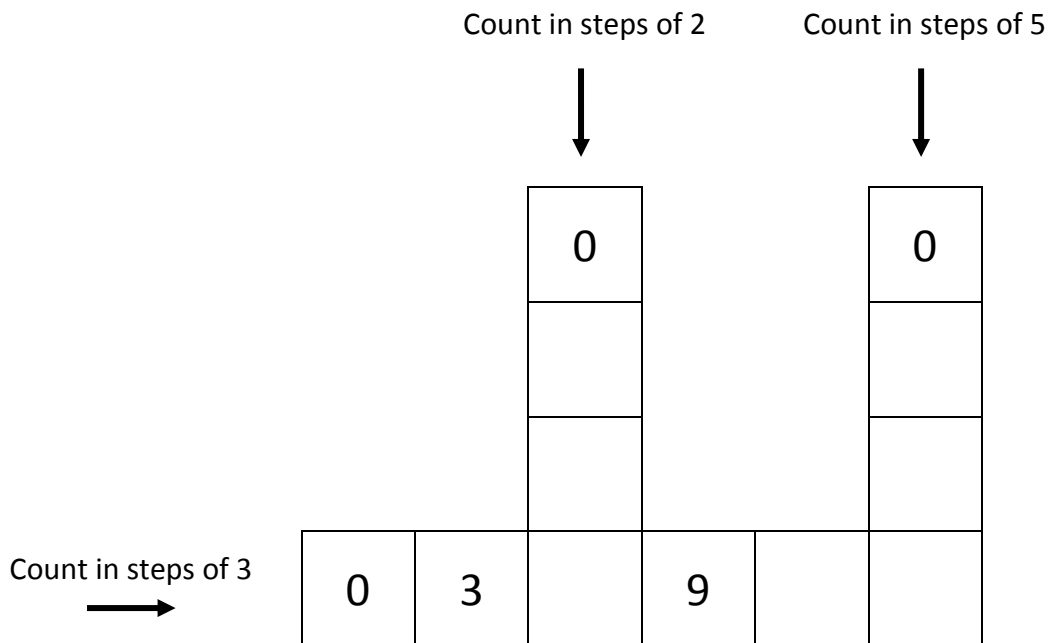


<p>count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward</p>	<p>recognise the place value of each digit in a two-digit number (tens, ones)</p>	<p>identify, represent and estimate numbers using different representations, including the number line</p>	<p>compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs</p>	<p>read and write numbers to at least 100 in numerals and in words</p>	<p>solve problems with addition and subtraction: <ul style="list-style-type: none"> - using concrete objects and pictorial representations, including those involving numbers, quantities and measures - applying their increasing knowledge of mental and written methods </p>	<p>recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100</p>
<p>add and subtract numbers using concrete objects, pictorial representations, and mentally, including: <ul style="list-style-type: none"> - a two-digit number and ones - a two-digit number and tens - two two-digit numbers - adding three one-digit numbers </p>	<p>show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot</p>	<p>recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.</p>	<p>recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</p>	<p>calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals signs</p>	<p>show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot</p>	<p>solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts; including problems in contexts</p>
<p>recognise, find, name and write fractions $1/3$, $1/4$, $2/4$ and $3/4$ of a length, shape, set of objects or quantity</p>	<p>choose appropriate and use standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ($^{\circ}$C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels</p>	<p>write simple fractions for example, $1/2$ of 6 = 3 and recognise the equivalence of $2/4$ and $1/2$</p>	<p>compare and order lengths, mass, volume/capacity and record the results using $>$, $<$ and $=$</p>	<p>compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs</p>	<p>write simple fractions for example, $1/2$ of 6 = 3 and recognise the equivalence of $2/4$ and $1/2$</p>	<p>compare and order lengths, mass, volume/capacity and record the results using $>$, $<$ and $=$</p>
<p>recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value</p>	<p>find different combinations of coins that equal the same amounts of money</p>	<p>solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change</p>	<p>compare and sequence intervals of time</p>	<p>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</p>	<p>know the number of minutes in an hour and the number of hours in a day</p>	<p>identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line</p>
<p>identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces</p>	<p>identify 2-D shapes on the surface of 3-D shapes, for example, a circle on a cylinder and a triangle on a pyramid</p>	<p>compare and sort common 2-D and 3-D shapes and everyday objects</p>	<p>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)</p>	<p>interpret simple pictograms, tally charts, block diagrams and simple tables</p>	<p>ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity</p>	<p>ask and answer questions about totalling and comparing categorical data</p>

Stage 2 Mathematics



1 a) Find the missing numbers:



b) What number is 10 more than 27?

