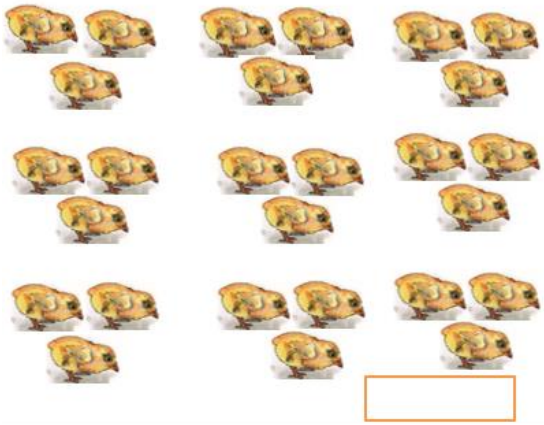
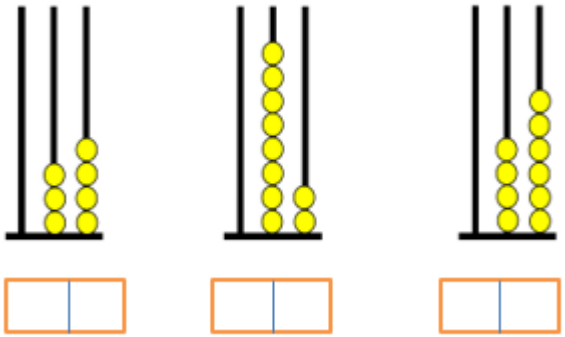
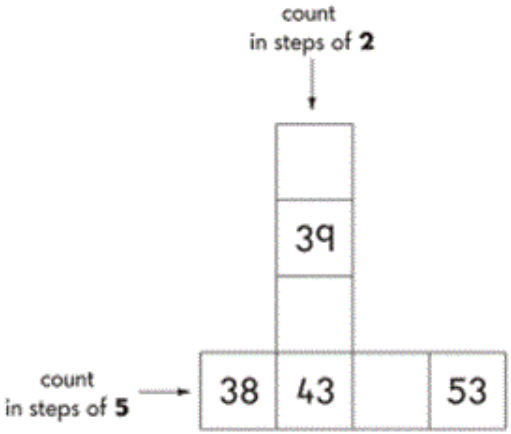
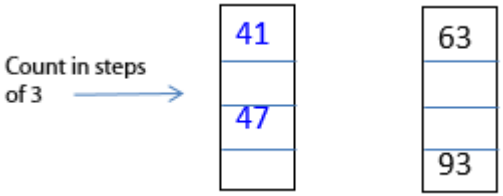
Maths Curriculum Map Year 2

	Autumn	Spring	Summer
Number and place value **Vocabulary:** number, zero, one, two, three… to twenty and beyond zero, ten twenty… one hundred, two hundred… one thousand none, count on/up/to /from/down before, after more, less, many, few, fewer, fewest, smaller, smallest, equal to, the same as,	• Count in steps of 2 and 5 from 0, and in tens from any number, forward or backward How many chicks are there? Count in threes.  • Recognise the place value of each digit in a two-digit number (tens, ones) Write down the amount the abacus shows: 	• Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward *Write the missing numbers in the patterns*   • Recognise the place value of each digit in a two-digit number (tens, ones)	• Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward *Write the missing numbers in these sequences:* 13 23 ☐ 43 ☐ ☐ 73 ☐ ☐ ☐ 45 48 ☐ ☐ 57 ☐ ☐ ☐ ☐ Fill in the missing numbers: 93 83 ☐ 63 ☐ ☐ ☐ 23 ☐ *Count back 6 from 47? Count back 7 from 59* *Count back 9 from 87? Count down in tens from 87 to 37* • Recognise the place value of each digit in a two-digit number (tens, ones)

odd, tally, even, digit, numeral, compare, order seize, value between, halfway between, pattern greater, lesser, pair, ones, tens, ten more/less, figure(s), in order/ a different order above, below, partition, recombine, hundred more, hundred less ones, tens, digit, place value, stand, stand for, compare, order, largest, first, second, third…tenth … twentieth,

- identify, represent and estimate numbers using different representations, including the number line

Look at these numbers:

37 12 45 60 72 27

Which of these numbers is the largest?
Which of these numbers is between 10 and 20?

Count the tally marks. What number is shown?

