Mathematics Workshop Reception Parents

Aims

- Explain how mathematics fits into the Early Years Foundation Stage Curriculum

- Explain what mathematics teaching and learning looks like within Reception

- Share some ideas of how you can help your child with their mathematics

EYFS Profile

Where is mathematics?

The prime areas of learning:

- communication and language
- physical development
- personal, social and emotional development

The specific areas of learning:

- literacy
- **mathematics**
- understanding the world
- expressive arts & design

Mathematics

The teaching of Mathematics in the Early Years Foundation Stage (EYFS) is made up of two main specific areas:

- Numbers
- Shape, space and measures

How is mathematical learning achieved in Reception?

Whole-class teaching
(10 – 15 mins per day)

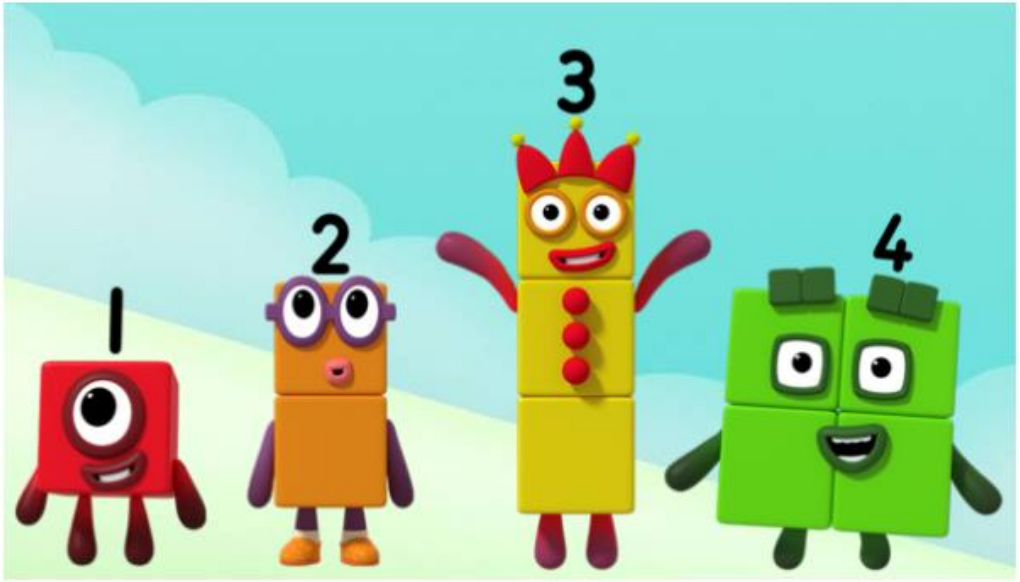
Small focus-group guided teaching

Play,
adult-led activities and
child-initiated learning

Whole-Class Teaching

Teachers plan together to introduce and teach key concepts consistently across the Year group

- *Children work together to develop not only their mathematics abilities, but general listening and attention skills*



https://www.bbc.co.uk/iplayer/cbeebies/episode/b08d61cv/number blocks-series-1-four

Small guided group activities

- Allows adults to model mathematical skills and introduce concepts
- Adults can focus on specific aspects of learning and address misconceptions
- Adults can demonstrate and encourage the use of mathematical language

Adult-led play

- Adults organise the physical environment so children have access to a wide range of interesting open-ended resources to explore and investigate imaginatively
- Through play children practise and consolidate their learning, play with ideas, experiment, take risks, solve mathematical problems, and make decisions

Child-Initiated Play

- Children choose their own mathematical learning
- Allows children to explore different approaches and reach conclusions themselves
- It allows them to practice skills and language in a safe and personal way
- Encourages critical thinking, problem solving and perseverance

Child-initiated activities allow the children to follow their own interests and encourages children to find and solve mathematical problems that grab their attention.

With Us, Everything Turns Into Mathematics

- We are always comparing and contrasting, always questioning and always problem solving
- We are constantly talking about size, weight, time, position and capacity
- We add, we take away and we never, ever stop counting

Curriculum Progression

Early Learning Goal 11

Numbers: Children count reliably with numbers from one to 20, place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing.

Progression to Year 1

- count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number
- count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens
- read and write numbers from 1 to 20 in numerals and words.
- add and subtract one- digit and two-digit numbers to 20, including zero
- read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs
- recognise, find and name a half & a quarter as one of two equal parts or 1 of 4 equal parts of an object, shape or quantity

'Counting'-The Key 5 principles

The first 3 are 'How to count…..

1.One-one principle – ***one-to-one correspondence***; when a child points to each object individually and they count and match a tag (a number) to each object they are counting.

2.Stable order principle- the same order of numbers; you will observe children gradually working towards the knowledge that the number words must always be said in the same order.

