

There are six main areas that together, underpin children’s early mathematical learning, and which provide the firm foundations for the maths that children will encounter as they go up the years in primary school. We hope the following will explain these and give you ideas of games you can play at home to help support these, when your child starts school and goes through the EYFS.

Cardinality and Counting: understanding that the cardinal value of a number refers to the quantity, or ‘howmanyness’ of things it represents

Things you can do at home:

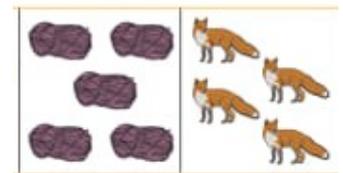
- Counting together— toys, stairs, trees outside, jumps, claps.
- Counting games - hide and seek, snakes and ladders.
- Counting songs - one, two buckle my shoe, 5 currant buns, 10 fat sausages.
- Counting stories - 10 little monsters.
- Counting online games such as numberblocks on cbeebies.

0	zero	
1	one	
2	two	

Comparison: understanding that comparing numbers involves knowing which numbers are worth more or less than each other

Things you can do at home:

- Compare quantities of toys, objects and anything that the children show interest in e.g. footballs.
- Compare groups of the same quantity - why is it the same?
- Compare and sort groups of objects and toys - include objects which are identical, and which include objects of different kinds or sizes. For example ‘how many dinosaur toys do we have?’ compared to ‘how many teddies do we have?’ What group has more/less?



Composition: understanding that one number can be made up from (composed from) two or more smaller numbers

Things you can do at home:

- Practical activities such as baking! For example “I need 3 eggs, if I have one how many more do you need to put in to make 3?”
- Playing shop - “lets buy five bananas, I have put 1 in your basket, how many more do you need?”
- Games involving rolling two dice. This can be adapted into a game such as snakes and ladders where the children will need to count both sets of dots on the dice to find how many places they need to move forward.



Pattern: looking for and finding patterns helps children notice and understand mathematical relationships



Things you can do at home:

- Copy a colour pattern tower out of duplo or lego, starting with two repeating alternate colours then moving onto three alternate repeating and so forth. Then making their own pattern.
- Collecting things in the outdoors environment and creating a pattern: stick leaf, stick, leaf, stick, leaf.
- Drawing, painting or chalking a repeated colour pattern, a repeated alternate picture pattern such as a square, circle, square, circle etc. Drawing, painting or chalking a picture pattern such as a car, house, car, house etc.

Shape and Space: understanding what happens when shapes move, or combine with other shapes, helps develop wider mathematical thinking

Things you can do at home:

- Look at and spot shapes in the environment.
- Talk about shapes and what they are like.
- Encourage selection of appropriate shapes for their play such as a square for a house for 'Goldilocks and the Three Bears' or junk modelling, constructing or drawing/painting through using a shape for a purpose, e.g. a circle for the sun.



Measures: comparing different aspects such as length, weight and volume, as a preliminary to using units to compare later.

Things you can do at home:

- Baking together, talking about full, empty, heavy, light
- Comparing size of objects—modelling words—big, small, tall, short, long.
- Discuss ordering time events such as the routine of the day.