- compare and order numbers from 0 up to 100

- read and write numbers to at least 100 in numerals and in words

Which is more: 23p or 35p

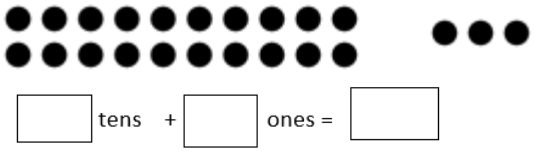
Which is more: 31p or 26p

Which is less: 64p or 28p

Which is less : 61p or 29p

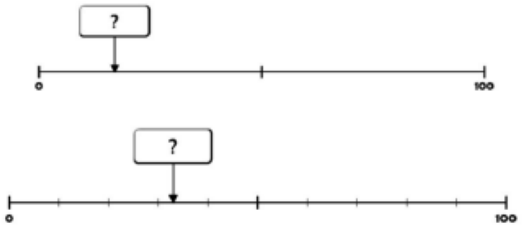
What numbers can you make using two of these digits: 3, 6, 0?

Count the dots. Then fill in the missing numbers:



identify, represent and estimate numbers using different representations, including the number line

Estimate numbers on the number line.



- compare and order numbers from 0 up to 100; use <, > and = signs

What number is half way between 15 and 25 ?

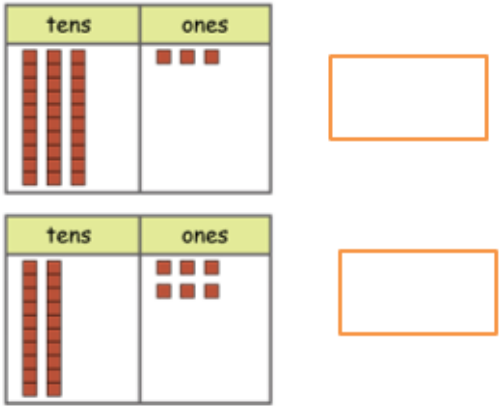
What number is half way between 19 and 29 ?

What number is half way between 21 and 27 ?

What number is half way between 11 and 29 ?

- read and write numbers to at least 100 in numerals and in words

Count the number of tens and ones. Write down the number.



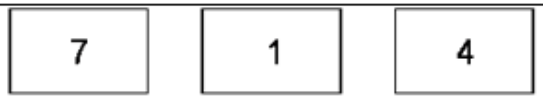
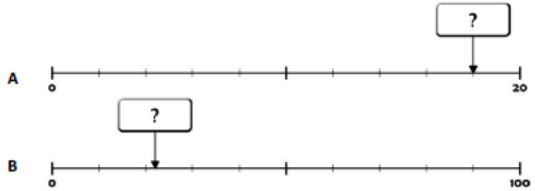
- identify, represent and estimate numbers using different representations, including the number line

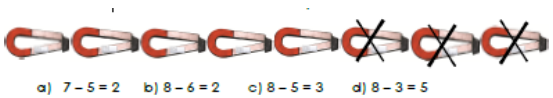
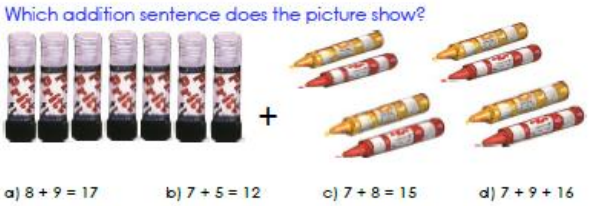
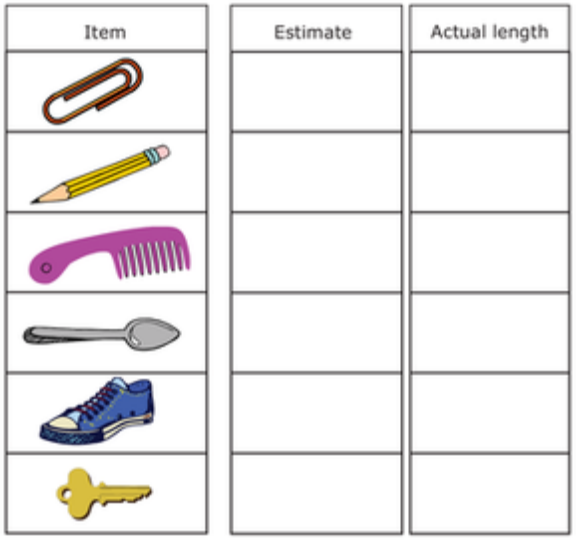
Look at the squares of chocolate

