Your child's journey as a mathematician in our school.

Presented by the Maths Team

Maths

"Maths is not about numbers, equations or agorithms: it is about understanding."
— Unknown

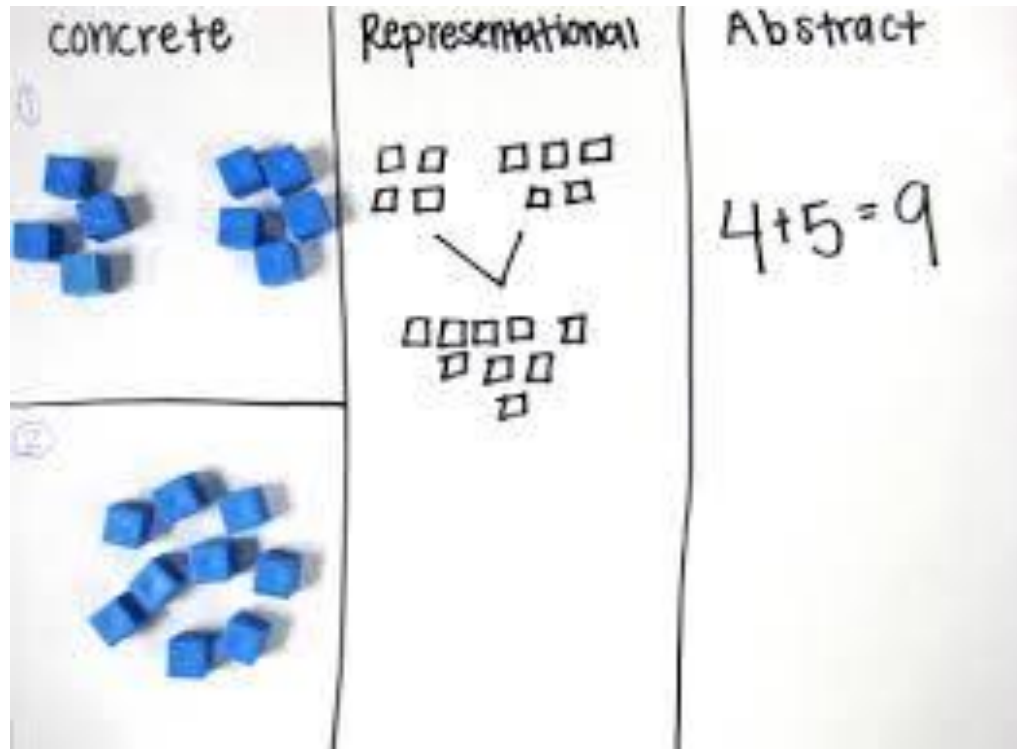"The only way to learn mathematics is to do mathematics"
—Einstein

"What's really neat about maths is that even when there's only **one** right answer there's never only **one** right way to solve the problem."
— Herb Gross

