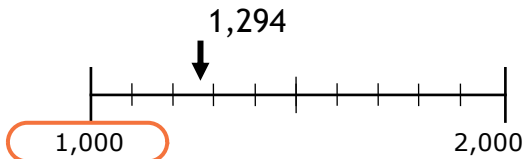
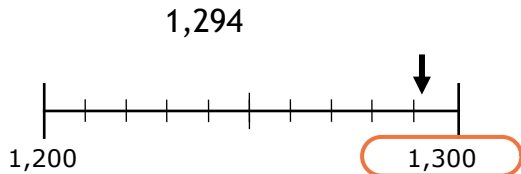


Y4- Number and Place Value

Round to the nearest 1,000



Round to the nearest 100



comparing numbers

< > =
 less than more than equal to

1,294 < 1,000
 1,294 > 2,000
 1,294 = 1,200 + 94

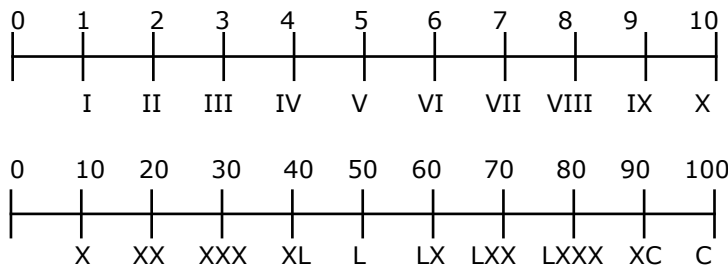
Th	H	T	O
1	2	9	4
1	0	0	0
	2	0	0
		9	0
			4

ordering numbers

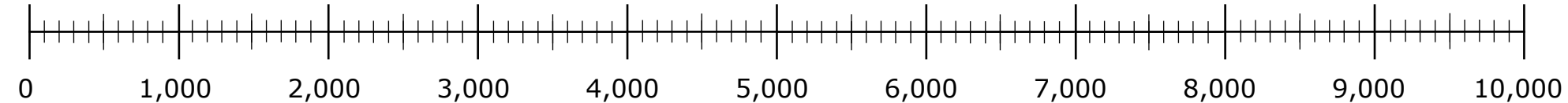
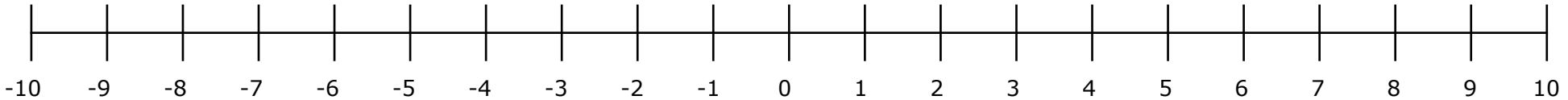
Th	H	T	O
1	2	9	4
1	9	2	4
1	2	4	9

ascending order:
 1,249 1,294 1,924

descending order:
 1,924 1,294 1,249



- Multiples of 6:** 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, 72
- Multiples of 7:** 7, 14, 21, 28, 35, 42, 49, 56, 63, 70, 77, 84
- Multiples of 9:** 9, 18, 27, 36, 45, 54, 63, 72, 81, 90, 99, 108
- Multiples of 25:** 25, 50, 75, 100, 125, 150, 175, 200, 225, 250
- Multiples of 100:** 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000



column addition

	Th	H	T	O
	2	5	7	8
+	3	3	5	1
	5	9	2	9
		1		

column subtraction

	Th	H	T	O
	⁴ 5	¹ 2	7	8
-	3	3	5	1
	1	9	2	7

estimating answers

$$4,934 + 2,345$$

Rounded to the nearest thousand: $5,000 + 2,000 = 7,000$

The answer should be approximately 7,000

$$4,934 + 2,345 = 7,279$$

using the inverse operation to check answers

$$4,934 + 2,345 = 7,279$$

'inverse' means opposite, so check by subtracting one part from the whole.

7,279	
4,934	2,345

$$7,279 - 4,934 = 2,345$$

solve addition and subtraction two-step problems

Mia was given £50 for her birthday. She bought a game for £26 and a shirt for £15. How much does she have left?

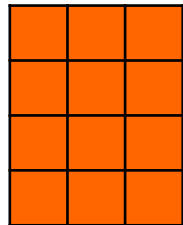
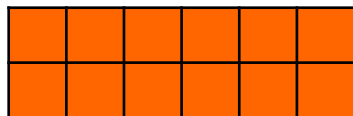
£50		
£26	£15	?

