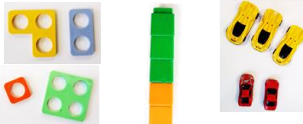

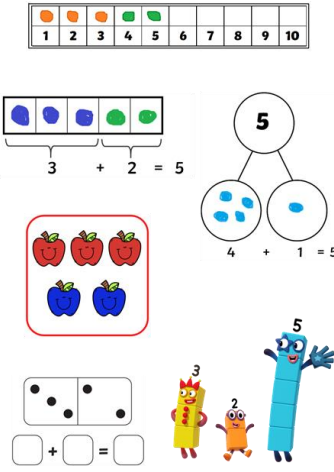
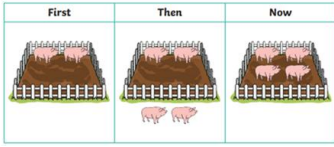


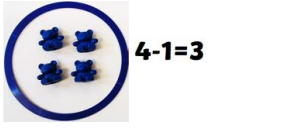
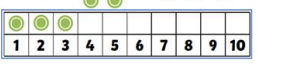
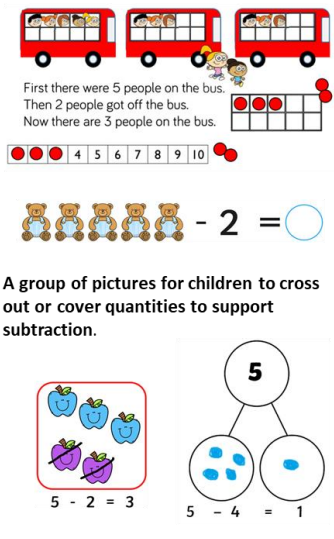
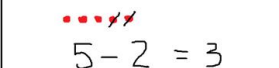


# EYFS Maths Calculation Policy


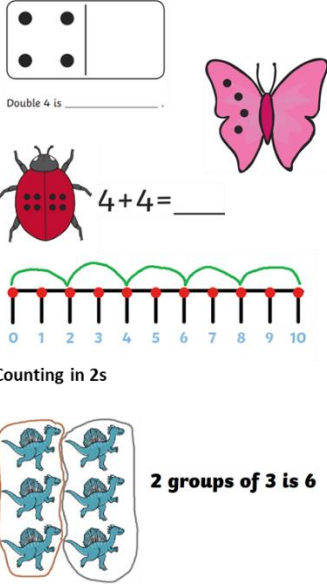
## Addition

Question for Learning	Concrete	Pictorial	Abstract	Mathematical Talk
<p><u>Addition</u></p> <p><b>How are numbers added?</b></p> <ul style="list-style-type: none"> <li>Children are encouraged to gain a sense of the number system through the use of counting concrete objects.</li> <li>They combine objects in practical ways and find the total.</li> <li>They begin to use + and = to record number sentences.</li> <li>Children develop a mental picture of the number system through subitising to use for calculations.</li> <li>Children use first/then/now stories to work out word problems.</li> <li>Knows that a group of things change in quantity when something is added.</li> <li>Says the number that is one more than a given number.</li> </ul>	 <p>Use specific math resources such as counters, unifix cubes, Numicon, Rekenreks, etc.</p>  <p>Use visual supports such as five/ten frames, part part whole and addition mats, with the physical objects and resources that can be manipulated</p>	 <p>3 + 2 = 5</p> <p>4 + 1 = 5</p> <p>3 + 2 = 5</p> <p>4 + 1 = 5</p> <p>5 + 0 = 5</p> <p>First Then Now</p> 	 <p>3 + 2 = 5</p> <p>4 + 1 = 5</p> <p>5 + 0 = 5</p> <p>* No expectation for children to be able to record a number sentence/addition calculation</p>	<ul style="list-style-type: none"> <li>What does <u>whole</u> mean?</li> <li>What does <u>part</u> mean?</li> <li>How can parts/wholes be <u>represented</u>?</li> <li>Are the parts <u>smaller</u> or <u>larger</u> the more you <u>partition</u> them? Why?</li> <li>Can 0 be a part?</li> <li>Can the parts be <u>swapped around</u>?</li> <li>What does <u>equal</u> mean?</li> <li>What is the <u>number sentence</u>?</li> </ul>

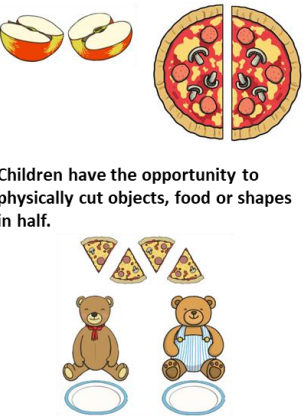
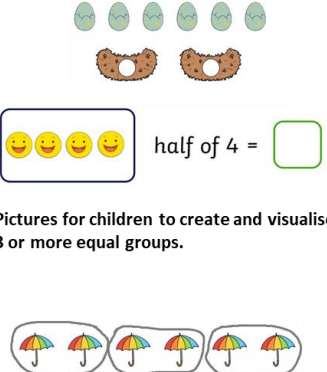
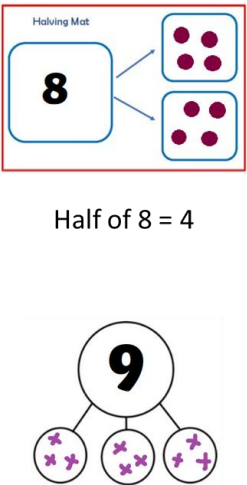
## Subtraction