.....

c) What number is 10 less than 17?

.....

(NPV1, 5 marks)

2 Sort these numbers into order, from smallest to largest:

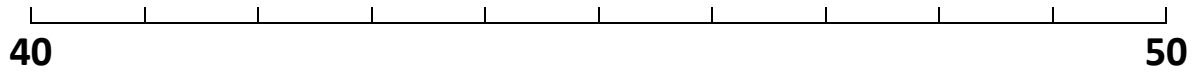
3 73 37 30 13 70 7 33

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

(NPV2, 3 marks)



3 Show 47 on this number line:



(NPV3, 2 marks)

4 Use the symbols < and > to make these statements correct:

a)

$$21 \quad \square \quad 61$$

b)

$$39 \quad \square \quad 32$$

c)

$$71 \quad \square \quad 17$$

d)

$$64 \quad \square \quad 97$$

(NPV4, 4 marks)

5 a) Write these numbers using numerals:

i) Twenty six:

ii) Sixty:

iii) Sixteen:

b) Write these numbers in words:

i) 19:

ii) 40:

iii) 37:

(NPV5, 6 marks)



6 a) Find the value of Δ in each of these statements:

i) $\Delta = 50 + 2$

$\Delta = \dots\dots\dots$

ii) $\Delta + 7 = 67$

$\Delta = \dots\dots\dots$

iii) $23 = 10 + \Delta$

$\Delta = \dots\dots\dots$

b) Complete the calculations:

i) $77 - 10 = 67$

ii) $66 - 9 = \dots\dots\dots$

$77 - 9 = \dots\dots\dots$

$66 - 10 = \dots\dots\dots$

$77 - 11 = \dots\dots\dots$

$66 - 11 = \dots\dots\dots$

(NPV6, 8 marks)



7 a) Here is part of a 1-100 square.

	☺			
		15		17
23	24	25	26	
		35		
	44			★

i) What number goes underneath ☺?

.....

ii) What number goes underneath ★?

.....

b) Angela is trying to solve the problem:

There are 17 cakes in a box. Mel eats 6 of the cakes.

How many cakes are left?

i) Draw a diagram to help solve the problem

ii) How many cakes are left?

..... cakes
(AS1, 4 marks)



8 a) Find the value of ★ in each statement:

i) $\star + 6 = 12$ $\star = \dots\dots$

vi) $\star - 6 = 2$ $\star = \dots\dots$

ii) $7 + 5 = \star$ $\star = \dots\dots$

vii) $17 - 5 = \star$ $\star = \dots\dots$

iii) $4 + \star = 12$ $\star = \dots\dots$

viii) $19 - \star = 9$ $\star = \dots\dots$

iv) $15 = 8 + \star$ $\star = \dots\dots$

ix) $\star = 16 - 12$ $\star = \dots\dots$

v) $18 = \star + \star$ $\star = \dots\dots$

x) $20 = \star - 0$ $\star = \dots\dots$

b) Here are some number cards

70

100

30

Show how the cards can be arranged to complete each statement

	+		=	
--	---	--	---	--

	=		+	
--	---	--	---	--

	-		=	
--	---	--	---	--

	=		-	
--	---	--	---	--

(AS2, 14 marks)