Find out how much was spent in total, then subtract from the amount of money she was given.

Y4- Multiplication and Division

finding factor pairs

$$\begin{array}{r} \underline{12} \\ 1 \times 12 \\ 2 \times 6 \\ 3 \times 4 \end{array}$$



multiplying using factor pairs

$$12 \times 9 =$$

$$\begin{aligned} 10 \times 9 &= 90 \\ 2 \times 9 &= 18 \\ 90 + 18 &= 108 \end{aligned}$$

$$12 \times 9 = 108$$

using known facts

$$4 \times 7 = 28$$

$$\begin{array}{ll} 7 \times 4 = 28 & 28 \div 7 = 4 \\ 40 \times 7 = 280 & 28 \div 4 = 7 \\ 400 \times 7 = 2,800 & 280 \div 7 = 40 \\ 4 \times 70 = 280 & 280 \div 4 = 70 \\ 4 \times 700 = 2,800 & 2,800 \div 7 = 400 \\ 40 \times 70 = 2,800 & 2,800 \div 4 = 700 \end{array}$$

short multiplication

		5	7
	x		6
<hr/>			
	3	4	2
<hr/>			
		4	

		3	5	7
	x			6
<hr/>				
	2	1	4	2
<hr/>				
		3	4	

Any number multiplied by 0 is 0

$$4 \times 0 = 0 \quad 7 \times 0 = 0 \quad 12 \times 0 = 0$$

Any number multiplied or divided by 1 stays the same

$$45 \times 1 = 45 \quad 45 \div 1 = 45$$

short division

$$148 \div 2 = 74$$

dividend divisor quotient

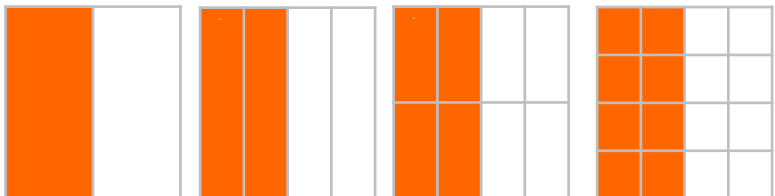
	0	7	4	
2	1	4	8	
	1			

x	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

Y4- Fractions (including Decimals)

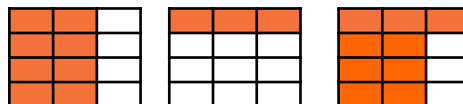
equivalent fractions

$$\frac{1}{2} \quad \frac{2}{4} \quad \frac{4}{8} \quad \frac{8}{16}$$



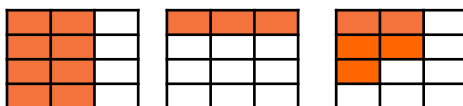
adding fractions with the same denominators

$$\frac{8}{12} + \frac{3}{12} = \frac{11}{12}$$



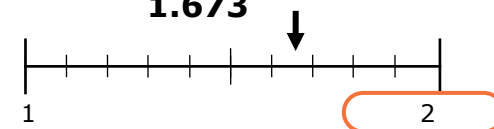
subtracting fractions with the same denominators