3. Cardinal principle – A **key** concept. I know that the last number I say when I count is also the name used to represent the size of the group.

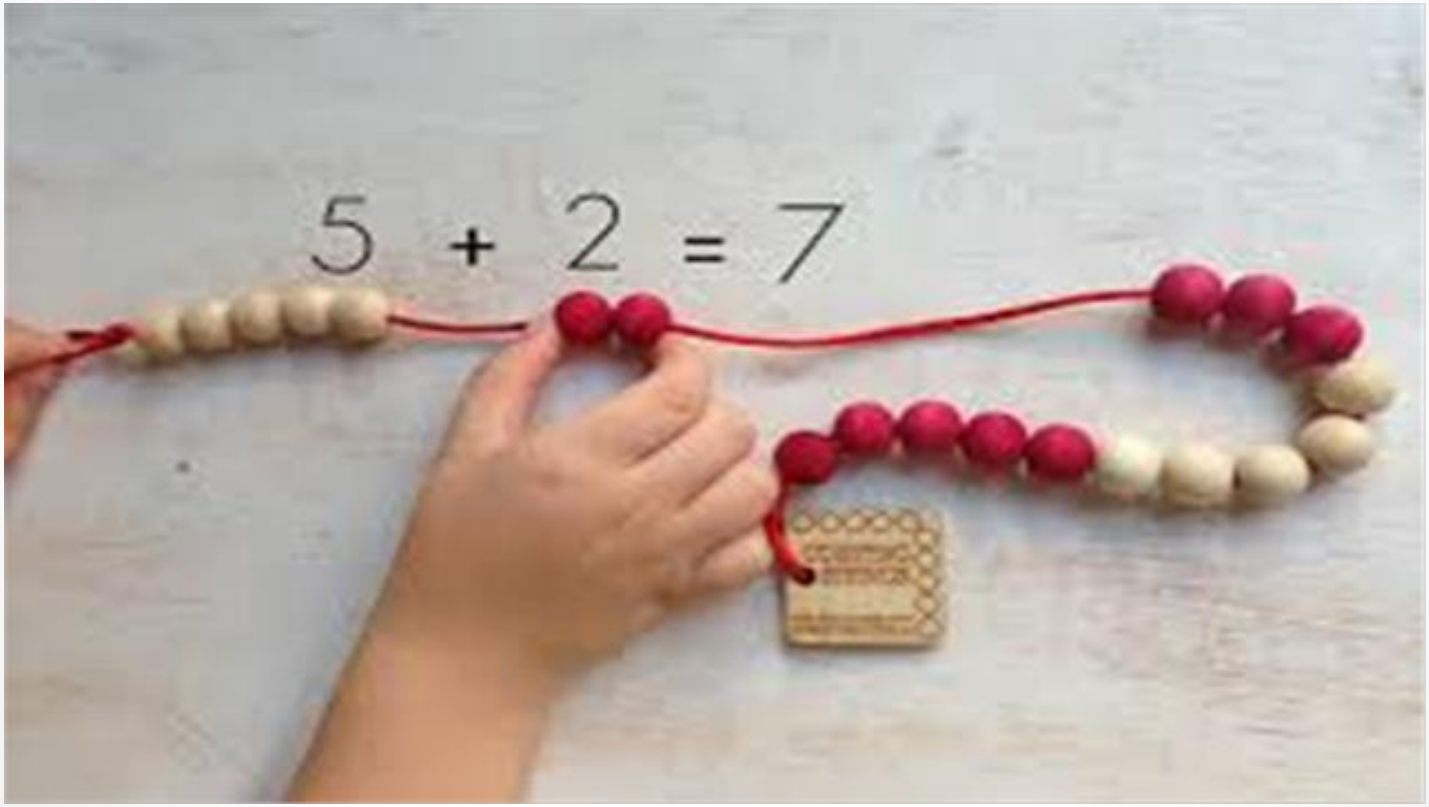
The last 2 are 'what to count…..

4. Abstraction principle – that anything can be counted; children, if given an assortment of opportunities to count in a variety of ways, for a variety of purposes, will develop the understanding that anything can be counted (for example, noises, claps) not just the objects.

5.Irrelevance principle - it does not matter which object you start with when counting – children will understand that you can count objects in any order and you will get the same result provided that you count each of them once and use the counting sequence

For example, start counting with the ***yellow*** objects and then ***red***.

If you can't count you can't calculate



How can you help you child with mathematics?

- Digit formation
- Mathematical vocabulary
- Value their mathematical mark making
- Encourage and enthuse
- Remodel – vocabulary/counting sequences
- Make mathematics everyday and every moments

How can you help at home?

Some ideas…

Thank you