

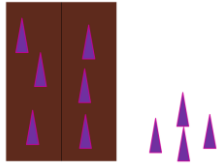
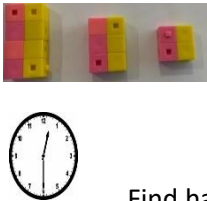

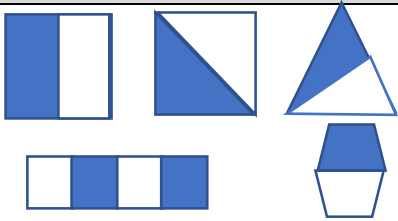
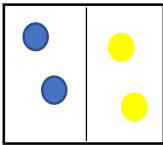
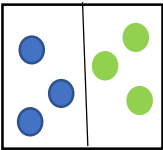

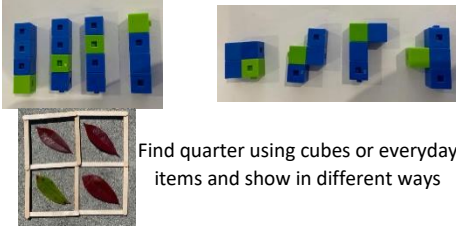

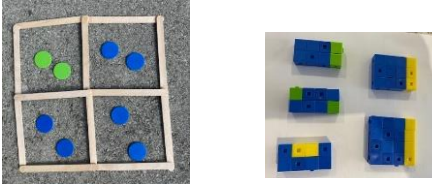
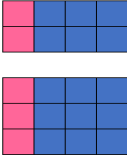
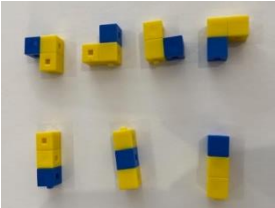
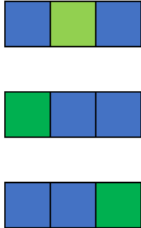
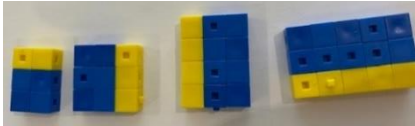




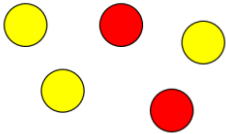


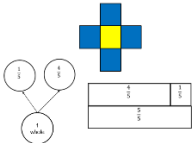
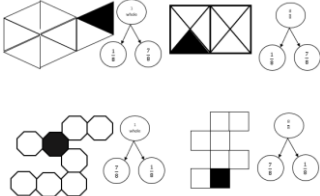

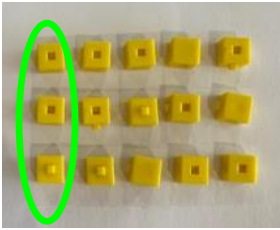
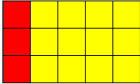
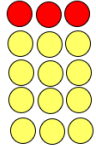


	Concrete	Pictorial	Abstract
EYFS			
To solve problems including halves	  <p>Halves of fruit or drinks and other common items</p>	 <p>Half and share images E.g. put half of the purple spikes on the Gruffalo</p>	
Key Stage 1			
To find $\frac{1}{2}$ of a shape	  <p>Find half using cubes or everyday items</p>	 <p>Find half of variety shapes in different ways</p>	
To find $\frac{1}{2}$ of a number	  <p>Find half using cubes or counters</p>	 <p>Find half using cubes or counters</p>	$\frac{1}{2}$ of 8 = 4 $\frac{1}{2}$ of 10 = 5




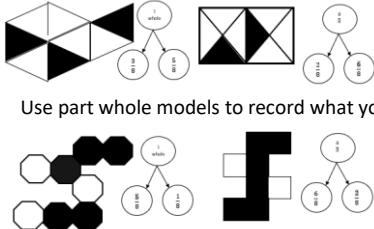
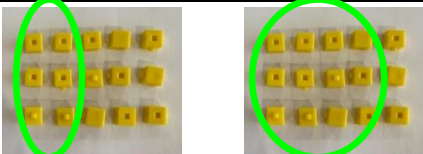
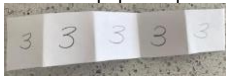
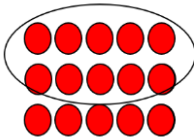
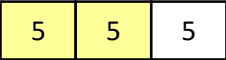