$$\frac{8}{12} - \frac{3}{12} = \frac{5}{12}$$



Round to the nearest whole number

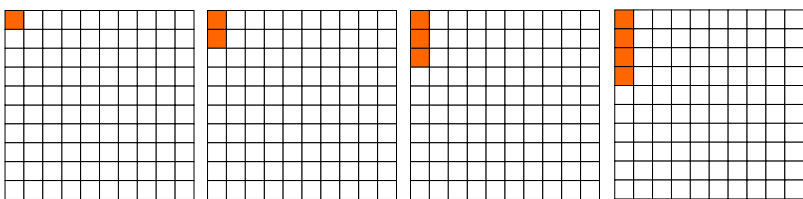
1.673



counting in hundredths

$$\frac{1}{100} \quad \frac{2}{100} \quad \frac{3}{100} \quad \frac{4}{100}$$

0.01 0.02 0.03 0.04



comparing decimal numbers

H	T	O	t	h
		0	2	2
		0	4	2

< > =

less than more than equal to

$$0.2 < 0.42$$

fractions of numbers

$\frac{3}{5}$ of 45



$$45 \div 5 = 9$$

$$9 \times 3 = 27$$

$$\frac{3}{5} \text{ of } 45 = 27$$

dividing by 10, 100 and 1000

H	T	O	t	h
	4	2		
		4	2	
		0	4	2

fraction and decimal equivalence

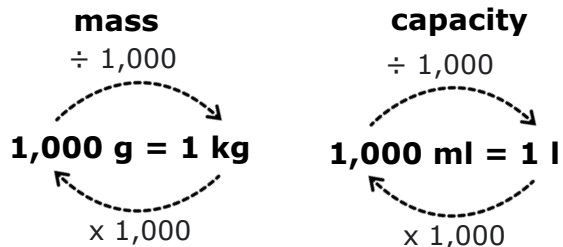
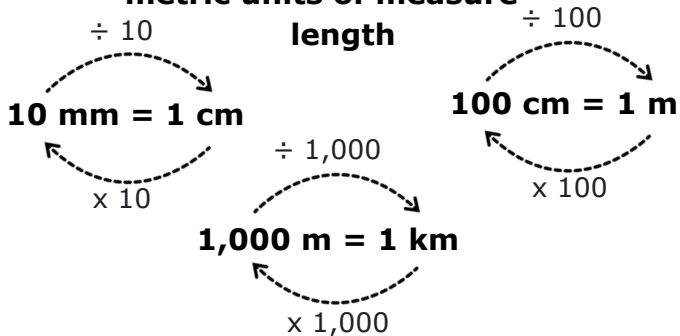
$$\frac{1}{4} = \frac{25}{100} = 0.25$$

$$\frac{1}{2} = \frac{50}{100} = 0.5$$

$$\frac{3}{4} = \frac{75}{100} = 0.75$$

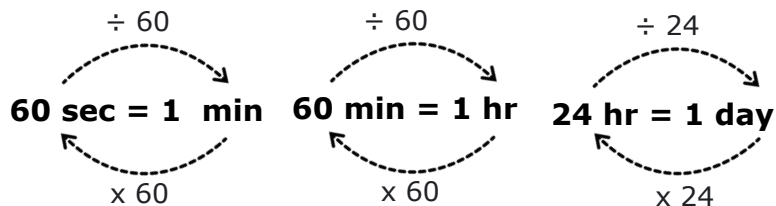
Y4- Measurement

metric units of measure length

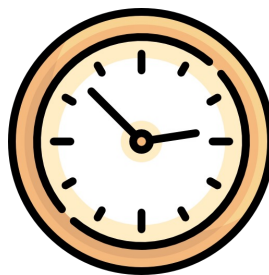


convert units of time

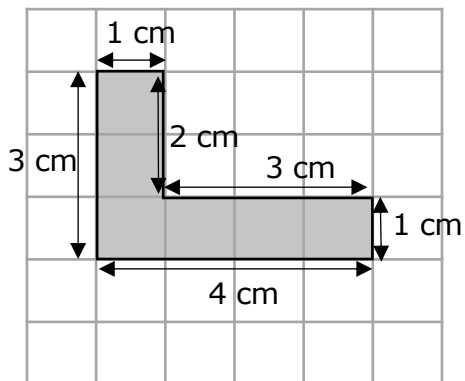
60 seconds = 1 minute
 60 minutes = 1 hour
 24 hours = 1 day
 7 days = 1 week
 12 months = 1 year
 365 days = 1 year



analogue and digital clock



perimeter of rectilinear shapes



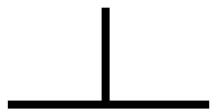
perimeter = 14 cm area = 6 cm²

12 hour	24 hour
1:00 am	1:00
2:00 am	2:00
3:00 am	3:00
4:00 am	4:00
5:00 am	5:00
6:00 am	6:00
7:00 am	7:00
8:00 am	8:00
9:00 am	9:00
10:00 am	10:00
11:00 am	11:00
12:00 pm	12:00
1:00 pm	13:00
2:00 pm	14:00
3:00 pm	15:00
4:00 pm	16:00
5:00 pm	17:00
6:00 pm	18:00
7:00 pm	19:00
8:00 pm	20:00
9:00 pm	21:00
10:00 pm	22:00
11:00 pm	23:00
12:00 pm	00:00

angles

Angles are measured in degrees ($^{\circ}$)
A right angle is 90°

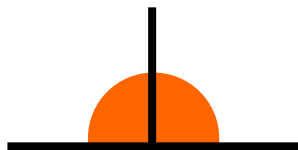
90°



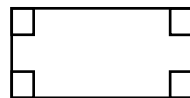
An acute angle is less than 90°



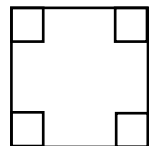
An obtuse angle is larger than 90° and less than 180°



quadrilaterals



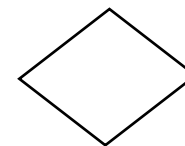
rectangle (4 right angles, opposite sides equal)