Question for Learning	Concrete	Pictorial	Abstract	Mathematical Talk
<p><u>Subtraction</u></p> <p><b>How are numbers subtracted?</b></p> <ul style="list-style-type: none"> <li>Knows that a group of things change in quantity when something is taken away</li> <li>Says the number that is one less than a given number up to 5 and then up to 10.</li> <li>In practical activities and discussion, beginning to use the vocabulary involved in subtracting.</li> </ul>	<p>Use toys and general classroom resources for children to physically manipulate, group/regroup</p>  <p>5 - 3 = 2</p>  <p>4 - 1 = 3</p>  <p>5 - 2 = 3</p>	 <p>First there were 5 people on the bus. Then 2 people got off the bus. Now there are 3 people on the bus.</p> <p>5 - 2 = 3</p> <p>5 - 4 = 1</p> <p>A group of pictures for children to cross out or cover quantities to support subtraction.</p> <p>5 - 2 = 3</p> <p>5 - 4 = 1</p> <p>Use visual supports such as five/ten frames, part part whole with pictures.</p>	 <p>5 - 2 = 3</p> <p>* No expectation for children to be able to record a number sentence/addition calculation</p>	<ul style="list-style-type: none"> <li>How many objects were there first?</li> <li>How many objects were taken away?</li> <li>How many objects are <u>left</u> now?</li> <li>What is the <u>whole</u>?</li> <li>What are the <u>parts</u> ?</li> <li>What is the <u>calculation</u>?</li> <li>What does <u>difference</u> mean?</li> <li>What symbol is used to find the <u>difference</u>?</li> </ul>

# Multiplication

Question for Learning	Concrete	Pictorial	Abstract	Mathematical Talk
<p><u>Multiplication</u></p> <p><b>How are numbers multiplied?</b></p> <ul style="list-style-type: none"> <li>• Doubling a number creates two groups of the same number</li> <li>• Creating multiple groups of the same quantity and counting them together.</li> </ul>	 <p>Practical fun activities to visualize doubling using mirrors and paint.</p> <p>Physical and real life examples that encourage children to see concept of doubling as adding two equal groups.</p>	 <p>Double 4 is _____</p> <p><math>4 + 4 = \underline{\quad}</math></p> <p>Counting in 2s</p> <p><b>2 groups of 3 is 6</b></p>	<p>Double 2 = 4</p> <p>Double 4 = 8</p> <p><math>3 + 3 = 6</math></p> <p><math>4 + 4 = 8</math></p> <p><math>5 + 5 = 10</math></p>	<ul style="list-style-type: none"> <li>❖ How many <u>pairs</u> are there?</li> <li>❖ How many objects/animals are there in <u>total</u>?</li> <li>❖ How do we know the groups are <u>equal</u>?</li> <li>❖ How many are in <u>each group</u>?</li> <li>❖ What is the <u>same</u>? What is <u>different</u>?</li> <li>❖ How can I <u>represent</u> the number sentence?</li> <li>❖ What does <u>double</u> mean?</li> <li>❖ How can objects be sorted into <u>equal groups</u>?</li> <li>❖ How many objects are there <u>left over</u>?</li> </ul>

# Division

Question for Learning	Concrete	Pictorial	Abstract	Mathematical Talk
<p><u>Division</u></p> <p><b>How are numbers divided?</b></p> <ul style="list-style-type: none"> <li>• Halving a whole</li> <li>• Share a quantity objects into equal groups and count how many in each group</li> </ul>	 <p>Children have the opportunity to physically cut objects, food or shapes in half.</p> <p>Counting and other maths resources for children to share into two equal groups.</p> <p>Use visual supports such as halving mats and part part whole, with the physical objects and resources that can be manipulated</p>	 <p>half of 4 = <input type="text"/></p> <p>Pictures for children to create and visualise 3 or more equal groups.</p> <p>Pictures and icons that encourage children to see concept of halving in relation to subitising, addition and subtraction knowledge. i.e. Knowing 4 is made of 2 groups of 2, so half of 4 is 2.</p>	 <p>Half of 8 = 4</p> <p>Half of 9 = <input type="text"/></p>	<ul style="list-style-type: none"> <li>❖ How can you tell if the groups are <u>equal</u>?</li> <li>❖ Can all numbers be <u>shared equally</u>?</li> <li>❖ Does <u>each group</u> need to be arranged in the same way for it to be <u>equal</u>?</li> <li>❖ How can I <u>share</u> the objects <u>equally</u>?</li> <li>❖ How many <u>equal groups</u> am I <u>sharing</u> the objects into?</li> <li>❖ Are the groups <u>equal</u>?</li> <li>❖ Are there any <u>left over</u>?</li> </ul>