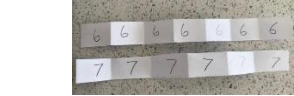
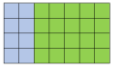
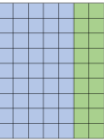
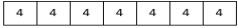
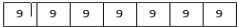




<p>To find $\frac{1}{4}$ of a shape</p> <p>To find $\frac{3}{4}$ of a shape</p>	 <p>Find quarter using cubes or everyday items and show in different ways</p>	 <p>Find quarter using pictures and show in different ways</p>	
<p>To find $\frac{1}{4}$ of a number</p> <p>To find $\frac{3}{4}$ of a number</p>	 <p>Find quarter using cubes or everyday items and show in different ways</p>	 <p>Find quarter using pictures and show in different ways</p>	<p>$\frac{1}{4}$ of 8 = 2</p> <p>$\frac{1}{4}$ of 12 = 3</p> <p>Find quarter using abstract form</p>
<p>To find $\frac{1}{3}$ of a shape</p>	 <p>Find third using cubes or everyday items and show in different ways</p>	 <p>Find third using pictures and show in different ways</p>	
<p>To find $\frac{1}{3}$ of a number</p>	 <p>Find third using cubes and show in different ways</p>	 <p>Find third using pictures and show in different ways</p>	<p>$\frac{1}{3}$ of 9 = 3</p> <p>$\frac{1}{3}$ of 15 = 5</p> <p>Find third using abstract form</p>



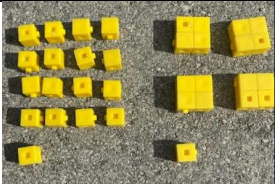
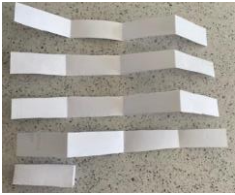
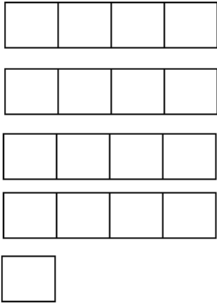
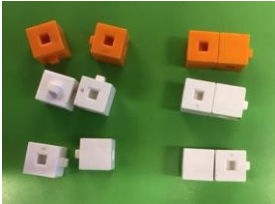
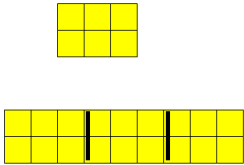

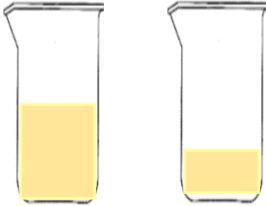
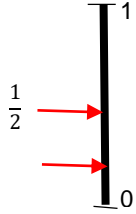
Key Stage 2			
Recognise, find, and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators	 <p>What fraction are apples? Pears? Limes?</p>	<p>What fraction is red?</p>  <p>What fraction are square? Circles?</p> 	<p>What fraction are multiples of 3?</p> <div> <div>27</div> <div>13</div> <div>23</div> <div>9</div> <div>21</div> </div>
Find unitary fractions of shapes	  <p>Find unitary fractions using cubes or everyday items and show in different ways</p>	 <p>Find unitary fractions using pictures and show in different ways</p>	
Find unitary fractions of numbers	  <p>Find unitary fractions using cubes</p>	<p>$\frac{1}{5}$ of 15</p>   <p>Find unitary fractions using pictures</p>	<p>$\frac{1}{5}$ of 25</p> <p>$\frac{1}{9}$ of 27</p> <p>$\frac{1}{6}$ of 18</p>

Find unitary fractions using cubes




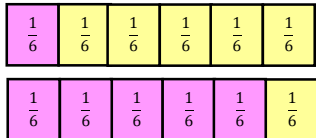
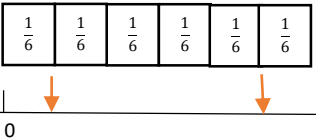