9 a) Calculate:

i) $45 + 3 = \dots\dots\dots$

iv) $45 - 4 = \dots\dots\dots$

ii) $45 + 7 = \dots\dots\dots$

v) $45 - 7 = \dots\dots\dots$

iii) $45 + 9 = \dots\dots\dots$

vi) $45 - 9 = \dots\dots\dots$

b) Work out:

i) $43 + 10 = \dots\dots\dots$

iv) $43 - 10 = \dots\dots\dots$

ii) $43 + 30 = \dots\dots\dots$

v) $43 - 30 = \dots\dots\dots$

iii) $43 + 50 = \dots\dots\dots$

vi) $43 - 40 = \dots\dots\dots$

c) Work out:

i) $46 + 13 = \dots\dots\dots$

iv) $46 - 15 = \dots\dots\dots$

ii) $46 + 34 = \dots\dots\dots$

v) $46 - 28 = \dots\dots\dots$

iii) $46 + 27 = \dots\dots\dots$

vi) $46 - 31 = \dots\dots\dots$

d) Complete the statements:

i) $6 + 3 + 2 = \dots\dots\dots$

iv) $7 + 8 + 9 = \dots\dots\dots$

ii) $6 + 4 + 5 = \dots\dots\dots$

v) $9 + 9 + 9 = \dots\dots\dots$

iii) $6 + 7 + 8 = \dots\dots\dots$

vi) $2 + 4 + 6 = \dots\dots\dots$

(AS3, 24 marks)



10 Decide each statement is true (T) or false (F). Tick the correct box.

a) These four calculations have the same answer:

$$5 + 3 + 1$$

$$3 + 1 + 5$$

$$1 + 3 + 5$$

$$5 + 1 + 3$$

True

False

b) These four calculations have the same answer:

$$5 - 3 - 1$$

$$3 - 1 - 5$$

$$1 - 3 - 5$$

$$5 - 1 - 3$$

True

False

(AS4, 2 marks)

11 Jasmine thinks of number. She subtracts 11 and the answer is 20.

What is Jasmine's number?

.....
(AS5, 2 marks)



12 a) Complete the number sentences:

i) $3 \times 2 = \dots\dots\dots$

v) $\dots\dots\dots \div 5 = 3$

ii) $\dots\dots\dots \times 2 = 10$

vi) $60 \div \dots\dots\dots = 6$

iii) $4 \times \dots\dots\dots = 40$

vii) $5 \times 2 = \dots\dots\dots \times 10$

iv) $12 \div 2 = \dots\dots\dots$

viii) $\dots\dots\dots \times 5 = 3 \times 10$

(MD1, 8 marks)

13 a) One sweet costs five pence.

How much will six sweets cost?

i) Write a mathematical statement, involving multiplication or division, to represent the problem:

.....

ii) Solve the problem.

.....

b) 20 sweets are shared equally between five children.

How many sweets will each child receive?

i) Write a mathematical statement, involving multiplication or division, to represent the problem:

.....

ii) Solve the problem.

.....

(MD2, 4 marks)



14 a) Tim is using the numbers 2, 6 and 12 to make 'fact families'.

Put a ring around the number sentence that is **incorrect**.

$$2 \times 6 = 12$$

$$6 \times 2 = 12$$

$$12 \div 2 = 6$$

$$2 \div 12 = 6$$

b) Here are some number cards

3

5

15

Show how the cards can be arranged to complete each statement

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

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

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

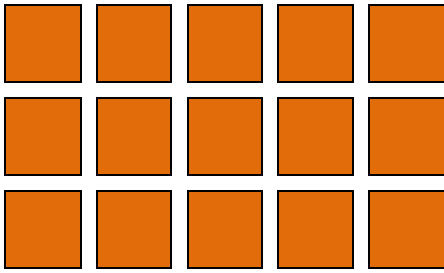
$$\square = \square \div \square$$

(MD3, 5 marks)



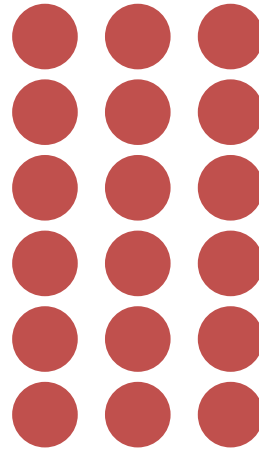
15 Describe these diagrams using multiplication or division:

a)



.....

b)



.....