There are 16 squares

Tick[✔] the sum that matches the picture

5+2+9=16
5+6+5=16
6+6+4=16
6+2+8=16
8+3+5=16

before, after, between, halfway between	*Write down each number you make. Read those numbers to me. Can you write the largest of the numbers in words?* • use place value and number facts to solve problems. Counting and writing tens and units 	• use place value and number facts to solve problems.  Write the lowest number. • use place value and number facts to solve problems. *Holly made a number using these digit cards.* *The hundreds digit is greater than 4 Holly's number is odd.* *What number did Holly make?*	• compare and order numbers from 0 up to 100; use <, > and = signs Which number line is pointing the bigger number?  • read and write numbers to at least 100 in numerals and in words *Circle the number that is closest to 300.* *338 3030 288 313 130* • use place value and number facts to solve problems. *Harry had 6 bundles of 10 straws and 7 single straws. How many straws did he have altogether?* Write down the value of the digits underlined in the numbers below. 143 264 377 503 625 725 814 547 881 628 703 899
Addition & Subtraction	• Solve problems with addition and subtraction	• Solve problems with addition and subtraction *What is 7 more than 43?* *What is the sum of 21 and 17?*	• Solve problems with addition and subtraction *Which two numbers can make 14?* *What three numbers can make 14?*

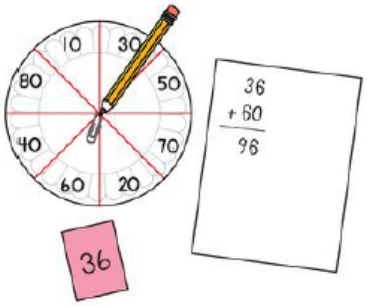
Vocabulary: add, more, plus, make, sum, total, altogether double, half, halves, equals, is the same (including equals sign), How many more to make…? How many more is… than…? How much more is…?, subtract, take away, minus, number bonds, inverse, near doubles, difference, between, How many fewer is…than…?, How much less is… ?, addition, subtraction,	*Add 5 and 24.* • Using concrete objects and pictorial representations *What subtraction sentence does the picture show?*  • recall and use addition and subtraction facts to 20 fluently **Add:** 12 + ☐ = 20 ☐ + 12 = 20 **Subtract:** 20 – 12 = ☐ 20 – ☐ = 12	• Using concrete objects and pictorial representations, including those involving numbers, quantities and measures  • recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 *Look at this number sentence:* *☐ + ☐ = 20.* *What could the two missing numbers be?* *What else?* *Can you tell me all the pairs of numbers that make 20?*	• Using concrete objects and pictorial representations, including those involving numbers, quantities and measures *Estimate the length of each item before you measure.*  Item / Estimate / Actual length • recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 • add and subtract numbers using concrete objects, pictorial representations, and mentally, including: - a two-digit number and ones - a two-digit number and tens - two two-digit numbers

one hundred more,
one hundred less

- add and subtract numbers using concrete objects and pictorial representations

Count on and back along a number-line

Adding tens to two digit numbers:



36 + 60 =
36 + 10 =
36 + 30 =
36 + 40 =
36 + 50 =
36 + 80 =
36 + 70 =

Subtracting:
96 – 30 =
96 – 40 =
96 – 60 =
96 – 80 =
96 – 70 =
96 – 20 =
96 – 50 =

- show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot

Write in the missing digits.

3	☐	+	☐	5	=	1	0	0

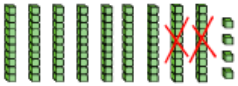
- add and subtract numbers using concrete objects, pictorial representations, and mentally, including:
  - a two-digit number and ones
  - a two-digit number and tens
  - two two-digit numbers
  - adding three one-digit numbers

Tens	Ones

72 – 50 = 22

	Tens	Ones
	3	7
–	1	2
	2	5

94 – 20 = 74



What number is 20 less than 79? What number is 20 more than 54?

- show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot

Add :

25 + 17 = ☐
34 + ☐ = 100
☐ + 71 = 94

57 + 9
39 + 46

12 + 9 + 28 = ☐
24 + ☐ + 17 = 100
3 + 56 + ☐ = 99

subtract:

89 – ☐ = 7
☐ - 15 = 74
62 – 47 = ☐

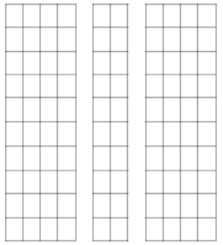
45 - 35
92 - 17

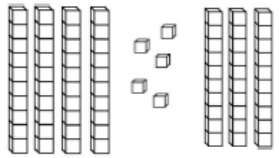
92 – 17 – 10 = ☐
☐ - 23 – 27 = 50

If you know this:
87 = 100 – 13
What other facts do you know?

