


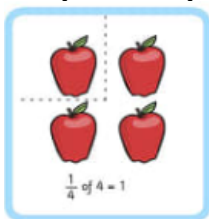
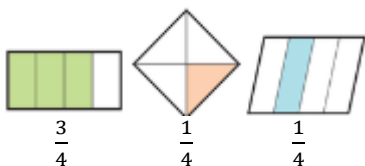
## Godmanchester Community Academy Maths Progression

Year 2		
Place Value	Addition and Subtraction	Multiplication and Division
<p>Count forward starting at 0 and backward in 2s to 100, 3s to 36, and 5s to 100. e.g. 36,34,32,30,28... 0,3,6,9,12,15,18,21...</p> <p>Count on from any number, including 0, in 10s.(add 10 or subtract 10) e.g.23,33,43,53</p> <p>Read and write numbers to at least 100 in numbers and words. e.g. 56 fifty six</p> <p>Know the value of each digit in a 2 digit number. e.g. 36 – the value of the 3 is 30 and the value of the 6 is 6</p> <p>Compare and order numbers from 0 up to 100 using the signs &lt; (less than) &gt; (greater than) and = (equal to). e.g. 45&lt;67 (45 is less than 67) Order these numbers from smallest to biggest 87, 13, 31, 56, 25 becomes 13, 25,31,56,87</p>	<p>Know addition can be done in any order e.g. <math>36 + 24 = 60</math> and <math>24 + 36 = 60</math> but subtraction of one number from another cannot be done in any order. e.g. <math>60 - 24 = 36</math> but <math>24 - 60</math> does not = 36</p> <p>Use addition to check subtraction calculations and subtraction to check addition calculations. e.g. <math>52 + 18 = 70</math> then check the answer by solving <math>70 - 18 = 52</math></p> <p>Mentally (in your head) or using blank numbers lines: add and subtract two-digit numbers and ones e.g. <math>45 + 8 = 53</math>, <math>87 - 8 = 79</math> add and subtract two-digit numbers and multiples of ten e.g. <math>38 + 10 =</math>   <math>56 + 30 =</math>   <math>78 - 10 =</math>   <math>56 - 30 =</math> add and subtract two two-digit numbers e.g. <math>45 + 23 =</math>   <math>87 - 34 =</math> add 3 one-digit numbers e.g. <math>4 + 8 + 9 =</math></p>	<p>Understand and use the x and ÷ symbols.</p> <p>Know multiplication and division facts for 2 5 and 10 multiplication tables. e.g. <math>2 \times 7 = 14</math> and <math>14 \div 2 = 7</math></p> <p>Recognise odd and even numbers.</p> <p>Know multiplication can be done in any order. e.g. <math>5 \times 2 = 10</math> and <math>2 \times 5 = 10</math> but division of one number by another cannot be done in any order. e.g. <math>10 \div 2 = 5</math> but <math>2 \div 10</math> does not = 5</p> <p>Use arrays and repeated addition to solve multiplication calculations. e.g. <math>5 \times 2</math> and <math>2 \times 5</math> as an array is  Or as a repeated addition is <math>2+2+2+2+2 = 10</math> or <math>5+5</math></p>

### Fractions

Recognise, find, name and write  $\frac{1}{3}$   $\frac{1}{4}$   $\frac{2}{4}$  and  $\frac{3}{4}$  of a length, shape, set of objects or quantity.

e.g.



Know that  $\frac{1}{2}$  is the same as  $\frac{2}{4}$ .

Solve simple fraction calculations involving  $\frac{1}{2}$   $\frac{1}{3}$   $\frac{1}{4}$

e.g.  $\frac{1}{2}$  of 6 = 3

### Measurement: Units of Measure

Know that length and height can be measured in centimetres (cm) and metres (m).

Know that weight/mass can be measured in kilograms (kg) and grams (g).

Know that temperature can be measured in degrees Celsius ( $^{\circ}\text{C}$ )

Know that capacity can be measured in litres (l) and millilitres (ml).