"Maths is like chickenpox – the younger you get it the better!"
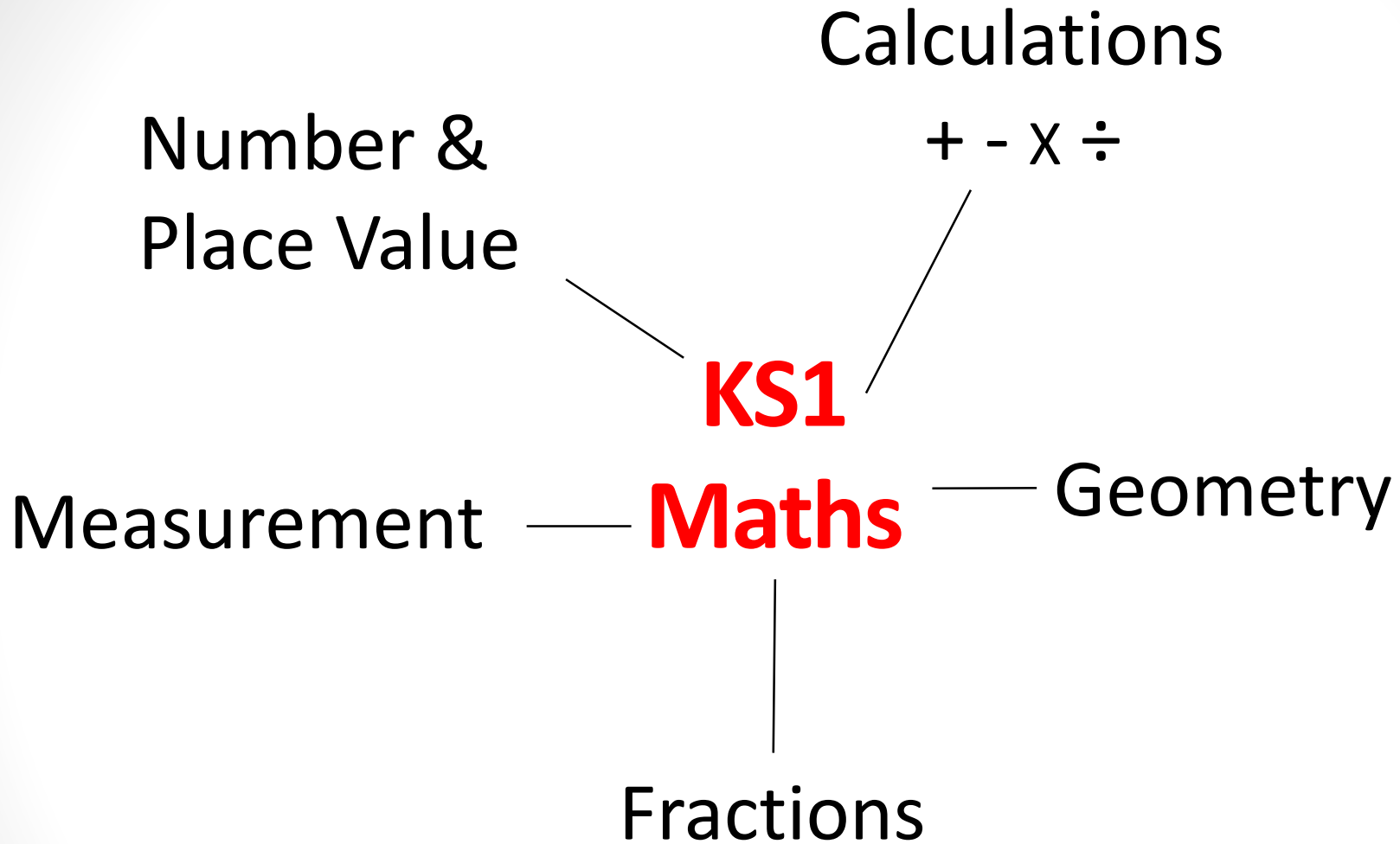— Unknown

How is maths taught in our school?

FLUENCY   REASONING   PROBLEM-SOLVING

Calculations

+ - X ÷

Number &
Place Value

KS1
Maths

Measurement —— Geometry

Fractions

Number and Place Value – year 1

- Count, both forwards and backwards, from any number, including past 100
- Read and write numbers up to 100 as digits (1-20 in words)
- Find 'one more' or 'one less' than a number
- Use mathematical language such as 'more', 'less', 'most', 'least' and 'equal'
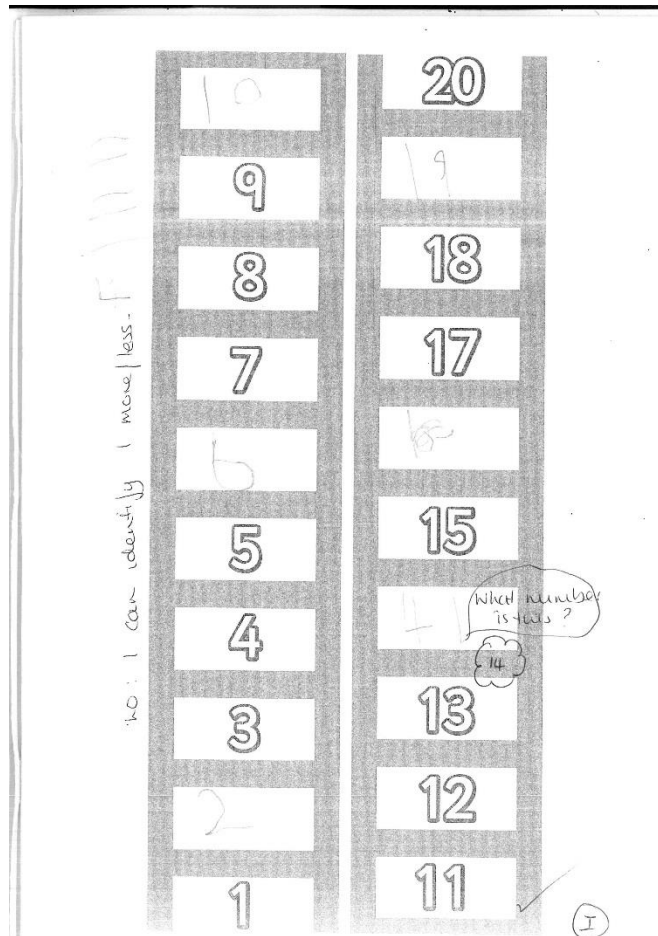
Number and Place Value – year 2