(MD4, 2 marks)



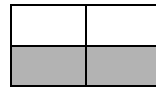
16 a) Describe the shaded regions using fractions:



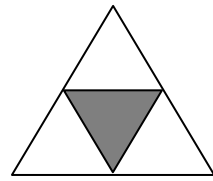
.....



.....

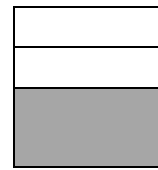
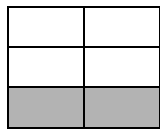
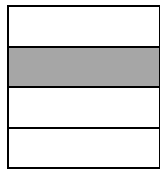


.....



.....

b) Place a (✓) by the shapes that have one third shaded:



(F1, 4 marks)

17 Would you prefer $\frac{1}{2}$ or $\frac{2}{4}$ of a bar of chocolate?

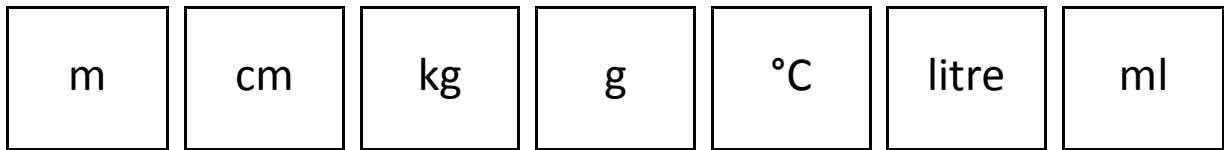
Use the diagrams to explain your answer.



(F2, 2 marks)



18 Here are some standard units:



Choose the most sensible unit for measuring:

- a) The height of your teacher
- b) Your weight
- c) The capacity of glass of water
- d) The length of a book
- e) Temperature
- f) The capacity of a swimming pool

(M1, 6 marks)

19 Use the symbols <, > and = to make these statements correct:

- a) Height of a man Height of a house
- b) Capacity of a bucket Capacity of a coffee mug
- c) Length of a long ruler 30 cm
- d) Mass of a blue whale Mass of an elephant

(M2, 4 marks)



20 Use the symbols £ and p to complete the statements:

- a) 4 pounds =
- b) Forty pence =
- c) 156 pence = £ and p

(M3, 4 marks)

21 Jack has 6 coins. The 6 coins have a total £1.

Find 6 coins with a total of £1.

..... p, p, p, p, p, p
(M4, 2 marks)

22 Shabneez buys a pen costing 30p and a pencil costing 25p.

She pays with a £1 coin.

How much change does she get?

.....
(M5, 2 marks)



23 Write these times in order, from shortest to longest:

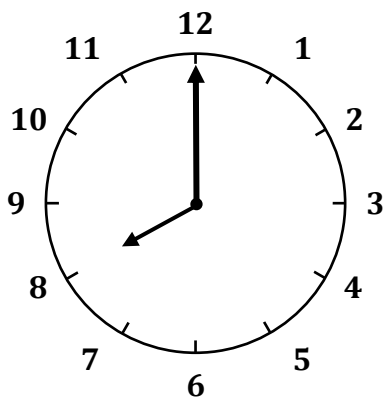
15 minutes 1 hour 5 minutes 90 minutes 2 hours

--	--	--	--	--

(M6, 2 marks)

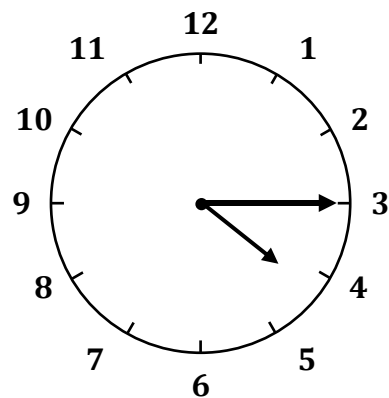
24 a) Write the time shown on each of the clocks

i)



.....