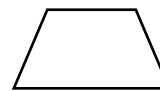
square (4 right angles and 4 equal sides)



parallelogram (two pairs of parallel sides and opposite sides equal)



rhombus (parallelogram with 4 equal sides)



trapezium (two sides are parallel)

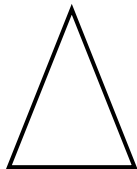


kite (two pairs of adjacent sides of the same length)

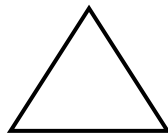
polygons

3 sides	tri angle
4 sides	quad rilateral
5 sides	pent agon
6 sides	hex agon
7 sides	hepta gon
8 sides	octa gon
9 sides	nona gon
10 sides	deca gon

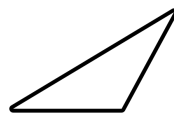
triangles



equilateral (3 equal sides and 3 equal angles)

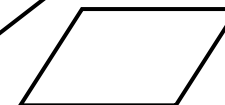
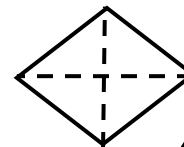
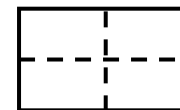
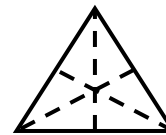
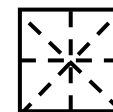


isosceles (2 equal sides and 2 equal angles)

