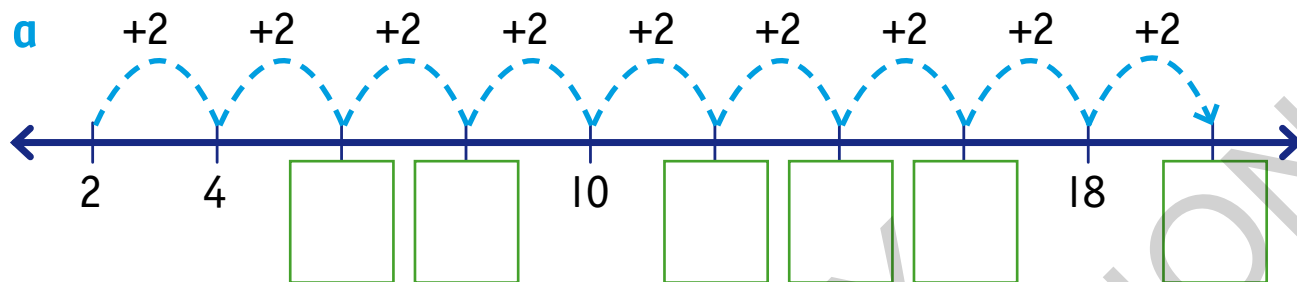
$$10 - 7 = \square$$

$$20 - 4 = \square$$

$$10 - 4 = \square$$

$$20 - 9 = \square$$

1 Complete the skip counting number lines.



2 Write the missing numbers.

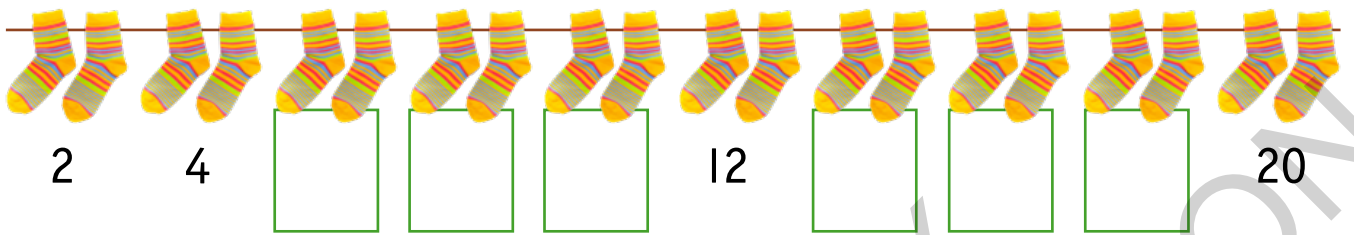


Multiply $\times 2$

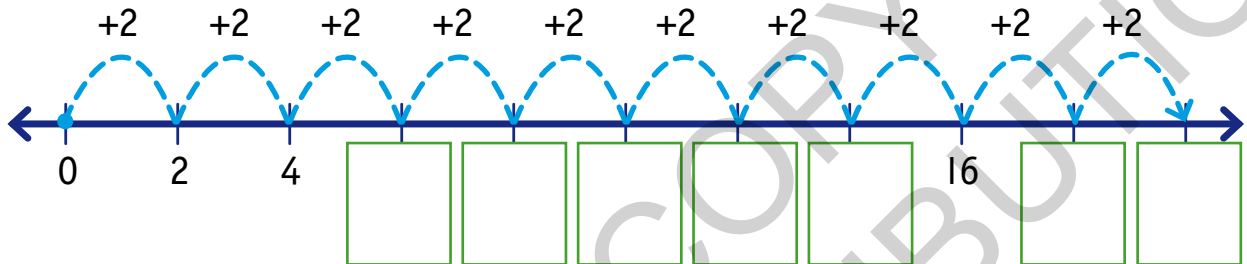
TERM 2
Week 1

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

$$11 \times 2 = \square$$

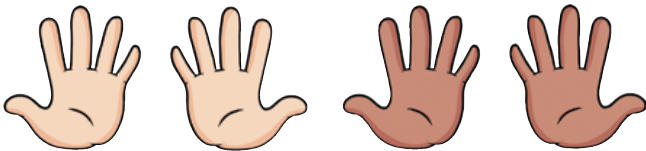
Counting in fives

TERM 2
Week 1

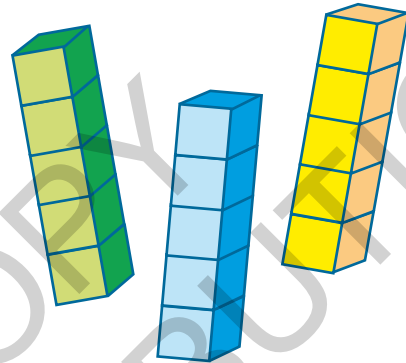
0	5	10	15	20	25	30	35	40	45	50
---	---	----	----	----	----	----	----	----	----	----

Count in 5s to find how many.