• Recognise place value in two-digit numbers, e.g. knowing that the 1 in 17 represents 10
• Read and write numbers up to 100 as words
• Count in 2s, 3s and 5s
• Compare and order numbers up to 100
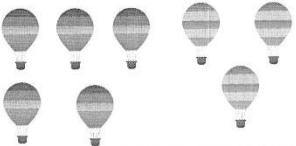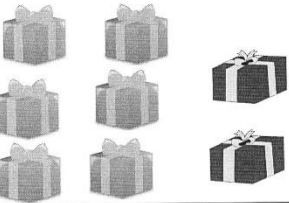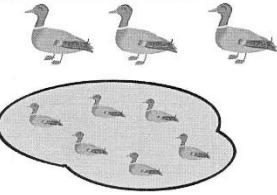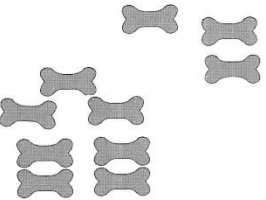• Use the < and > symbols to represent the relative size of numbers
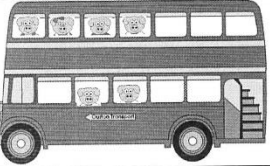
What you can do at home:

Calculations – year 1

• Use the +, -– and = symbols to write and understand simple number calculations
• Add and subtract one- and two-digit numbers, up to 20
• Solve missing number problems, such as 10 – ? = 6
• Begin to use simple multiplication by organising and counting objects

$10 = \boxed{5} + 5$

$8 + \boxed{2} = 10$

$17 = 10 + \boxed{7}$

$\boxed{10} + 5 = 15$

$25 + 5 = \boxed{20}$

Calculations – Year 2

• Recall number bonds up to 20 fluently
• Add and subtract numbers mentally and using objects, including two-digit numbers
• Show that adding two numbers can be done in any order, but subtracting cannot
• Recognise that addition and subtraction are inverse operations
• Learn the multiplication and division facts for the 2x, 5x and 10x tables
• Show that multiplying two numbers can be done in any order, but dividing cannot
• Solve problems using the x and ÷ symbols

The garden centre sell their plants in boxes of 2. How many boxes will they need?
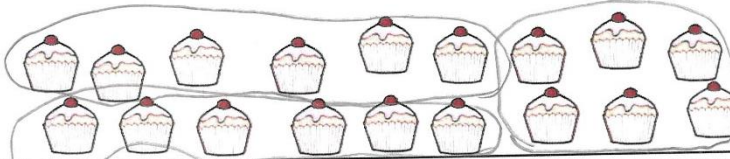
Write this as a division number sentence.

$16 ÷ 2 = 8$ ✓

Billy the baker sells his cakes in boxes of 6. How many boxes will he need?
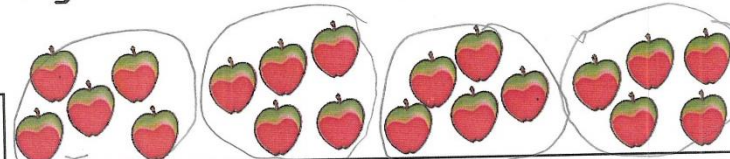
Write this as a division number sentence.

$18 ÷ 6 = 3$ ✓

Tom sells his apples in bags of 5. How many bags will he have?

Write this as a division number sentence.

