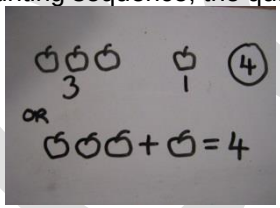
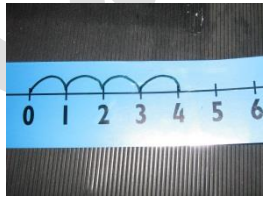
All Saints C of E Primary School Year R – Numbers

By the end of the reception year, children have been taught to:

Learning milestone	Why is it important? Things to watch out for!	Ways to support a Year R child
Recognise some numerals of personal significance	This objective is important to demonstrate how numbers are important to them as individuals, for example:   	Talking about numbers is the best way to support a child and to explore what they mean to them on a day to day basis.
Recognise numerals 1 to 5	Reading numerals is vital for children's mathematical development. Reading numbers is equivalent to reading letters and words in their English learning. Letters build words and give meaning; this is exactly the same for numbers. Children need to see numbers all around and be made aware of numbers in their environment. Reading numbers requires practice, just like reading letters and words. This enables children to remember the shape of the number and what it means.	Being a number detective is a great way to help a child recognise numbers. • Go on a number hunt around a house, street or in town and see who can see the most number 1s, 2s, 3s etc. • When out in a card shop ask a child to find the birthday cards for one year olds or two year olds etc. • Play a target game – put buckets or hoops with the numbers on them. If a child throws a ball into that particular bucket, he/she scores the amount of points on the bucket/hoop.
Count up to three or four objects by saying one number name for each item	Understanding that each object being counted must be given one count and only one count is key to this learning. It is useful in the early stages for children to actually touch each item being counted and to move an item out of the way as it is counted. The action of touching/moving must be done at the same time as the number name is said. You may see: Your child moving objects slowly and counting really quickly, therefore moving 4 objects but counting up to number 8 and then thinking there are 8 objects. Your child saying the number names in the wrong order, also needs more practice at learning the counting sequence.	Counting with a child as he/she is counting out a certain amount of objects allows us to slow him/her down so that he/she is counting at the same time as touching the object. Physically moving things and counting helps a child see what to do as we act as a role model. A way to make it more fun is for us to make deliberate mistakes and ask a child to help us 'get it right'. Asking a child to teach someone else or his/her teddy or doll is a fun purposeful way of helping him/her to consolidate the learning (this can be done for any of these learning goals).
Count actions or objects which cannot be moved	Counting actions is another way of consolidating the fact that the number name is the label given to the amount of actions done or objects counted.	Walking up and down steps, counting skips/hops and jumps are all active and fun ways of helping children to learn and see a purpose and meaning behind counting.

Count objects to 10, and begin to count beyond 10	Understanding that the counting sequence stays consistent. It is always 1, 2, 3, 4, 5, 6, 7, etc., not 1, 2, 4, 5, 8. Children need to be able to count with a purpose, for example; counting steps, fish fingers, toes, money and sweets; rather than just reeling off a list of numbers which could be meaningless without understanding. A child with no understanding of number saying 1,2,3,4 is the same as a child saying frogs, jelly, raindrops, cushions – pointless!	Make counting fun! Lots of family board games are really useful to help children look at the sequence and patterns of number whilst playing a game. Counting steps, peas on a plate, sweets in a packet, shopping in a trolley, pennies in a jar are all purposeful counting activities which support mathematical development in a way that can be deemed to be 'helping mummy/daddy'.
Count out up to 6 objects from a larger group	Understanding that the counting of objects can begin with any object in a set. This can be a challenging thing to learn because a child has to multi-task! He/she has to remember how many objects we asked for, pick out one at a time, remember how many he/she had counted so far and know when to stop. Quite often some children find it hard to remember how many objects were asked for to begin with and so they keep counting.	
Counts an irregular arrangement of up to 10 objects	Understanding that the quantity of five large things is the same count as a quantity of five small things. Or the quantity is the same as a mixed group of five small, medium and large things. This objective is important to show that numbers are not assigned to a specific object. Numbers are labels which describe an amount of things.	
Select the correct numeral to represent 1 to 5, then 1 to 10 objects	Reading numerals is vital for children's mathematical development. Reading numbers is equivalent to reading letters and words in their English learning. Letters build words and give meaning, this is exactly the same for numbers. Children need to see numbers all around and be made aware of numbers in their environment. Reading numbers requires practice just like reading letters and words. This enables children to remember the shape of the number and what it means. Some children get mixed up between letters and numbers, which is completely understandable at this early age of mathematical development (bearing in mind they are learning phonics and letter shapes too!)	Looking at examples of numbers when shopping, on number plates, on houses and newspapers are a few examples of good ways to immerse a child in a number rich environment. There are lots of games we can play to help children, such as snap, board games, as well as making up our own games by numbering toy cars, teddies etc. We can even eat numbers! Yummy! 
Estimates how many objects they can see and checks by counting	Estimating is a good way to see whether a child has an understanding of the relative value of a number. We talk about estimates as being a reasonable guess based on what we can see. At times, a child may look at 5 objects and estimate that there are a million, which is quite often the response because he/she wants to say the largest number that they possibly	Pretend to be a magician! Put a small collection of toys on the carpet. Give a child enough time to make an estimate but not enough time to count them. Cover the objects over with a small blanket. When they are covered ask for the child to estimate and then reveal the objects for the child