- add and subtract numbers using concrete objects, pictorial representations, and mentally, including:
  - a two-digit number and ones
  - a two-digit number and tens
  - two two-digit numbers
  - adding three one-digit numbers

4 ten rods + 2 ten rods + 4 ten rods





☐ + ☐ + ☐ = ☐

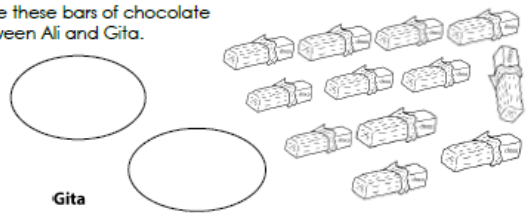
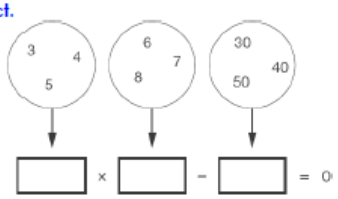
40 + 20 + 40 = 100

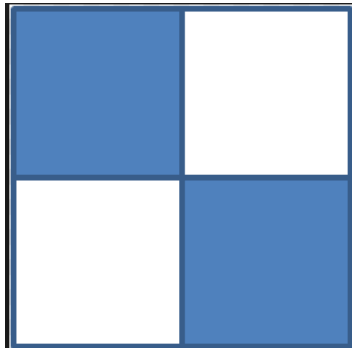
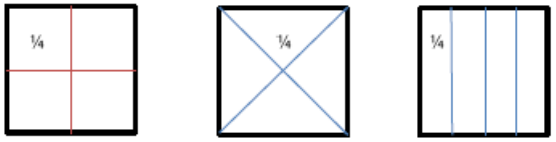
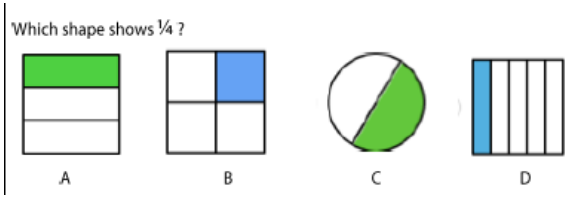
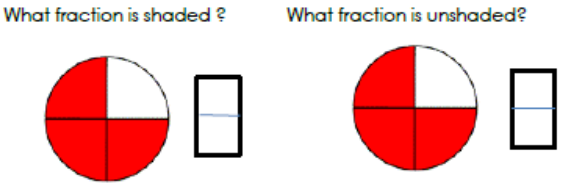
Take any three numbers. Add them up. What different totals can you make?

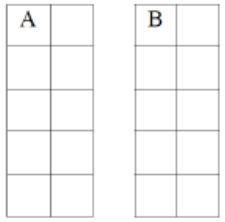
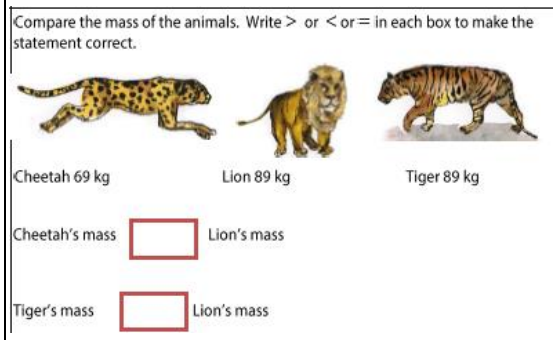
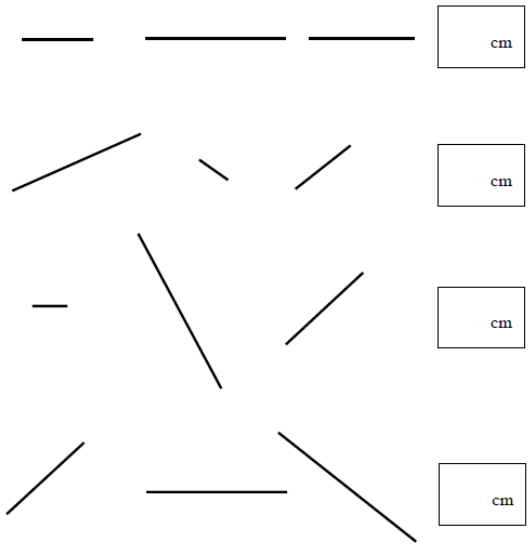
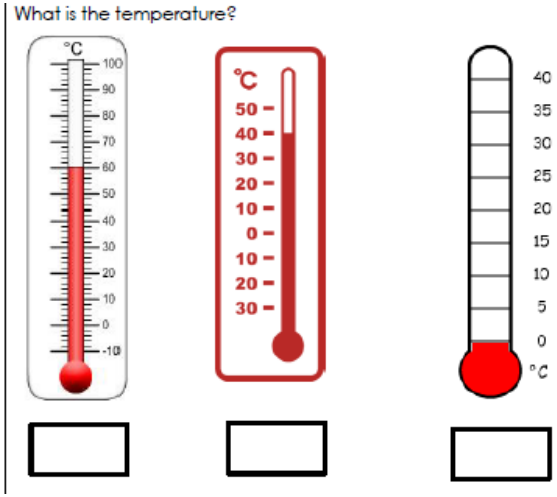
9 5 8 7