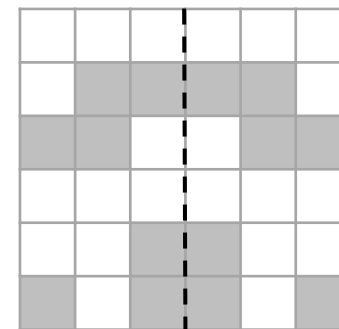


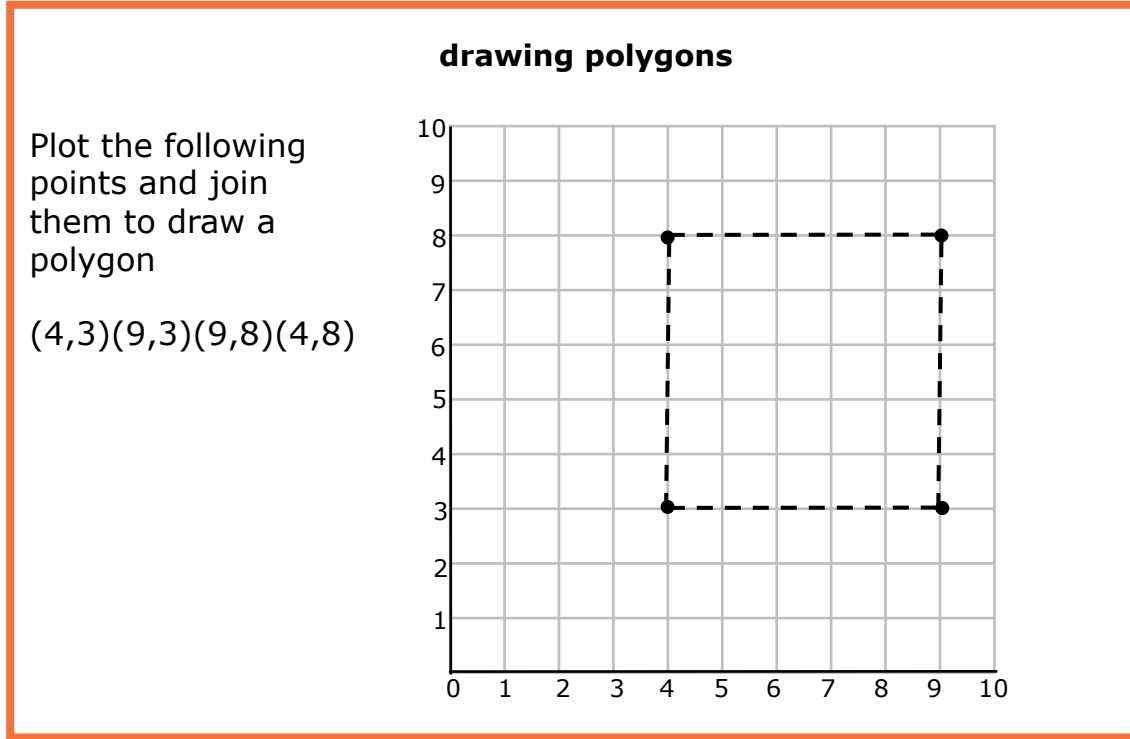
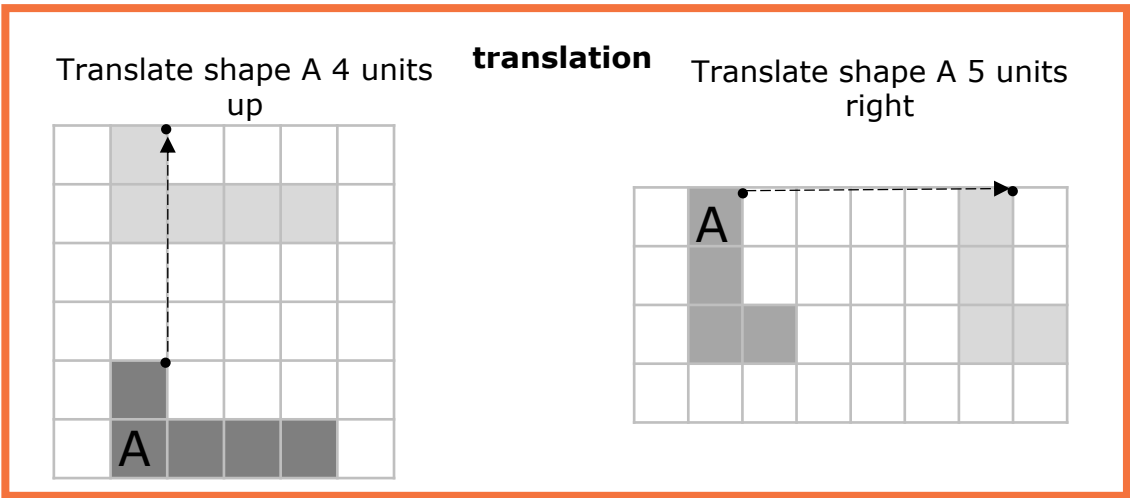
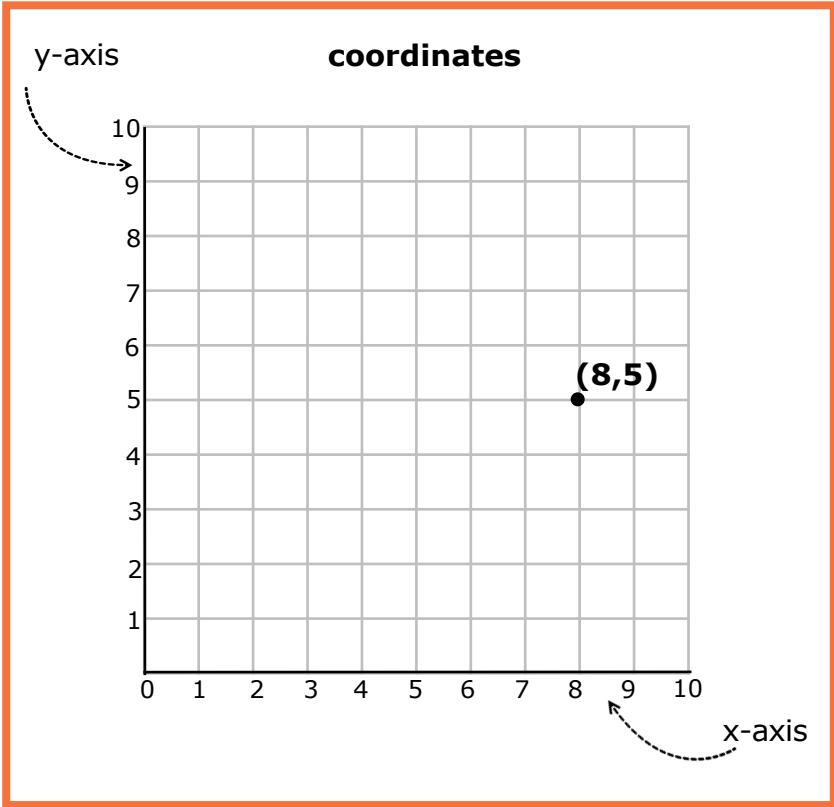
scalene (no equal sides and no equal angles)