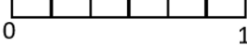
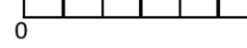

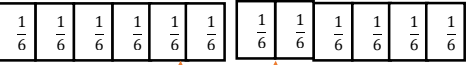
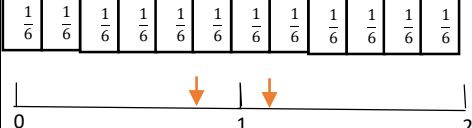
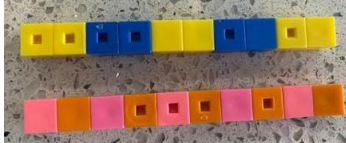
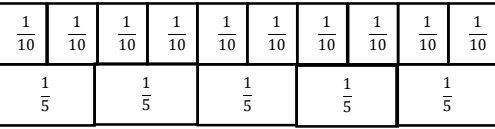
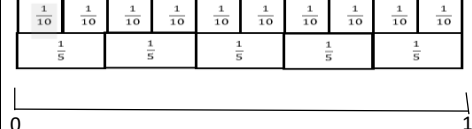

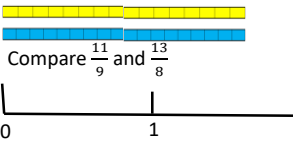
Find Non-unitary fractions of shapes	 <p>Use part whole models to record what you see</p>	 <p>Use part whole models to record what you see</p>	
Find Non-unitary fractions of numbers	 <p>Link the array to a part whole model used folded paper or practical resources</p> 	 <p>$\frac{2}{3}$ of 15</p> <p>Link the array to a part whole model</p> 	<p>$\frac{2}{3}$ of 15</p> <p>$\frac{3}{5}$ of 25</p>
Find increasingly difficult non unitary fractions	<p>Find $\frac{3}{7}$ OF 42 and $\frac{5}{6}$ of 42</p> <p>Comapre fraction of same number</p>  	<p>Find $\frac{2}{7}$ of 28 and $\frac{5}{7}$ of 63</p> <p>Compare fractions using same denominator</p>    	<p>Compare fractions</p> <p>$\frac{3}{7}$ of 49  $\frac{8}{28}$ × 21</p> <p>$\frac{2}{5}$ of 45  $\frac{3}{5}$ × 30</p> <p>$\frac{3}{8}$ of 72  $\frac{18}{24}$ × 32</p> <p>$\frac{1}{6}$ of 24  $\frac{12}{18}$ × 36</p>



Recognise mixed numbers and improper fractions	 	$\frac{17}{4}$		$\frac{17}{4} = 4\frac{1}{4}$
Use common factors to simplify fractions		$\frac{6}{18} = \frac{1}{3}$		$\frac{6}{18}$ Find largest common factor of 6 and simplify to $\frac{1}{3}$
Compare and Order fractions				
Compare and order unit fractions				Compare $\frac{1}{6}$ and $\frac{5}{6}$