$20 ÷ 5 = 4$ ✓

Calculations – What you can do at home:

What's the total?
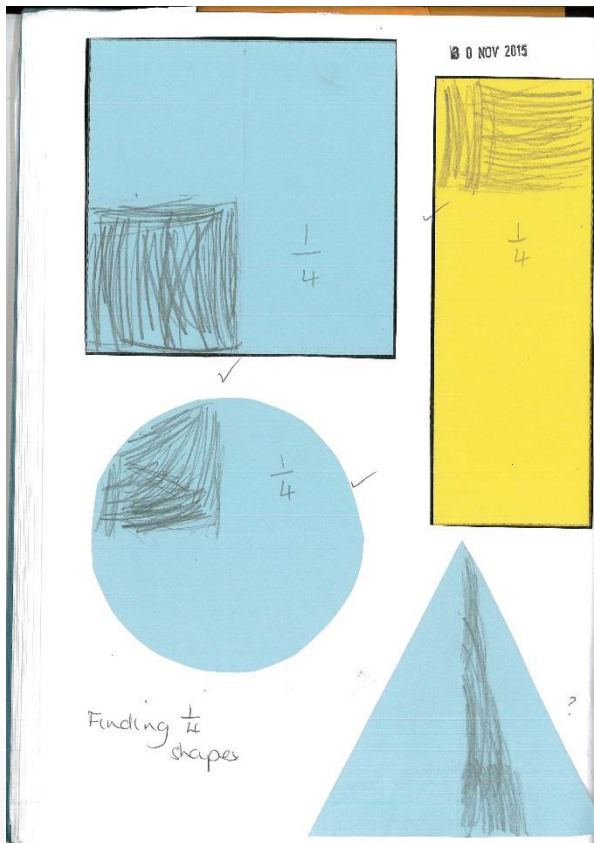
How many pieces of fruit altogether?

How many lots of 2 ?

If my toy costs 57p how much change from a £1?
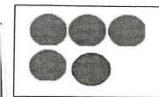
Group them into 3s – how many groups?

Fractions - Year 1

- Understand ¼ and ½ as equal parts of an object, shape or quantity

½ of 10 = 5
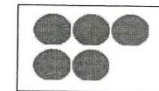
5   5

Half of 12 = 6
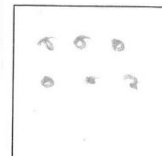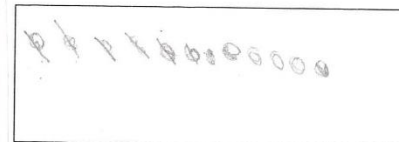
Fractions - Year 2

- Find ¼, ¾ of an object or set of objects
- Find the answer to simple fraction problems, such as finding ½ of 6

8			
4		4	
2	2	2	2

12			
6		6	
3	3	3	3

20			
10		10	
5	5	5	5

16			
8		8	
4	4	4	4

24			
12		12	
6	6	6	6

36			
18		18	
9	9	9	9

Use your fraction walls to help you solve these:

½ of 8 = ☐ 4   ¾ of 12 = ☐ 9   ¼ of 16 = ☐ 4

¼ of 20 = ☐ 5   ½ of 36 = ☐ 16   ¾ of 20 = ☐ 15 ✓

5+5+5 = 15

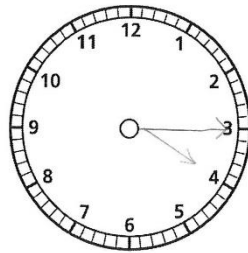# Fractions - What you can do at home.

Measurement – year 1

- Use practical apparatus to explore different lengths, weights and volumes
- Use language such as 'heavier', 'shorter' and 'empty' to compare things they have measured
- Recognise the different coins and notes of British currency
- Use language of time, such as 'yesterday', 'before', days of the week and months of the year
- Tell the time to the hour and half-hour, including drawing clock faces

The ant is heavier / lighter than the cat.