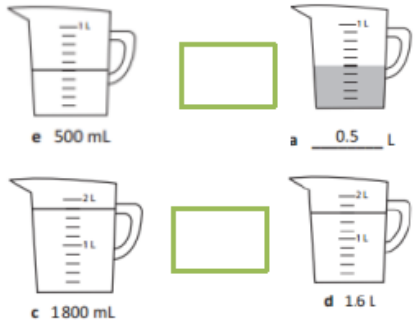
	Adding sums in different orders 23 + 49 = 72 49 + 23 = 72 • Recognise and use the inverse relationship between addition and subtraction 17 + 5 = 22 5 + 17 = 22 22 – 17 = 5 22 – 5 = 17	12 + 37 + 60 = 109 60 + 12 + 37 = 109 37 + 60 + 12 = 109 • Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. 45 + 32 = 77 Write the missing fact for this calculation. Write the missing number 28 + ☐ = 75	• show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot 45 + 28 = 73 28 + ☐ = 73 • Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. Can you make two addition numbers sentences and two subtraction number sentences from each of the following sets of numbers? 8 15 9 — 15 + 9 = 24; 9 + 15 = 24; 24 – 15 = 9; 24 –9 = 15 12 7 14 — ☐ 20 6 11 — ☐

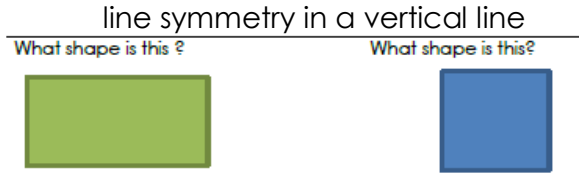
		77 – 32 = 45 Write the missing fact for this calculation. Write the missing number: 75 – ☐ = 28 75 – 47 = ☐	
Multiplication & Division **Vocabulary:** double , half, halves, share, share equally, group in pairs, equal groups, divide once, twice, three times, five times etc, count in tens (forwards from/	• recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers	• recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers There are 4 groups of 5 footballs. The multiplication number sentence will be : 4 x 5 = 20	• recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers • Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs

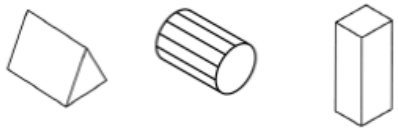
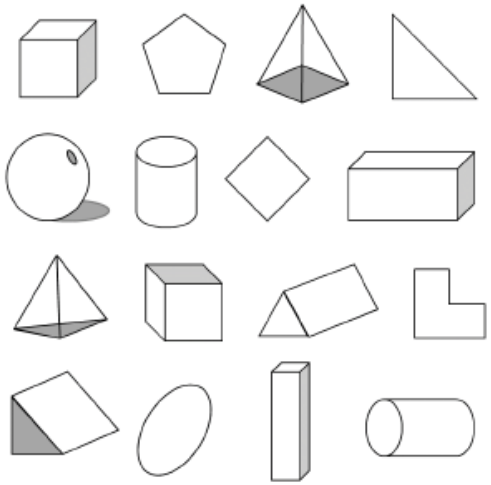
backwards from), How many times?, bts of, groups of, multiple of, times, multiply, multiply by, repeated addition, array, row, column, group in twos, threes etc, divided by, left, leftover	• Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs There are 3 groups of 7. How would you write this as a multiplication number sentence? Write the multiplicatipn number sentence shown here: Share these bars of chocolate between Ali and Gita. Ali Gita  • Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot	• Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs Show me 3 number facts for: 2 x 5 = 10 Find missing numbers or symbols in a calculation: 4 x ☐ = 20 ☐ ÷ 10 = 3 ☐ x = 60 10 x 10 = 90 ÷ ☐ = 9 13 x ☐ = 65 50 ÷ 5 = ☐ 30 x ☐ = 90 80 ÷ ☐ = 16 Multi, Subby and Divvy all like peaches. Share these peaches equally between them. • Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot	Anna has 3 boxes of cakes. Each box contains 5 cakes. How many cakes does she have altogether? Show how you worked this out. Write one number from each circle to make this calculation correct.  Dan had £15. Karl had twice as much. How much did Karl have? Ali's pencil is 5 cm long. Leo's is twice as long. How long is Leo's? • Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot Write the missing fact: 9 x 10 = 90 5 x 7 = 35 ☐ x ☐ = ☐ ☐ x ☐ = ☐