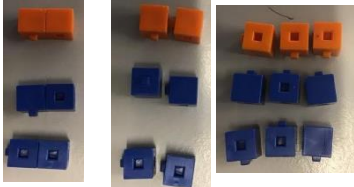
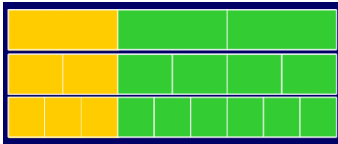
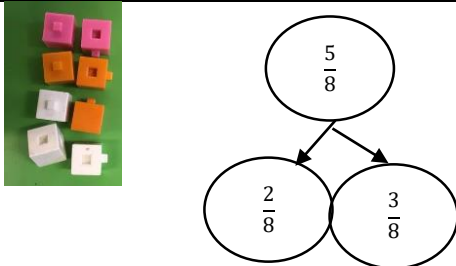
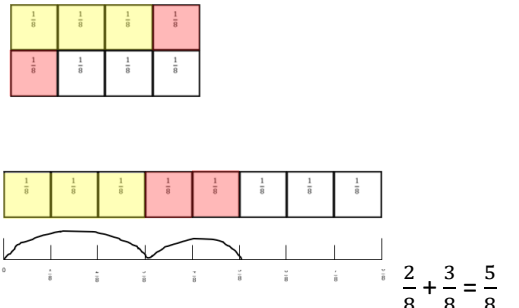
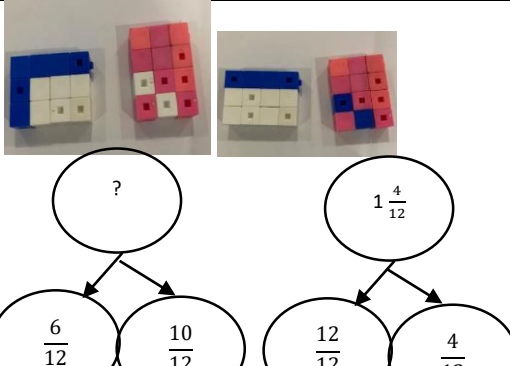
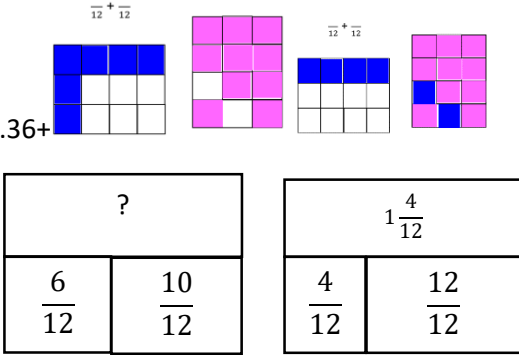
$$\frac{1}{4}$$

Compare and order fractions of the same denominator	<p>Compare $\frac{1}{6}$ and $\frac{5}{6}$</p> 	<p>Compare $\frac{1}{6}$ and $\frac{5}{6}$</p> 	
		  <p>Show both fractions ($\frac{1}{6}$ and $\frac{5}{6}$) on the number line</p>	
Compare and order fractions of the same denominator	 <p>Compare $\frac{5}{6}$ and $\frac{7}{6}$</p>	 <p>Compare $\frac{5}{6}$ and $\frac{7}{6}$</p>	
Compare and order fractions of the whose denominators are all multiples of the same number			
Compare and order fractions including fractions > 1		<p>Compare $\frac{6}{8}$ and $\frac{7}{9}$</p> 	 <p>Compare $\frac{11}{9}$ and $\frac{13}{8}$</p>
Equivalent Fractions			

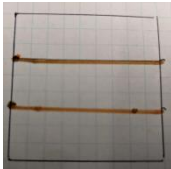
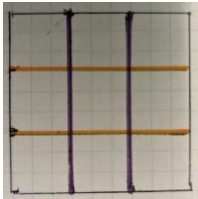
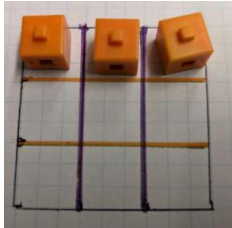
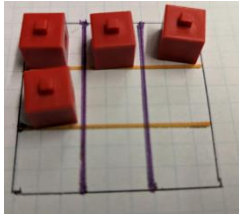
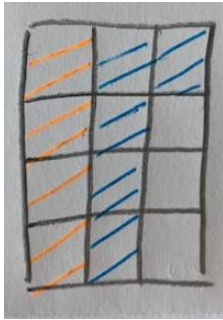


Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$			$\frac{2}{4}$ and $\frac{1}{2}$																																																																
Recognise and show, using diagrams, families of common equivalent fractions with small denominators																																																																			
	<p>Family of $\frac{1}{4}$ and $\frac{3}{4}$</p>	<p>Find a fraction of a shape and cut into equal groups in different ways</p>	<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td></tr><tr><td>5</td><td>10</td><td>15</td><td>20</td><td>25</td><td>30</td><td>35</td><td>40</td></tr></table> <p>Use double number line</p>	1	2	3	4	5	6	7	8	5	10	15	20	25	30	35	40																																																
1	2	3	4	5	6	7	8																																																												
5	10	15	20	25	30	35	40																																																												
Recognise and show, using diagrams, families of common equivalent fractions	$\frac{2}{9} = \frac{4}{18} = \frac{6}{27} = \frac{8}{36}$	<p>Family of $\frac{1}{5}$ and $\frac{4}{5}$</p> <p>Family of $\frac{2}{3}$ and $\frac{1}{3}$</p>	<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td></tr><tr><td>2</td><td>4</td><td>6</td><td>8</td><td>10</td><td>12</td><td>14</td><td>16</td></tr><tr><td>3</td><td>6</td><td>9</td><td>12</td><td>15</td><td>18</td><td>21</td><td>24</td></tr><tr><td>4</td><td>8</td><td>12</td><td>16</td><td>20</td><td>24</td><td>28</td><td>32</td></tr><tr><td>5</td><td>10</td><td>15</td><td>20</td><td>25</td><td>30</td><td>35</td><td>40</td></tr><tr><td>6</td><td>12</td><td>18</td><td>24</td><td>30</td><td>36</td><td>42</td><td>48</td></tr><tr><td>7</td><td>14</td><td>21</td><td>28</td><td>35</td><td>42</td><td>49</td><td>56</td></tr><tr><td>8</td><td>16</td><td>24</td><td>32</td><td>40</td><td>48</td><td>56</td><td>64</td></tr></table> <p>Use multiplication table</p>	1	2	3	4	5	6	7	8	2	4	6	8	10	12	14	16	3	6	9	12	15	18	21	24	4	8	12	16	20	24	28	32	5	10	15	20	25	30	35	40	6	12	18	24	30	36	42	48	7	14	21	28	35	42	49	56	8	16	24	32	40	48	56	64
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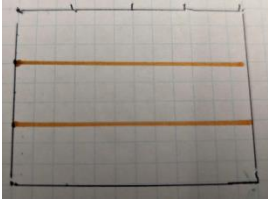
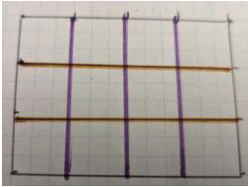

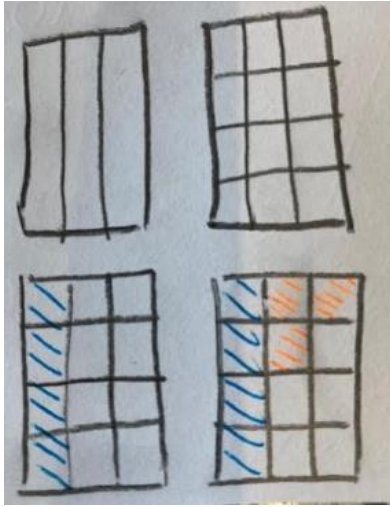


Identify name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths	 $\frac{1}{3} = \frac{2}{6} = \frac{3}{9}$	 $\frac{1}{3} = \frac{2}{6} = \frac{3}{9}$	Write fractions that are equivalent to $\frac{3}{5}$ $\frac{30}{50}$ $\frac{60}{100}$ $\frac{120}{200}$ $\frac{15}{25}$ $\frac{21}{35}$ $\frac{27}{45}$
Calculation Addition and Subtraction of fractions			
Add and subtract fractions with the same denominator within one whole		 $\frac{2}{8} + \frac{3}{8} = \frac{5}{8}$	$\frac{2}{8} + \frac{3}{8} = \frac{5}{8}$ $\frac{2}{8} + \frac{3}{8} + \frac{3}{8} = \frac{8}{8}$
Add and subtract fractions with the same denominator		 $\frac{6}{12} + \frac{10}{12} = 1\frac{4}{12}$	$\frac{6}{12} + \frac{10}{12} = 1\frac{4}{12}$ $1\frac{4}{12} = 1\frac{1}{3}$