symmetry



symmetry



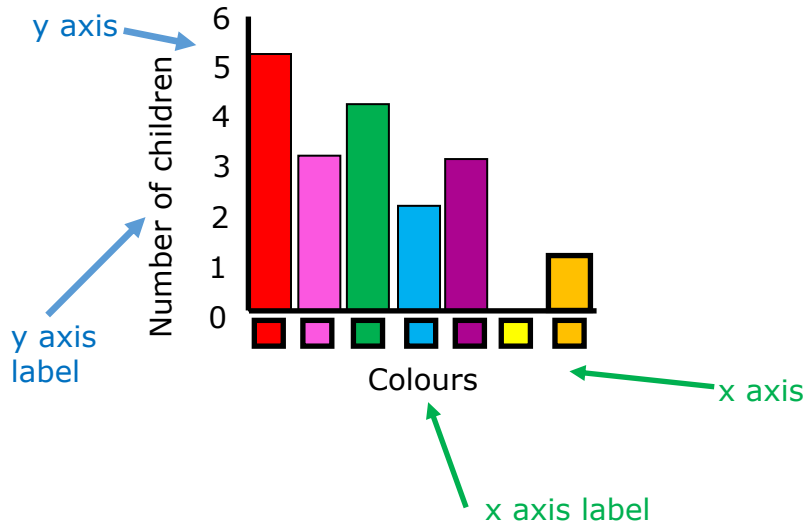


bar graphs

Bar graphs show a snapshot in time

graph title

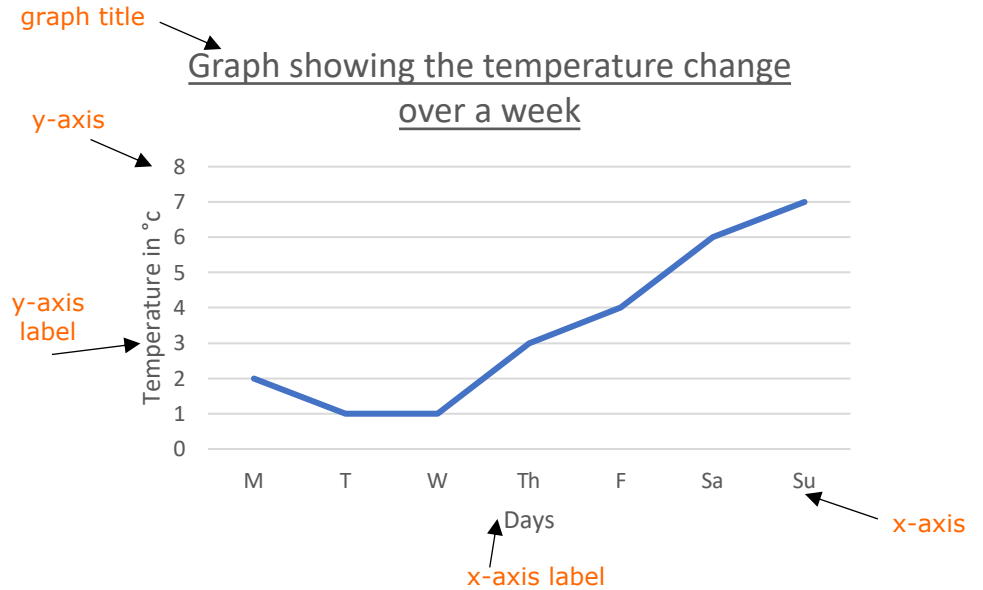
Graph showing the favourite colours in year 6



line graphs

Line graphs show a change over time

Graph showing the temperature change over a week



pictogram

team	points
Green	● ● ● ●
Blue	● ● ●
Red	● ● ● ● ●

Key

= 10 points

table

hockey	tennis	football	rugby	total
21	41	16	22	100

If one part is missing, add the other parts together and subtract them from the total.

hockey	tennis	football	rugby	total
21	41		22	100

If the total is missing, add the parts together.

hockey	tennis	football	rugby	total
21	41	16	22	