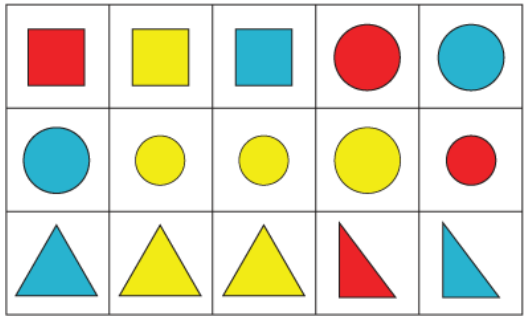
Fractions **Vocabulary:** numerator, denominator, whole, equal, one, half, equal parts, four equal parts, fraction, two halves, a quarter, two quarters, three quarters, one third, a third, equivalence, equivalent	• recognise, find, name and write fractions ¼, 2/4 and ½ of a shape or set of objects What fraction is this shape split into?  • write simple fractions e.g. ½ of 6 = 3  ¼ = ¼ = ¼	• recognise, find, name and write fractions 1 /3, ¼, 2/4 and ¾ of a length, shape, set of objects or quantity  Would you rather eat half of the cupcake or half of the chocolate cake? • write simple fractions e.g. ½ of 6 = 3 and recognise the equivalence of two quarters and one half Look at these fractions. Circle the two fractions that are equal. $\frac{1}{2}$ $\frac{1}{3}$ $\frac{2}{4}$ $\frac{3}{4}$	• recognise, find, name and write fractions 1 /3, ¼, 2/4 and ¾ of a length, shape, set of objects or quantity  • write simple fractions e.g. ½ of 6 = 3 and recognise the equivalence of two quarters and one half

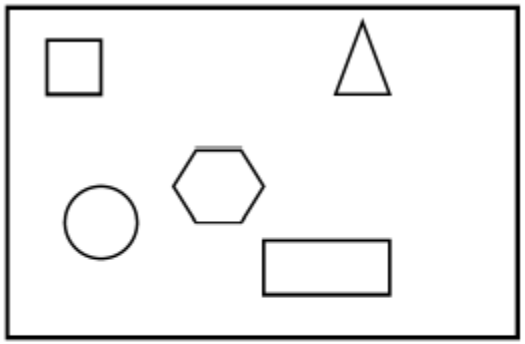
			Shade in half of shape A. Shade in five tenths of shape B What do you notice? 
Measurement **Vocabulary:** Seasons: spring, summer, autumn, winter Days of the week: Monday, Tuesday etc. today, yesterday, tomorrow, before, after, next, days, week, month,year, weekend, midnight, morning, afternoon, evening, night, bedtime, playtime, dinnertime, birthday, holiday, now, soon, early,late, scales, heavy, heavier, heaviest,	• choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); capacity (litres/ml) Which is a better estimate for the length of a bed? A) 2 metres B) 2 centimetres • compare and order lengths, mass, volume/capacity and record the results using >, < and =  	• choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) using rulers, scales, thermometers and measuring vessels What is the length of the longest line to the nearest whole centimetre?  	• choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels  A box of strawberries weighs 200 grams How much do two boxes weigh?

