

Knowledge - What I will learn – Autumn Term

- Recognise numerals 0-5
- Subitise up to 3 objects. (Don't count, say the amount)
- Understand how to represent and compare numbers up to 5.
- Explore 2D shapes - circles, squares, rectangles, triangles and pentagons and talk about their properties.
- Understand the number system. Counting forward and backwards.
- Explore 1 more and 1 less than a number.
- Explore 3D shapes – sphere, cone, cube, cuboid and cylinder.
- Know the composition of numbers up to 5.

How can you help at home?



Useful Websites:

- **Topmarks**

<https://www.topmarks.co.uk/Search.aspx?Subject=16&AgeGroup=1>

- **Cbeebies numeracy**

<https://www.bbc.co.uk/cbeebies/topics/numeracy>

- **Numberblocks**

<https://www.bbc.co.uk/iplayer/episodes/b08bzfnh/numberblocks>

Numberblocks is a fantastic way for your child to gain a deep understanding of how numbers work in a fun animated way.



Vocabulary:

Cardinality and counting

The cardinal value of a number refers to the quantity of things it represents, e.g. the numerosity, 'howmanyness', or 'threeness' of three. When children understand the cardinality of numbers, they know what the numbers mean in terms of knowing how many things they refer to. Counting is one way of establishing how many things are in a group, because the last number you say tells you how many there are. Children enjoy learning the sequence of counting numbers long before they understand the cardinal values of the numbers.

Subitising

Subitising is another way of recognising how many there are, without counting

Comparison

Comparing numbers involves knowing which number has more or less than each other. Children will begin to use 'more' or 'fewer' to compare quantities.

Composition

Understanding that 1 number can be made up of 2 or more smaller numbers. Children will begin to use 'add' and 'subtract' find 'how many are altogether'

Pattern

Developing an awareness of pattern helps young children notice and understand mathematical relationships. Patterns can be made with objects like coloured cubes, small toys, buttons and keys, and with outdoor materials like pine cones and leaves.

Shape and space



Understanding what happens when shapes move, or combine with other shapes, helps develop wider mathematical thinking

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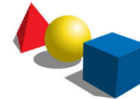
Examples of activities


Pattern



- Continue a simple pattern. For example red cube, yellow cube, red cube, yellow cube.
- Use natural resources to make your own patterns. (stick, conker, leaf, leaf) 
- Notice errors in patterns and correct them - asking the children to make a pattern with a deliberate mistake and challenging a friend to spot it.
- Make a pattern necklace using beads.
- Make a fruit kebab using a repeating pattern. (Strawberry, grape, strawberry, grape) 

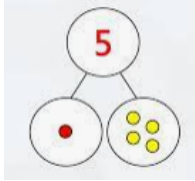
Shapes




- Shape hunt in the environment. (2D)
- Use construction toys such as wooden blocks to build with, using positional language and properties as they build. (The curved brick will go on top of the cube to make the roof)
- Use shape in play to make other shapes. 

Composition



- Make 5 by using 2 pieces of Numicon
- Use a whole part model to equally divide a number into 2 smaller numbers. 


- Use the Number blocks or cubes to explore which two smaller numbers make 5. 


Comparison


- Collections for children to sort and compare, which include objects which are identical, and which include objects of different kinds or sizes. Which has more/fewer?
- Understand 1 more and 1 less using counters, cars, or toys.
- Singing rhymes such as 5 little speckled frogs, 5 little men in a flying saucer or 1 little elephant to develop the children's knowledge of 1 more or 1 less.



Cardinality and counting 123

- Counting out loud – how many apples in the fruit bowl? 
- Subitise – how many in a group without actually counting (Up to 3 objects)
- Count things that can't be moved: beats of a drum.
- Count out or 'give' a number of things from a larger group, not just to count the number that are there. This supports a focus on the 'stopping number' which gives the cardinal value. EG. counting out 5 presents to put in Santa's sack.
- Recognise numerals 0-5

- Bunny Ears: using your fingers like bunny ears. 'With two hands, show me five fingers. Can you do it in a different way?' 

- Using a hoop and 5 bean bags, see how many you can get into the hoop? How many landed outside the hoop? 

- Number talk – use lots of opportunities to talk about numbers. For example, use your fruit bowl to compare quantities of fruit, add them all together, or even find 1 less when you eat a piece 