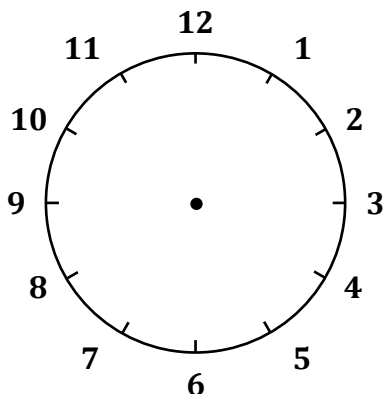
ii)



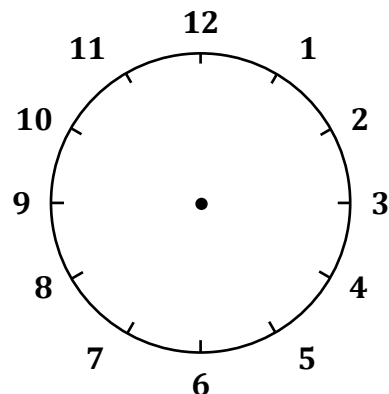
.....

b) Show the time on each of the clocks

i) Quarter past 8



ii) Quarter to 5



(M7, 4 marks)



25 Complete the statements:

- a) There are minutes in one hour
- b) One day is hours long

(M8, 2 marks)



26 a) Draw **and label** an example of:

- i) A quadrilateral ii) A rectangle iii) A triangle with a line of symmetry



b) Jake thinks of a shape with more than five sides

Name two shapes that Jake could be thinking of

..... and

(GPS1, 5 marks)

27 Are these statements true (T) or false (F)?

- a) A cuboid has 8 sides
 b) A triangular prism has 5 faces
 c) A cube has the same number of faces as a cuboid
 d) A triangular-based pyramid has 6 sides

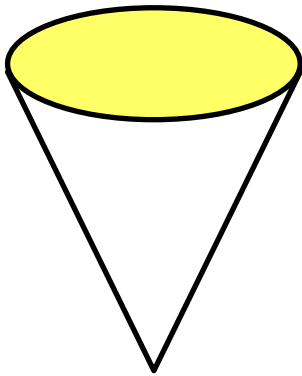
(GPS2, 3 marks)



28 Here are three solids. Each solid has one face shaded.

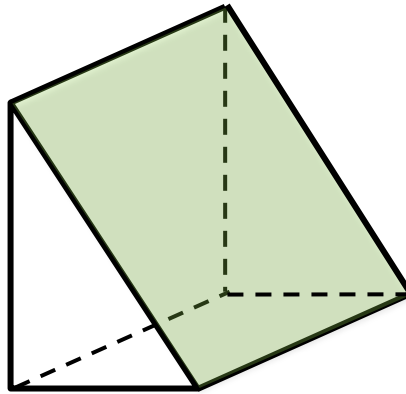
Name the shape of the shaded face.

a) Cone



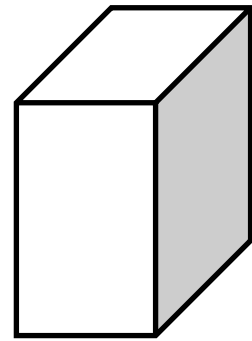
.....

b) Prism



.....

c) Cuboid



.....

(GPS3, 3 marks)

29 a) Name six shapes to complete the table:

Quadrilateral	Not a quadrilateral

b) Name four 3-D shapes to complete the table:

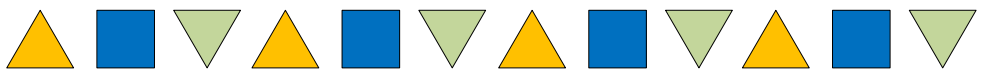
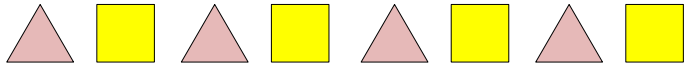
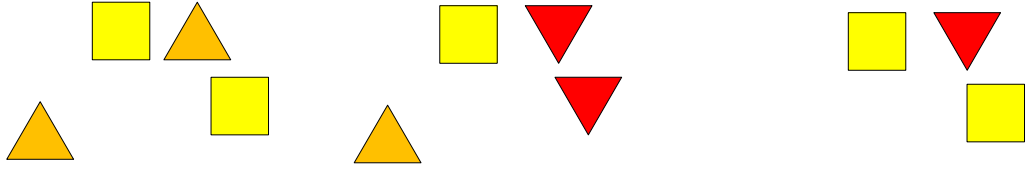
Prism	Not a prism