Compare and order units of measure (cm, m, kg, g,  $^{\circ}\text{C}$ , l and ml) using the signs < (less than) > (greater than) and = (equal to).

e.g.  $500\text{ml} < 800\text{ml}$  (500ml is less than 800ml)

### Measurement: Money and Time

Know the symbol for pounds (£) and pence (p).

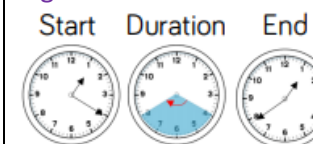
Use coins to make a particular amount  
e.g. to make 20p you can use two 10ps

know different ways to make the same amount  
e.g. 20p = two 10p, four 5ps or ten 2ps

Find the total of 2 amounts and calculate change  
e.g. I buy a 15p lolly and a 20p sweet. How much does this cost altogether and what change would you get from 50p

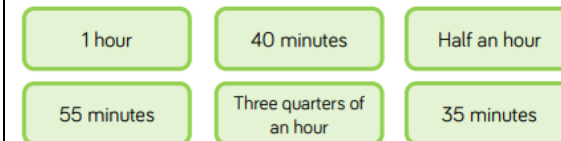
Find durations of time

e.g.



Compare and sequence intervals of time

e.g. order these durations from shortest to longest



Tell the time at o'clock, half past, quarter past and quarter to and draw hands on a clock to show these times.

Tell and write the time to 5 minutes

e.g. 5 past 7, 8 forty








Know the number of minutes in an hour and the number of hours in a day

**Shape**

Identify and describe the properties of 2d shapes using: number of sides and vertices, and vertical lines of symmetry.  
 e.g a rectangle has 4 sides and 4 vertices.

Find 2d shape on the surfaces of 3d shapes  
 e.g A cube has square faces or a triangle on a pyramid.

Identify and describe the properties of 3d shapes using: number of edges, faces and vertices  
 e.g a cuboid has 6 faces 12 edges and 8 vertices.


Shape	Name	Faces	Edges	Vertices	2-D shapes on surface
	Cube	6	12	8	Square
	Cylinder	3	2	0	Circle
	Sphere	1	0	0	None
	Cuboid	6	12	8	Square Rectangle
	Cone	2	1	1	Circle
	Square Based Pyramid	5	8	5	Square Triangle
	Triangular Prism	5	9	6	Triangle Square Rectangle

**Position and Direction**

Use the following words to describe movement in a straight line: forwards, backwards, up, down, left and right.

Use the following words to describe turns: full turn, half turn, quarter turn, three quarters turn, clockwise and anticlockwise.

e.g.  
 Draw the route to show these directions.


			

Forward 1 square. Turn left.

Forward 1 square, quarter turn anti-clockwise.

Forward 1 square. Make a quarter turn clockwise.

Forward 1 square. Make a three quarter turn anti-clockwise. Forward 3





**Statistics**


Understand and make pictograms, tally charts, block diagrams and tables

e.g.  
**Tally chart**

Class 1	
Flavour	Total
Vanilla	
Chocolate	
Strawberry	
Mint	





**Pictogram**


Colour	
Blue	
Green	
Red	
Purple	

**Key**  
 = 1 T-shirt

What is the most popular colour t-shirt?  
 What colour is the least popular t-shirt?  
 How many more children chose blue t-shirts than red?  
 How many children are in Class 5?

Or where a symbol represents more than 1  
 e.g.

Class 1	
Class 2	
Class 3	
Class 4	

**Key**  
 = 5 books

**Block Diagrams**

5 classes collected their house points. Here are their results.

Which class collected the most house points?  
 Which class collected the fewest house points?  
 How many more points did Class 2 get than Class 4?  
 How many fewer points did Class 3 get than Class 5?  
 How many points did Class 2 and Class 3 get altogether?

Class	Class 1	Class 2	Class 3	Class 4	Class 5
Number of House Points	100	80	20	40	60