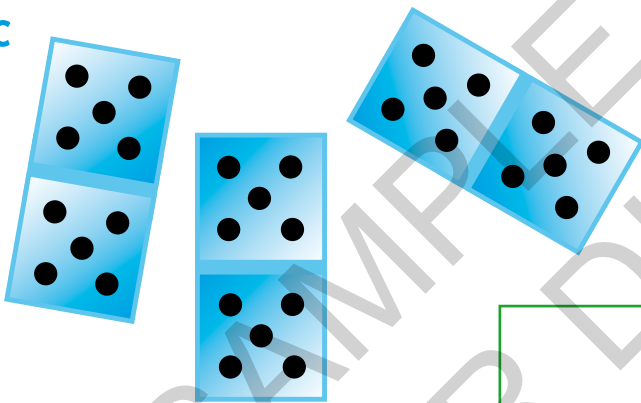
a



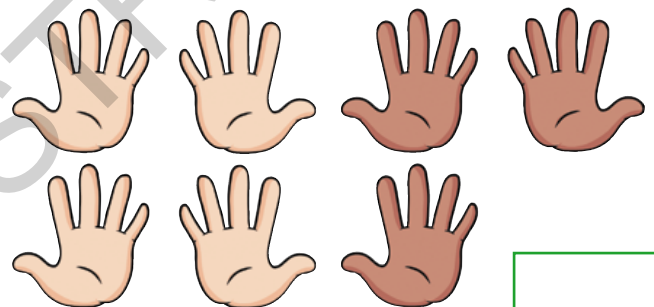
b



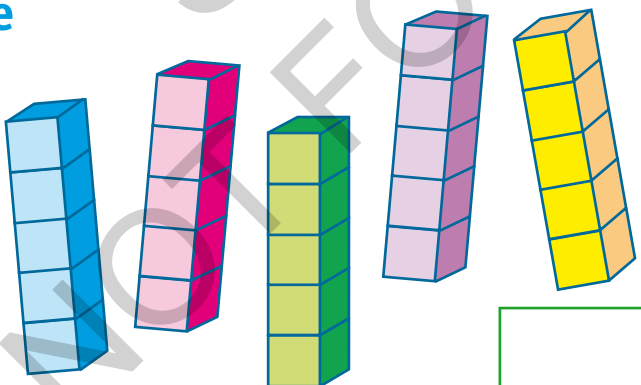
c



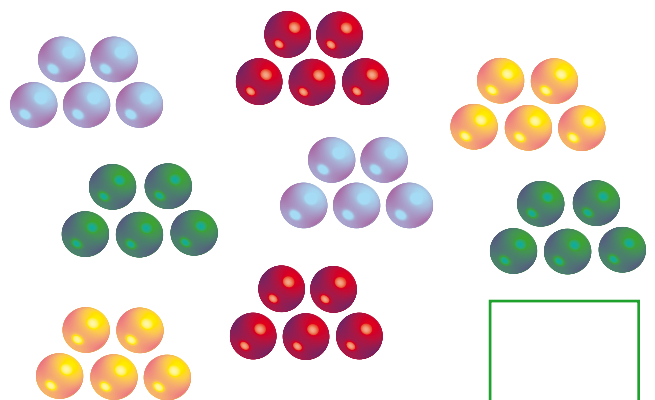
d



e



f



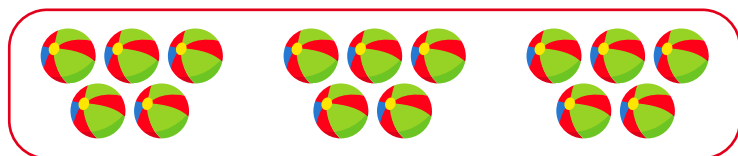
Challenge!

50 55 65 80 90 100

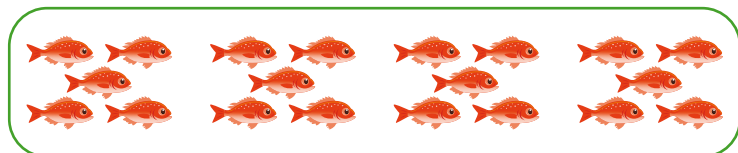
Multiplying groups

TERM 2
Week 1

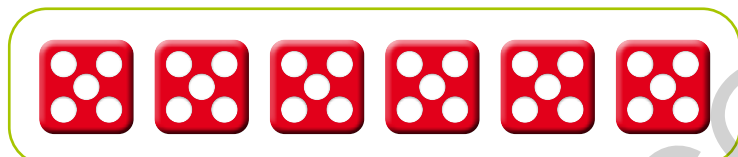
1 Match each group with its number sentence.