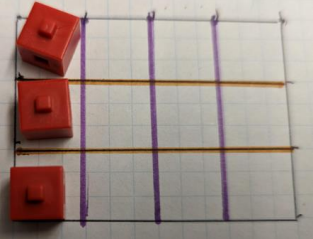
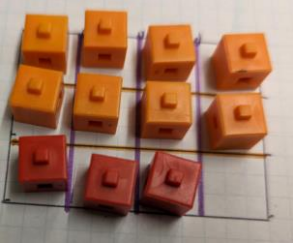
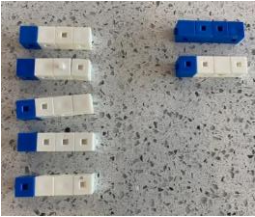
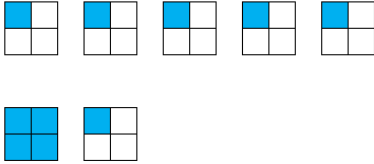


<p>Add and subtract fractions with denominators that are multiples of the same number</p>	<p>$\frac{1}{3} + \frac{4}{9}$</p> <div style="display: flex; justify-content: space-around;">   </div> <p>Split into thirds Split into ninths</p> <div style="display: flex; align-items: flex-start;">  <div style="margin-left: 10px;"> <p>1/3 is the same as 3/9 (remove the cubes)</p> <p>1/3 = 3/9</p> </div> </div> <div style="display: flex; align-items: flex-start; margin-top: 20px;">  <div style="margin-left: 10px;"> <p>Put on 4/9</p> </div> </div>	<p>$\frac{5}{12} + \frac{1}{3}$</p> 	<p>$\frac{5}{12} + \frac{1}{3} = \frac{3}{4}$</p>

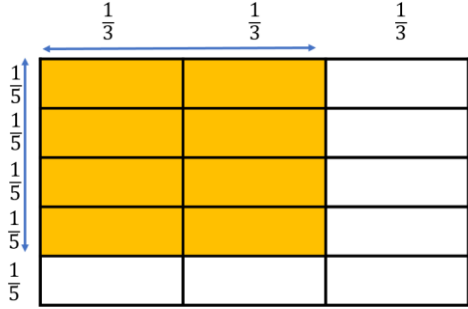
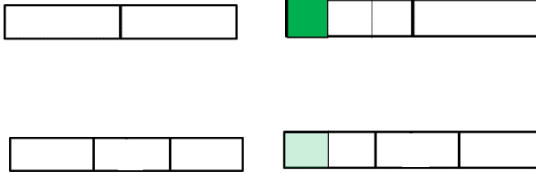






		Add them		
Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions	<p>$\frac{2}{3} + \frac{1}{4}$ Split into thirds</p>  <p>Split into quarters</p>  <p>Put on $\frac{2}{3}$ and remove</p>  <p>Put on $\frac{1}{4}$ and remove</p>	<p>$\frac{2}{3} = \frac{8}{12}$</p>		$\frac{1}{3} + \frac{1}{4}$ $\frac{4}{12} + \frac{3}{12} = \frac{7}{12}$



	 <p>$\frac{3}{4} = \frac{9}{12}$</p> <p>Finally add them</p>  <p>Answer= $\frac{11}{12}$</p>		
Calculation Multiplication and division			
Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	<p>$\frac{1}{4} \times 5$</p> 	<p>$\frac{1}{4} \times 5$</p> 	<p>$\frac{1}{4} \times 5$</p> $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \frac{5}{4}$ $\frac{5}{4} = 1\frac{1}{4}$



<p>Multiply pairs of proper fractions, writing the answer its simplest form</p>	$\frac{4}{5} \times \frac{2}{3} = \frac{8}{15}$ 	$\frac{1}{3} \times \frac{1}{2} = \frac{1}{6}$ 	$\frac{1}{3} \times \frac{1}{2} = \frac{1}{6}$
<p>Divide proper fractions by whole numbers</p>	$\frac{1}{3} \div 2$  $\frac{1}{2} \div 3$ 	$\frac{1}{3} \div 2$  $\frac{1}{2} \div 3$ 	$\frac{1}{3} \div 2 \qquad \frac{1}{3} \div \frac{2}{1} \qquad \frac{1}{3} \times \frac{1}{2} = \frac{1}{6}$ $\frac{1}{2} \div 3 \qquad \frac{1}{2} \div \frac{3}{1} \qquad \frac{1}{2} \times \frac{1}{3} = \frac{1}{6}$