(GPS4, 4 marks)



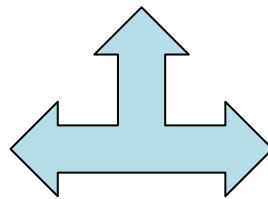
30 Anna is making ordered patterns and sequences using squares and triangles.

Tick the pattern that does **not** show a repeated sequence.

<p>Pattern 1</p>	
<p>Pattern 2</p>	
<p>Pattern 3</p>	

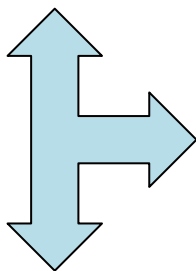
(GPD1, 1 mark)

31 Here is a shape

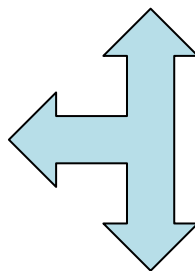


The shape is rotated one quarter turn anti-clockwise.

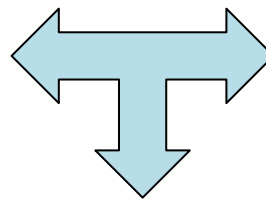
Place a (✓) by the correct rotation.



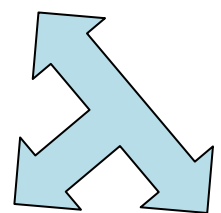
A



B



C



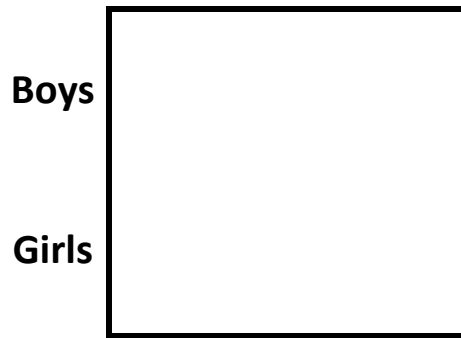
D

(GPD2, 1 mark)



32 Construct a pictogram for this data.

Boys	Girls



KEY:

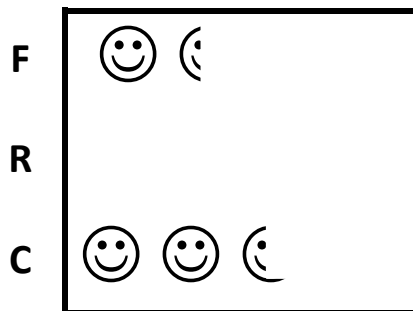
..... = 1 person

(S1, 3 marks)

33 The charts shows information about the number of pupils who like football (F), rugby (R) and cricket (C).

Use the information to complete the pictogram and tally chart:

	Tally	Total
F		
R		4
C		



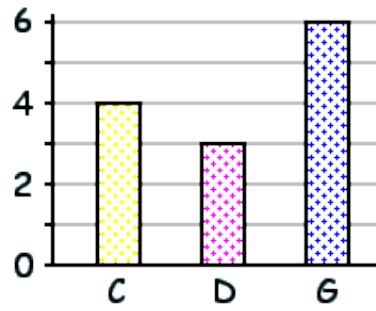
KEY:

😊 = 2 people

(S2, 4 marks)



34 The bar chart shows the number of pupils who like cats (C), dogs (D) and goldfish (G).



a) How many pupils in Class A like cats?

.....

b) How many pupils in like dogs?

.....

c) How many more pupils like goldfish than dogs?

.....

(S3, 4 marks)



Number and Place Value	+ and -	× and ÷	Fractions, Decimals & %s	Measurement	Properties of Shapes	Position & Direction	Statistics
NUMBER					GEOMETRY		

NOT GOT IT YET?

Key topics I need to work on:

