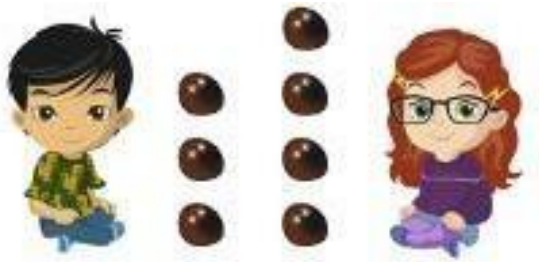
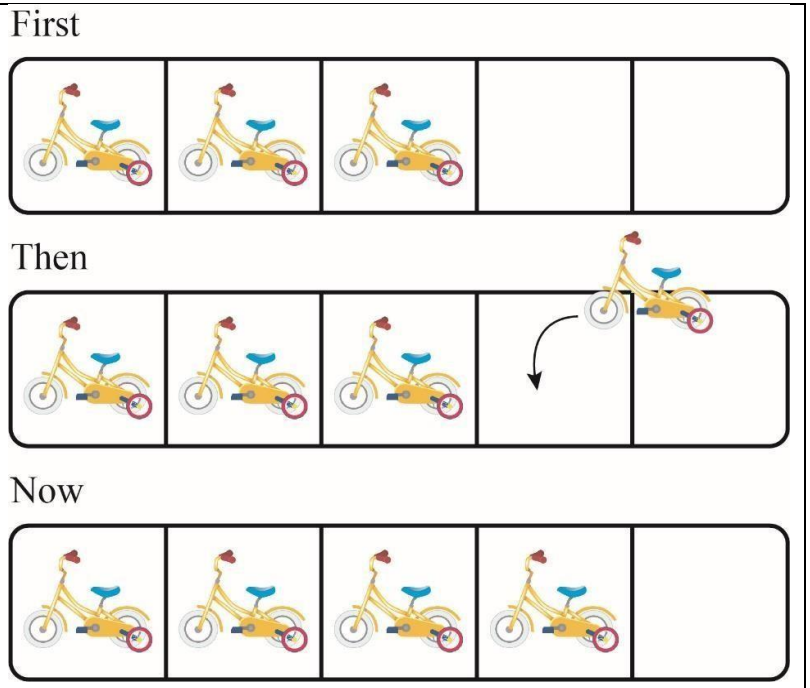
EYFS Calculation Policy

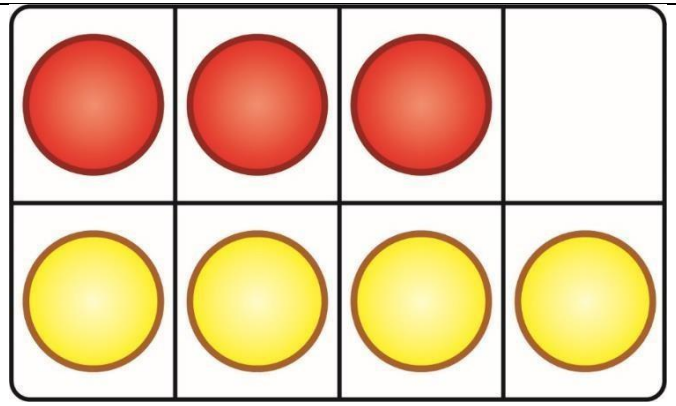
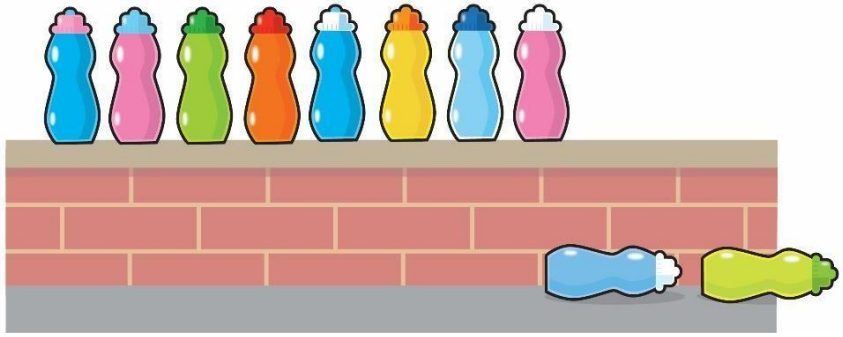
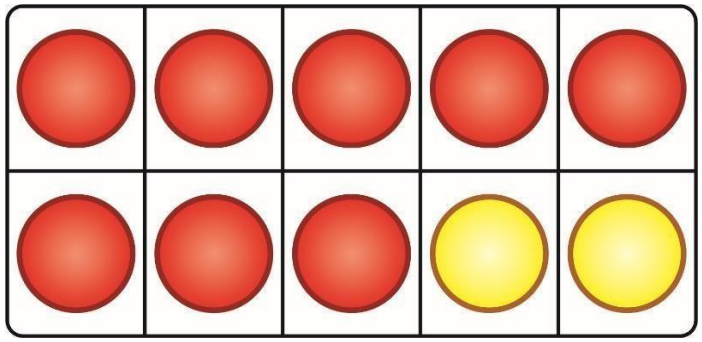
In this policy we set out the progression children will move through in calculation in the EYFS. Our Nursery pupils will focus on the foundation skills and concepts of counting, shapes and spatial awareness, comparing and ordering and patterns. These elements are designed to build a strong mathematical foundation as children progress through their learning.

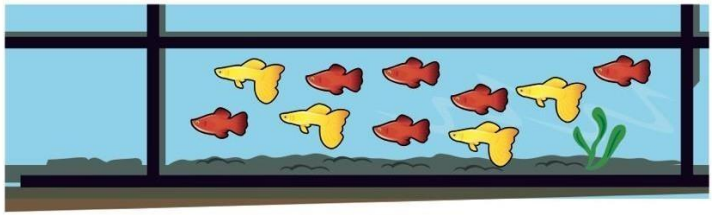
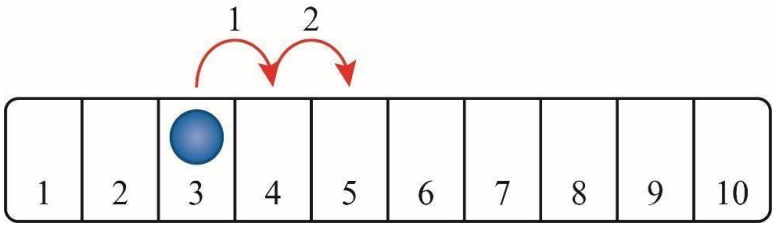
Our Reception pupils will follow the NCETM Mastering Number Programme and be given further mathematics opportunities through high quality adult led sessions plus opportunities to extend and explore their mathematics through play.

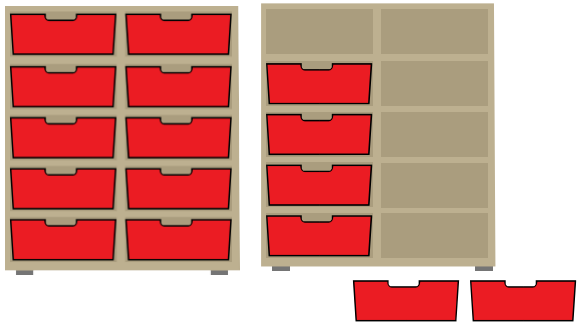
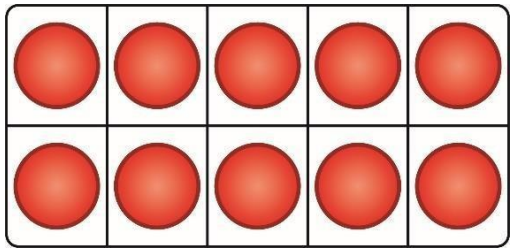
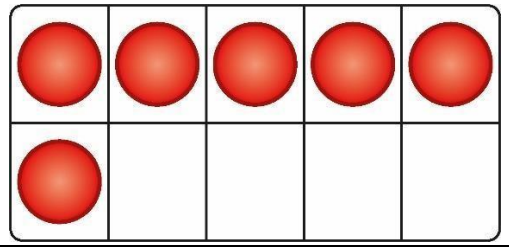
	Real-life representation	
Addition	**<u>Sorting groups</u>** Children sort everyday objects into groups.	

		
	<u>Counting and adding more (within 5)</u> Children add one more person or object to a group to find one more.  *One more than 3 is 4*	**<u>Counting and adding more (within 5)</u>** Children represent first, then, now stories on a five frame. They make the first number and then add one more.

		 *First, there are 3 bikes.* *Then, 1 more bike came. Now, there are 4 bikes.*
	<u>Combining groups to find the whole</u> Children sort people and objects into parts and combine them to find the whole.	**<u>Combining groups to find the whole</u>** Children use counters or cubes in a part-whole model to find the whole.

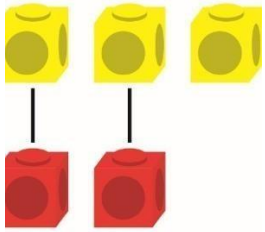
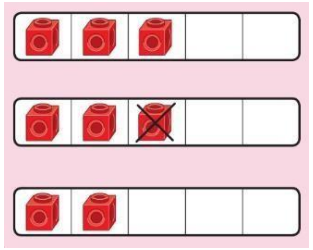
	 *The parts are 3 and 4. The whole is 7.*	 *The parts are 3 and 4. The whole is 7.*
	Finding number bonds to 10 Children combine 2 groups to find a number bond to 10  *There are 8 bottles on the wall.*	**Finding number bonds to 10** Use ten frames and part-whole models to represent key number bonds.  *8 and 2 is 10*

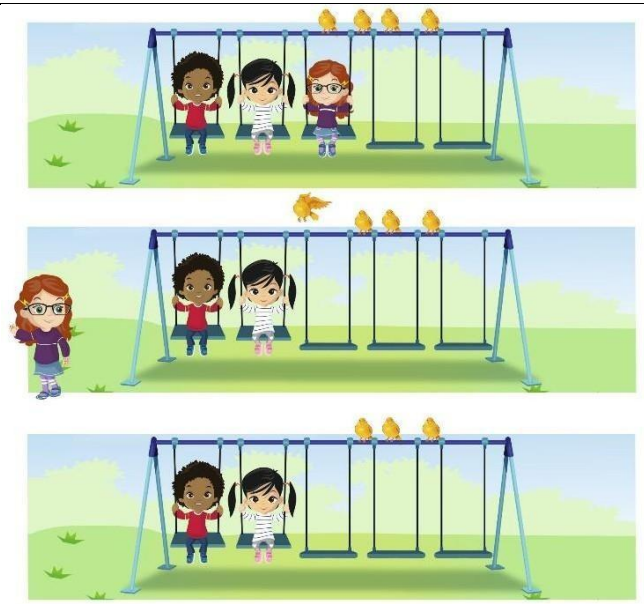
	There are 2 bottles on the floor. *There are 10 bottles altogether.*	*There are 10 altogether.*  *6 and 4 is 10* *There are 10 altogether.*
	<u>Adding by counting on (number track)</u> Children jump along a physical number track. They start at the larger number and count on the smaller number to find the total. 	**<u>Adding by counting on (number track)</u>** Children use a number track and a counter. They start at the larger number and count on the smaller number to find the total. 

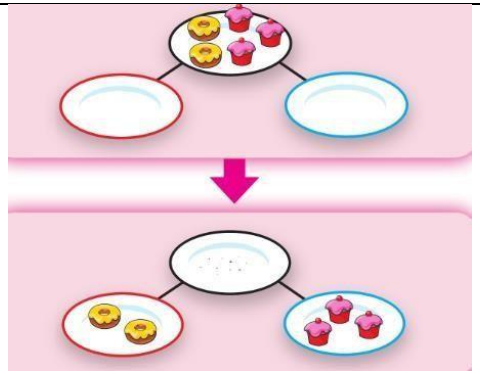
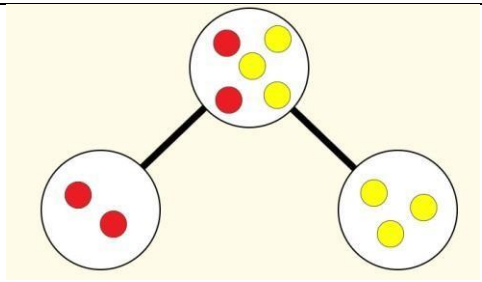
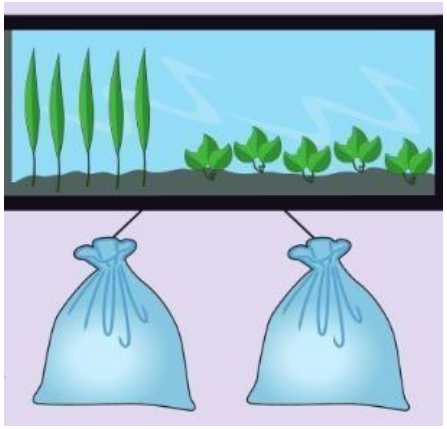
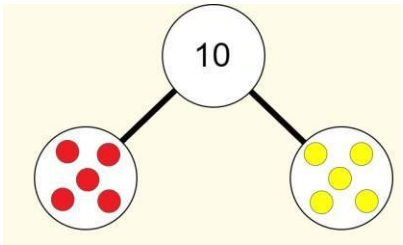
	Adding by counting on (ten frames) Children find the total number by counting on from the larger number. 	**Adding by counting on (ten frames)** Children make the larger number on the ten frames and then make the smaller number, counting on to find the total. They can use counters, cubes or other objects on the ten frames.  

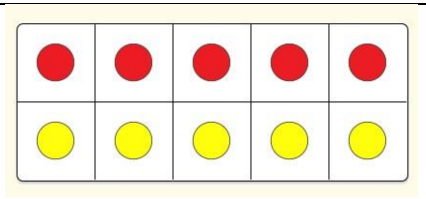
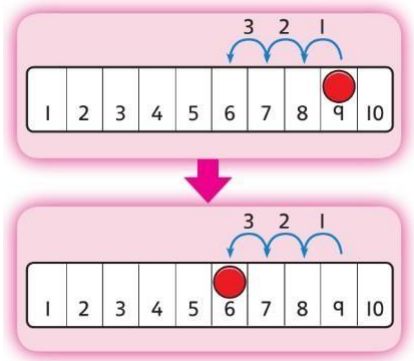
Subtraction	**Sorting groups** Children sort everyday objects into groups.	

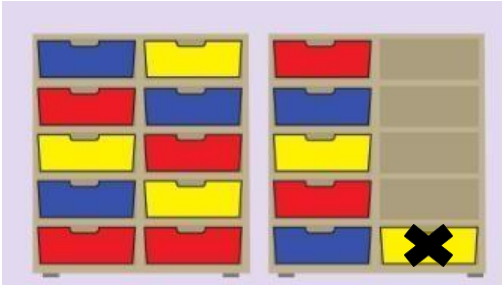
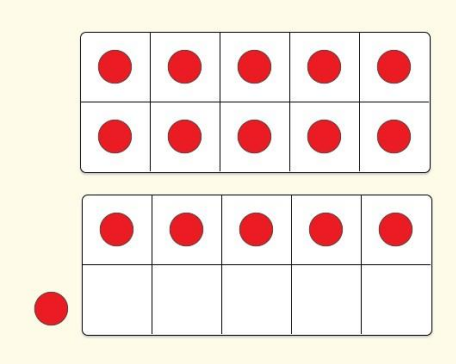
		
	<u>Comparing groups</u> Children line up objects to compare the amount. They line the objects up either horizontally or vertically.	**<u>Comparing groups</u>** Children line up cubes or counters to compare the amount in each group. Lines can either be horizontal or vertical. A starting line helps to line the objects accurately.

	 *Ella has more conkers.* *Tom has fewer conkers.*	 *There are more yellow cubes.* *There are fewer red cubes.*
	Counting back and taking away (within 5) Children remove one more person or object from a group to find one less.	**Counting back and taking away (within 5)** Children use five frames and objects to make a number. They then remove or cross out one object to find one less. 

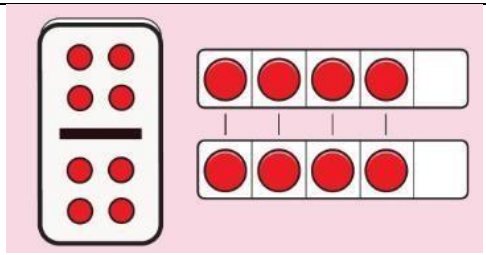
	 *First, there were 3 children.* *Then, 1 child left.* *Now, there are 2 children.*	*One less than 3 is 2*
	<u>Introducing the part-whole model</u> Children sort everyday objects into parts.	**<u>Introducing the part-whole model</u>** Children use counters or cubes to represent objects in a part-whole model.