	know OR he/she just has not secured the concept of place value yet. Alternatively an estimate of 6 would show that a child has linked the relative value of the number to its number name.	to count them and check whether the estimate was accurate. Put a few objects in an enclosed bag. Challenge the child to have a quick feel and then make an estimate. Turn them out of the bag so that the child can count how many there are.
Use the language of more and fewer to compare two sets of objects	Mathematical language is a completely new set of language which children have to learn. Some children may be exposed to the language of *more* and *fewer* during meal times from an early age, whereas others may not.	Practical everyday activities are the best way of supporting a child with early addition and mathematical language acquisition.
Finds the total of items in two groups by counting all of them	Understanding that the last count of a group of object represents how many are in the group. A child who recounts when asked how many sweets are in the set that they just counted, has not understood the cardinality principle. If a child was asked how much fruit there are in the bowl he/she may approach it in several ways. After counting he/she may respond by saying: • 5 pieces of fruit • 3 oranges and 2 apples (he/she has said the individual fruits and not understood the concept of altogether) • 2 apples (he/she has said the total of the last group of fruit that was counted and therefore he/she has not understood the concept of altogether and the concept of combining two groups)	
Says the number that is one more than a given number Finds out one more or one less from a group of up to 5 objects, then 10 objects	Understanding that as we move up the counting sequence, the quantity increases by one. .      If a child was to respond to the question 'What is one more than 3?' by saying 10 - several things could have occurred, such as: • He/she did not understand the concept of one more	Pretending to forget the name of something or how to do something is always a good way to help a child to think, learn and remember things. By doing this it makes it more relaxed and less like we are testing them. We may get them to teach us how to do something, thus putting them in charge. Adult: My brain doesn't seem to be working properly today! I can't remember how to find one more than 3. Can you help me?

	• He/she cannot count accurately and therefore does not know that 4 comes after 3. • He/she has not built a visual image of the sequence of numbers in his/her brain and therefore cannot draw on that knowledge.	
In practical activities and discussions children are beginning to use the vocabulary of addition and subtraction	Vocabulary: add, more, and, make, sum, total, altogether, score Double, one more, two more, ten more…, How many more to make… ? How many more is… than…? take (away), leave. How many are left/left over? How many have gone? one less, two less… ten less… How many fewer is… than…? The difference between is the same as….. Mathematical vocabulary can be very specialised and can at times cause confusion. For example, when using the term take away, some children may automatically think about a take away meal such as; pizza or fish and chips, rather than maths.	
Records using marks that they can interpret and explain	Children's mathematical mark making is a progressive skill, which children need to develop at their own speed and in a way which is meaningful to them. When presented with a verbal maths problem, children are encouraged to solve it practically with equipment. A way to develop mathematical mark making is by asking the child to draw what he/she has done – 'show me how you solved the problem', 'show me how you worked it out so I/you don't forget'.	The urge as a parent is often to rush children into writing out 'sums'; in school we refer to these calculations as number sentences because the term sum only refers to addition. We write number sentences horizontally so that children read it as if they are reading words. Likewise, the addition and subtraction signs are not introduced to children until they are ready and able to understand the concepts of *more* and *less* linked to the sign.

year R