$4 \times 5 = \square$



$3 \times 5 = \square$



$6 \times 5 = \square$



$2 \times 5 = \square$



$5 \times 5 = \square$

2 Find the answer. Draw groups to help.

a

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

b

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

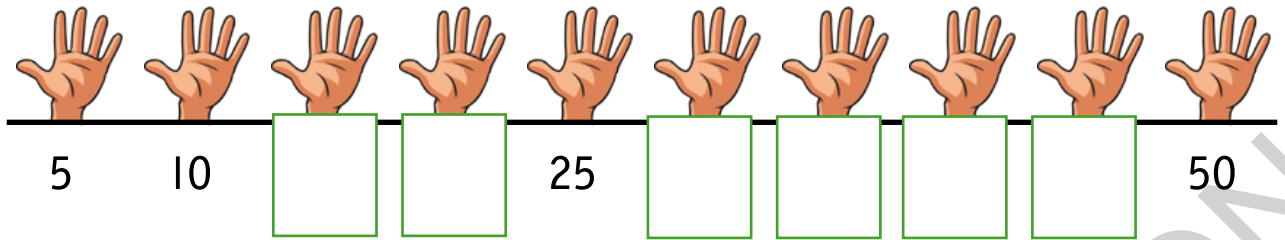
c

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

d

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

1 Count by 5s.



2 a

$$5 + 5 = \square$$

$$2 \times 5 = \square$$

b

$$5 + 5 + 5 = \square$$

$$3 \times 5 = \square$$

c

$$5 + 5 + 5 + 5 = \square$$

$$4 \times 5 = \square$$

d

$$5 + 5 + 5 + 5 + 5 = \square$$

$$5 \times 5 = \square$$

e

$$6 \times 5 = \square$$

f

$$7 \times 5 = \square$$

g

$$8 \times 5 = \square$$

h

$$9 \times 5 = \square$$

i

$$10 \times 5 = \square$$

j

$$0 \times 5 = \square$$

3 How many 5s in

$$50? \square$$

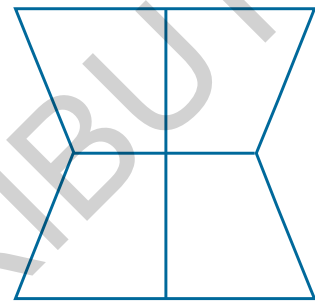
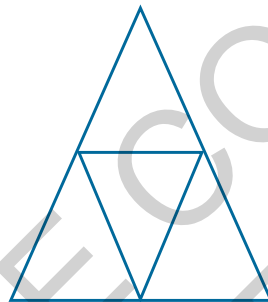
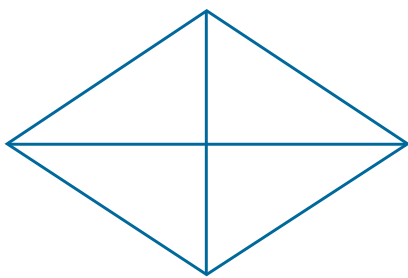
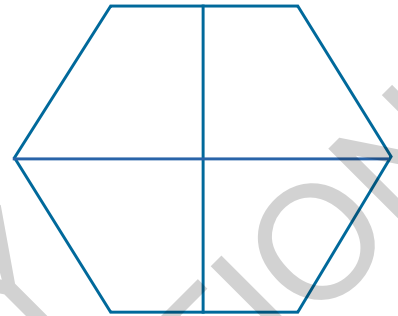
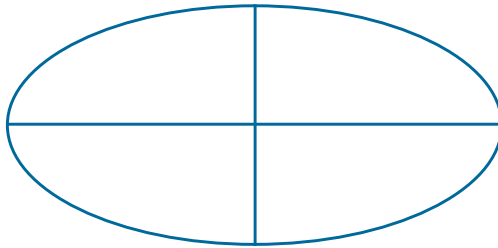
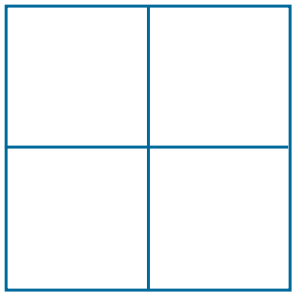
$$40? \square$$

$$25? \square$$

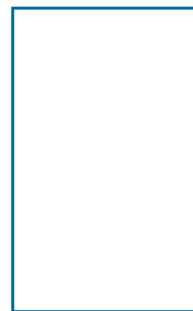
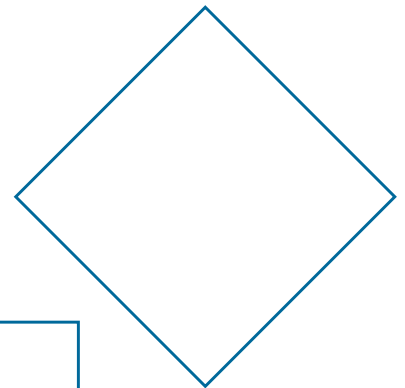
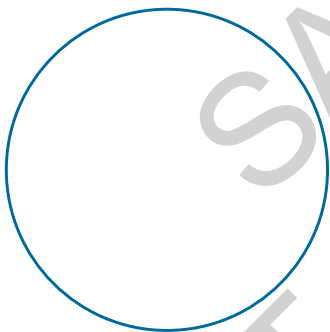
Mastery Checklist

- 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.