The bicycle is heavier / lighter than the car.
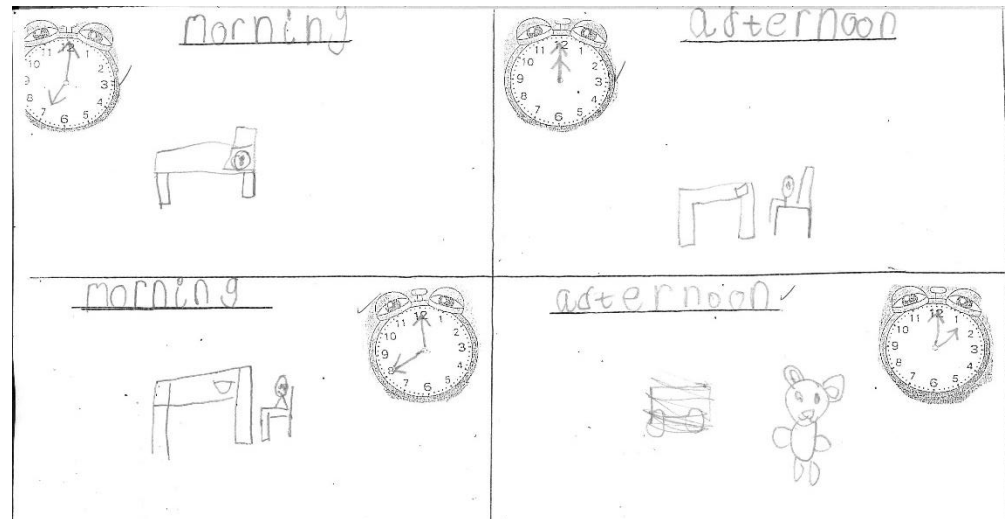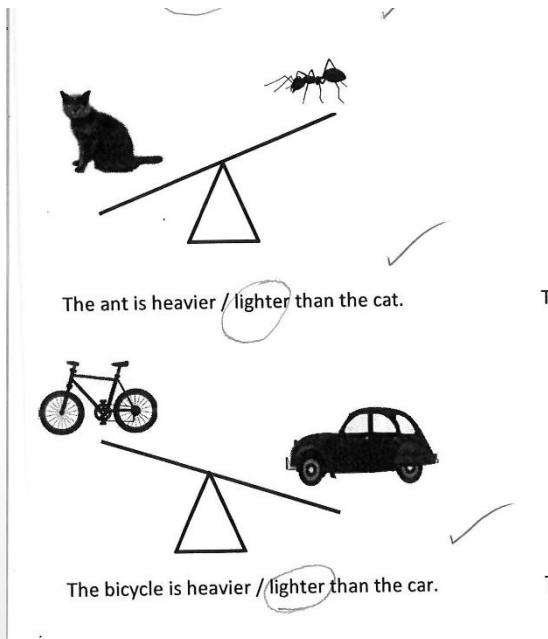
Measurement – year 2

• Use standard units to measure length (centimetres and metres), mass (grams and kilograms), temperature (degrees Celsius) and capacity (millilitres and litres)

• Use the £ and p symbols for money amounts

• Combine numbers of coins to make a given value, for example to make 62 pence

• Tell the time to the nearest five minutes on an analogue clock
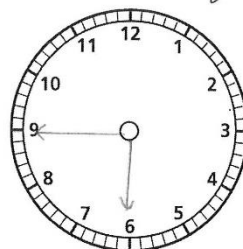
• Know the number of minutes in an hour and hours in a day