light,lighter, lightest, weigh, weighs, balance, estimate, too many, too few length, height longer, longest, shorter, shortest,taller, tallest, higher, highest quick, quicker, quickly, fast, slow, slower, old, older, oldest, new, newer, newest takes longer, takesless time, clock, hour, o'clock, half past, quarter past/to, watch, hands, How long ago? How long will it be to…? How long willit take to…? How often?, always, never, often, sometimes, usually, once, twice… first, second, third ect, close to, about thesame as, just over,just under, enough, not	• recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value • compare and sequence intervals of time tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times know the number of minutes in an hour and the number of hours in a day Match times to everyday events, e.g. match some pictures of daily events to some given clock faces showing their typical times. Compare times, e.g. sort some given times into a sequence from earliest to latest and draw hands onto corresponding clock faces	• compare and order lengths, mass, volume/capacity and record the results using >, < and = Look at the jugs below. Write = or > or < to make the statement true:  • recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value find different combinations of coins that equal the same amounts of money Harry has the same amount of money but has six coins. What are they? How many different answers are there? • compare and sequence intervals of time tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times know the number of minutes in an hour and the number of hours in a day	You have 10 litres of water. How many 2 litre jugs can you fill? • compare and order lengths, mass, volume/capacity and record the results using >, < and = Megan and Jack are growing beans. Megan's plant is 25 cm tall. Jack's is 38 cm tall. Whose plant is the taller? By how much? Can you compare them using > or < ? • recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value find different combinations of coins that equal the same amounts of money How do you make 4 pounds and 71 pence using the fewest coins? • compare and sequence intervals of time tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times know the number of minutes in an hour and the number of hours in a day

enough, width, depth long, short, tall,high, low, wide, narrow, deep, shallow, thick, thin, far, near, close, metre, ruler, metre stick costs more, costsless, dear(er), cheaper, costs thesame as money, coin, penny, pence, pound, price, cost, buy, sell, spend, spent, pay, change How much? Howmany?, temperature (degrees), m/km, g/kg, ml/l		I went out for a walk at half past 3 and walked for quarter of an hour. Show me on these two clock faces what time I started and what time I would then have finished.	
Geometry: properties of shapes **Vocabulary:** sort, cube, cuboid, pyramid, sphere, cone,	• identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line  • identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces	• identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line	• identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line

cylinder, circle, triangle, square, rectangle flat, curved, straight, round , solid, corner, face, side make, build, draw, group, hollow, point, pointed, edge, size, bigger, larger, smaller, symmetrical, line of symmetry, fold, match, mirror line, reflection, pattern, repeating pattern	What shape am I? I have no flat faces. I have no straight edges. I have just one curved face. • identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid • compare and sort common 2-D and 3-D shapes and everyday objects. triangle, rectangle square Flat, curved, How many ways can you find to sort the cards? Can you see any cards that are the same as other cards?	Find shapes that have: a) Six sides. b) No corners. c) Four angles. d) Long sides and short sides. e) No straight sides. f) One curved edge. g) Five corners and five straight sides. h) Eight sides. i) Big angles. j) Sharp angles. • identify and describe the Which figure can you trace to make this shape?  properties of 3-D shapes, including the number of edges, vertices and faces • identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] • compare and sort common 2-D and 3-D shapes and everyday objects.	• identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces I have 6 flat faces, four of them are rectangles and two of them are squares I have 12 straight edges and 8 corners. I am a cuboid. • identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] • compare and sort common 2-D and 3-D shapes and everyday objects. Shade in the 2D shapes yellow and the 3D shapes green. 

			
Geometry: position, direction and movement **Vocabulary:** over, under, underneath, above, below, top, bottom, side, in, outside,inside in front, behind, front, back, before, after, beside, next to, middle	• Order and arrange combinations of mathematical objects in patterns • use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).	• Order and arrange combinations of mathematical objects in patterns • use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).	• Order and arrange combinations of mathematical objects in patterns • use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).

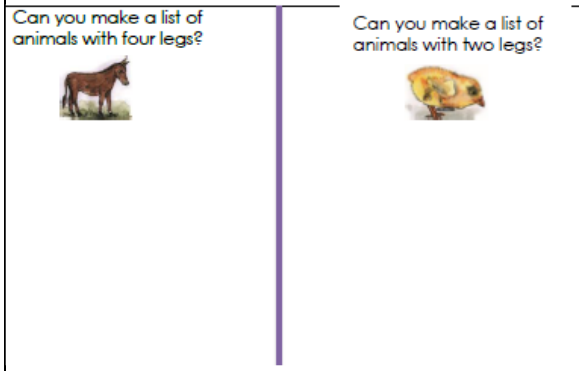
up, down, forwards, backwards, sideways, close, far, through, towards, awayfrom, side, roll, turn, position, around, opposite, apart between, edge, centre, corner, direction, journey, left, right, across near, along, to, from, movement whole turn, halfturn, stretch, bend, rotation clockwise, anticlockwise, straight line, ninety degree turn, right angle		 Point to shapes which are: a) Lower than the square. b) To the right of the hexagon. c) Below the triangle. d) Nearest to the circle.	