	 *One part is* *The other part is*	 *The whole is 5.* *2 is a part.* *is a part.*
	Finding number bonds to 10 Children partition 10 into different groups to find the number bonds to 10 	**Finding number bonds to 10** Children use part-whole models, ten frames and counters to find the number bonds to 10  *10 is the whole.* *5 is a part and 5 is a part.*

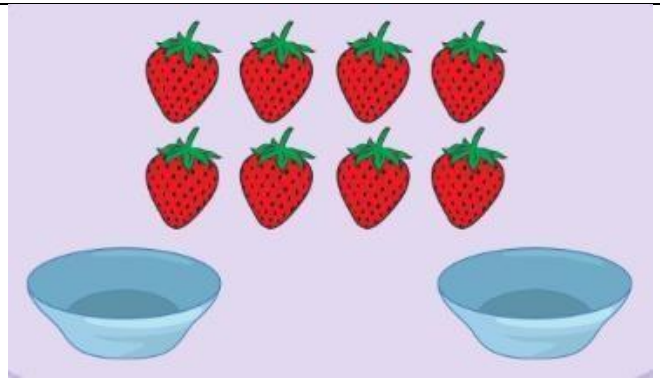
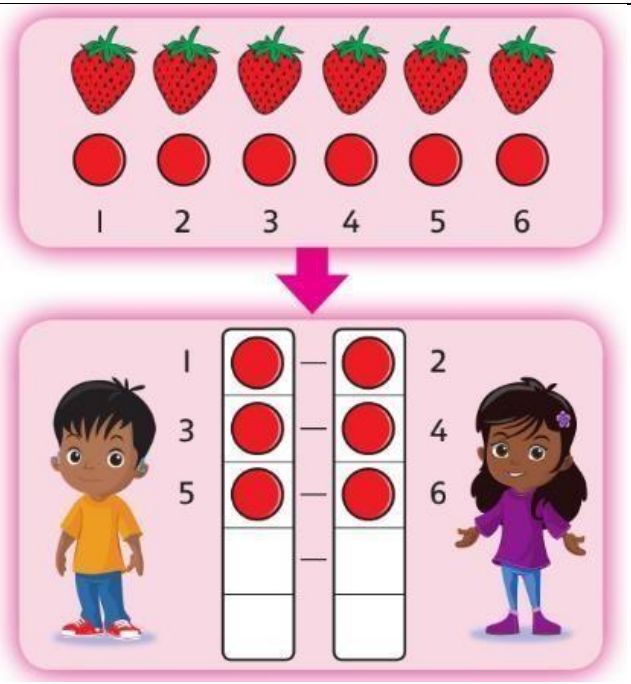
		 *10 is the whole.* *5 is a part and 5 is a part.*
	Counting back and taking away (number track) Children use game boards and human number tracks to subtract by counting back.  *9 take away 3 equals 6* *9…8…7…6*	**Counting back and taking away (number track)** Children use a number track and a counter. They start at the larger number and count back the smaller number to find the answer.  *9 take away 3 equals 6* *9…8…7…6*

	<u>Counting back and taking away (ten frames)</u> Children count backwards to find one less with numbers up to 20  *One less than 16 is 15*	**<u>Counting back and taking away (ten frames)</u>** Children remove counters from ten frames to support in counting back with numbers up to 20.  *One less than 16 is 15*

Multiplication		
	<u>Making doubles</u> Children explore doubles in their environment including in games such as on dominoes or dice. They focus on the understanding of doubles being 2 equal groups.	**<u>Making doubles</u>** Children use five frames to find doubles by lining up counters or cubes.

	 *Double 4 is 8* *Double 2 is 4* *Double 3 is 6*	 *Double 4 is 8*

Division		
	<u>Halving and sharing</u> Children explore halving and sharing through practical sharing using real life scenarios including sharing fruit or classroom equipment.	**<u>Halving and sharing</u>** Children use five frames to share amounts fairly and to check that the groups are equal. They share the counters/cubes one by one.

	 *Half of 8 is 4*	 *Half of 6 is 3*