Quarter past 4
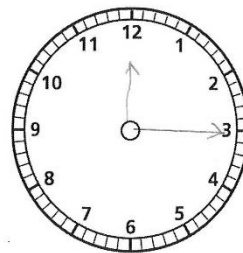
Quarter past 12
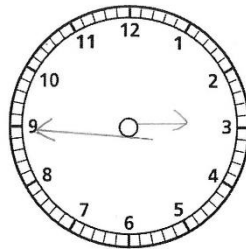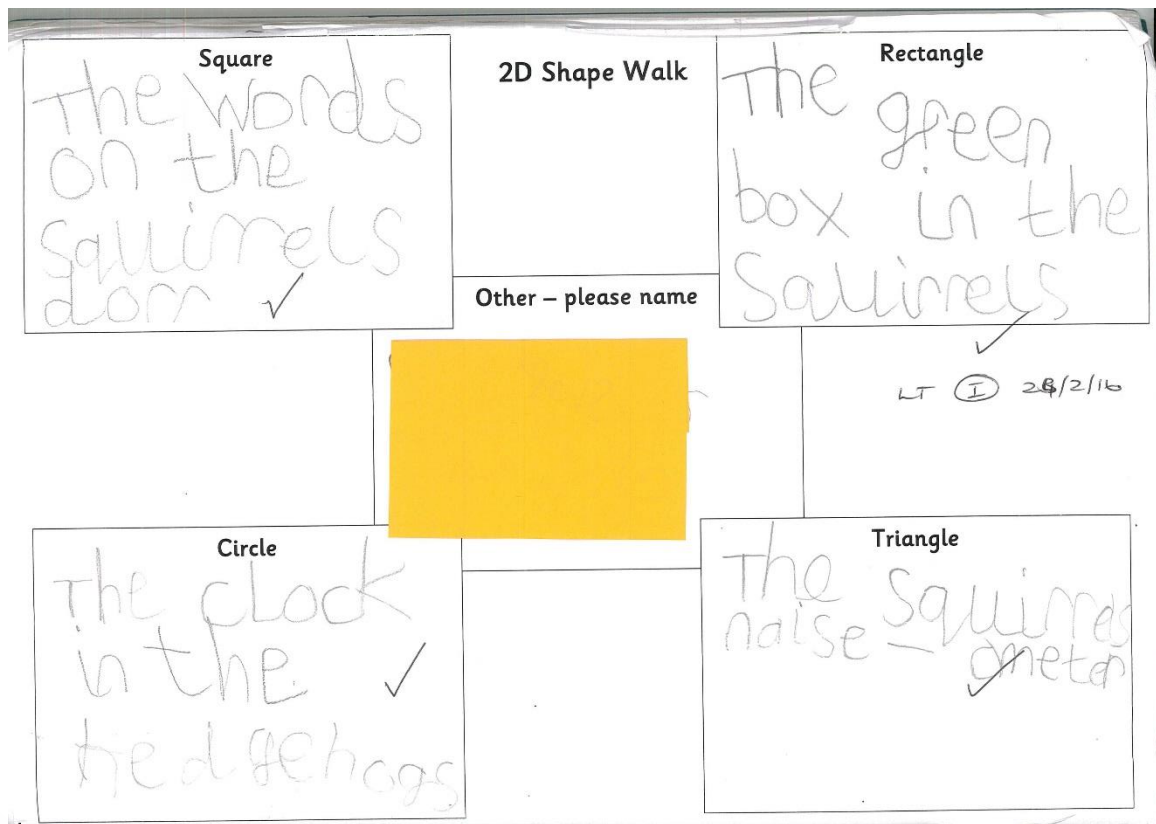
Quarter to 3

Quarter to 6

Measurement – What you can do at home

Geometry – Year 1

• Recognise and name some common 2-d shapes, such as squares, rectangles and triangles

• Recognise and name some common 3-d shapes, such as cubes, cuboids and spheres

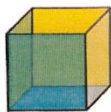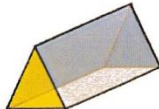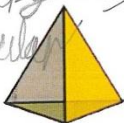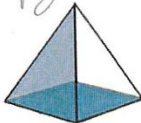• Describe movements, including quarter turns

Geometry – Year 2

• Identify the number of sides, vertices and a line of symmetry on 2-d shapes

• Identify the number of faces, edges and vertices on 3-d shapes

• Use mathematical language to describe position and direction, including rotations and turns

3D SHAPE PROPERTIES SHEET 5

Fill in the name, and number of faces, edges and vertices for each shape.

Name: Cube ✓
Faces: 6
Edges: 8 12
Vertices: 8

Name: triangular prism
Faces: 5
Edges: 9
Vertices: 6

Name: Square pyramid triangular
Faces: 5 4
Edges: 6
Vertices: 4

Name: cuboid
Faces: 6
Edges: 12
Vertices: 8

Name: Cone
Faces: 2
Edges: 1
Vertices: 1

Name: cylinder
Faces: 3
Edges: 0
Vertices: 0

Name: Sphere ✓
Faces: 1
Edges: 0
Vertices: 0

Name: Square pyramid
Faces: 5
Edges: 8
Vertices: 5

Geometry – What you can do at home.

Different methods of recording

$39 + 43 =$

$40 + 30 = 70$
$9 + 3 = 12$
$70 + 12 = 82$

3. $25 \div 5 = 5$

6 X 5 = 30

8 + 5 = 13

12   13   14

$15 + 3 = 18$