Statistics

Vocabulary:

count, tally, sort, vote, graph, block graph, pictogram, represent, group, set, list, table, label, title, most popular, most common, least popular, least common

- Interpret and construct simple pictograms, tally charts, block diagrams and simple tables



- Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity

Favorite Pets		
Pet	Tally Marks	Number
	𝍸 𝍸	10
	𝍸	4
	𝍸 I	6

How many people chose cats as their favourite pet?

- Interpret and construct simple pictograms, tally charts, block diagrams and simple tables

Omar saw the following balls at the sporting goods store:

He decided to count how many of each ball there were, so he made a table of the balls. Which is his table? A or B

A

Balls			
How many?	4	7	9

B

Balls			
How many?	7	4	9

- Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity

colour of car	tally	frequency
red	𝍸 𝍸 I	11
blue	𝍸	5
green	𝍸 III	8
black	𝍸	4
white	I	1
other	𝍸 II	7
total		36

What do you think this table shows?
How many people drive a red car?

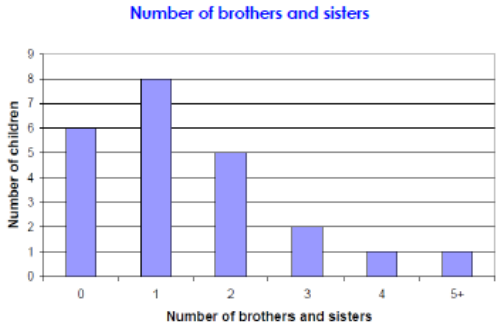
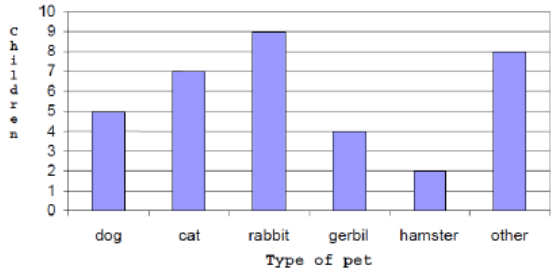
- Interpret and construct simple pictograms, tally charts, block diagrams and simple tables

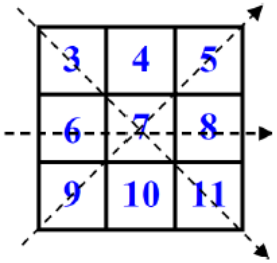
- Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity

Children were asked to state how many pets they own. From the tally chart, what are the values of x, y and z?

Number of pets	Tally	Frequency
0	III	3
1	𝍸 II	x
2	𝍸 IIII	y
3	𝍸 𝍸 𝍸 I	z
4	IIII	4
More than 4	𝍸 I	6

- Ask and answer simple questions about totalling and comparing categorical data

	• Ask and answer simple questions about totalling and comparing categorical data	• Ask and answer simple questions about totalling and comparing categorical data  **1.** How many of the children have four brothers and sisters? **2.** How many children have two brothers and sisters? **3.** How many of class 2G do not have any brothers or sisters? **4.** How many more children have one brother or sister than have three? **5.** How many children altogether have more than three brothers and sisters? **6.** How many brothers and sisters would you like?	**Graph of pets** This graph shows how many children in 2T have these pets.  Ask children to discuss in pairs and write questions relate to this graph.

Problem solving **Vocabulary:** say, think, imagine, remember, start from, put What comes next?, find, use, make, build tell me, describe, pick out, talk about, explain, counters, cubes, blocks, die, dice, dominoes, pegs, peg board, same way, different way, in order, in a different order, look, place, fit arrange, rearrange, change, change over, split, separate, carry on, continue, repeat, choose, collect record, trace, copy, complete,	Choose any nine consecutive numbers. Put them in a 3 x 3 square. Here is an example:  Now add the diagonals and the middle line. What do you notice? 6 + 7 + 8 = 3 + 7 + 11 = 9 + 7 + 5 = Does this work for other 3 x 3 squares with consecutive numbers in? **What other patterns can you find in this square? What about the middle line adding downwards?**		

finish, end fill in, shade, colour, cross, draw, draw a line between, join (up), arrow answer, check, same number(s), different number(s), missing number(s), number facts, abacus, rods best way, another way not all, every, each			