FOUNDATION STAGE

Maths

MATHEMATICS

Maths split into two areas for the Early Learning Goal – Maths and Numerical patterns.

Both elements are covered under 'Maths' in the development matters statements up to the ELGs.

Some aspects for reception coverage have been moved into the 3-4 years section in the development matters statements.

Children will be either emerging into the Early Learning Goal or they will achieve the ELG. No exceeding statement within the new curriculum.

DEVELOPMENT MATTERS STATEMENTS RECEPTION

•Count objects, actions and sounds.

• Subitise.

• Link the number symbol (numeral) with its cardinal number value.

• Count beyond ten.

• Compare numbers.

• Understand the 'one more than/one less than' relationship between consecutive numbers.

• Explore the composition of numbers to 10.

• Automatically recall number bonds for numbers 0–10.

• Select, rotate and manipulate shapes in order to develop spatial reasoning skills.

• Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.

• Continue, copy and create repeating patterns.

• Compare length, weight and capacity

EARLY LEARNING GOAL - MATHS

- Have a deep understanding of number to 10, including the composition of each number.
- Subitise (recognise quantities without counting) up to 5.
- Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.

EARLY LEARNING GOAL – NUMERICAL PATTERNS

- Verbally count beyond 20, recognising the pattern of the counting system.
- Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
- Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally

ONENESS OF ONE ETC

To develop a strong sense of number, children need lots of experiences of each number.

For example:

Count lots of different types of objects – big, small, spread out, pattern, random, etc

Count actions and sounds as well as things

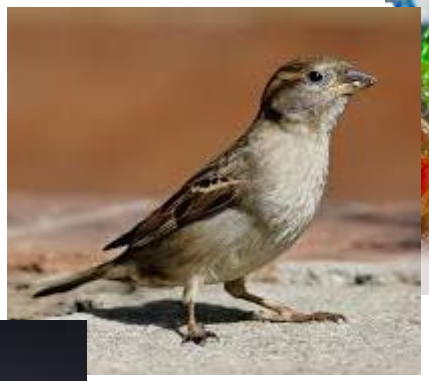
Count in different contexts

To begin with focus on numbers to 5 but numbers in environment should be up to 10 and beyond

https://www.bbc.co.uk/iplayer/cbeebies/episode/b08d630h/numberblocks-series-1-five

CARDINAL NUMBERS

The number of items in a set, the quantity but not the order of things



ORDINAL NUMBERS

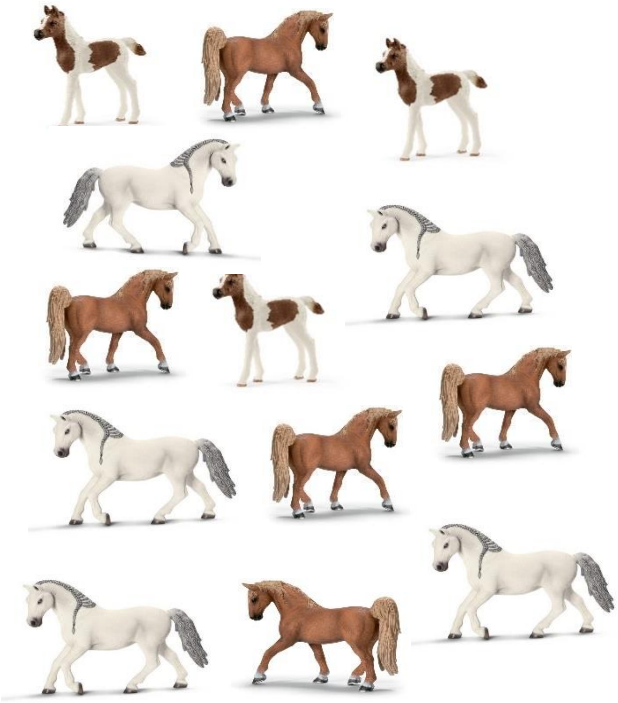
A term that describes a position within an ordered set or a group of numbers in order

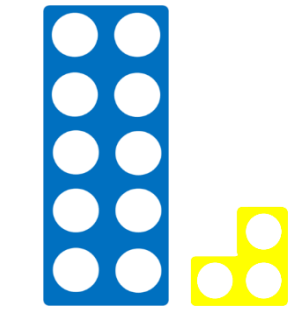
NOMINAL NUMBERS

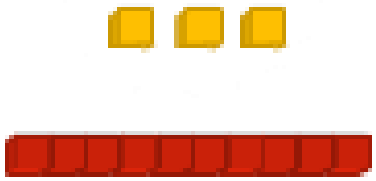
Using the number as a label

CPA APPROACH

C – Concrete P – Pictorial A – Abstract







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SUBITISING

Recognising the size of a set from the pattern or structure of the set without having to count the number of objects

HOW SUBITISING WORKS

Perceptual subitising

Recognising a small number of items without using a pattern or any mathematics to help

Conceptual subitising

Using the pattern or arrangement of items to recognising the number, eg dots on dice or dominoes

PATTERN

Children who can recognise and make patterns are more likely to be successful mathematicians.

PATTERN PRE-SKILLS

There are skills children need before they can understand pattern:

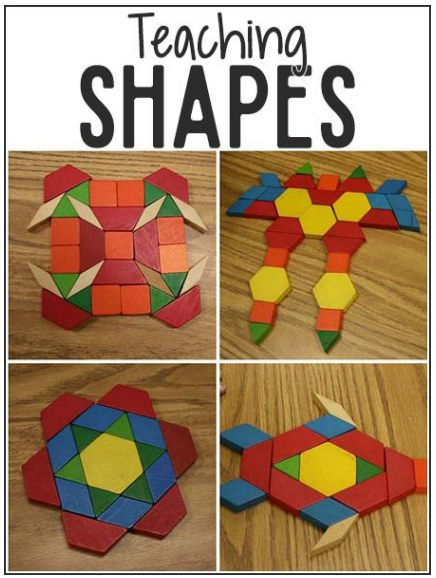
They need to be able to sort/classify

They need to be able to talk about things that are the same and things that are different

CHILDREN'S UNDERSTANDING OF PATTERN

Can children:

- Spot a pattern
- Use pattern in their play
- Use symmetry
- Use positional language appropriately
- Make and describe line patterns
- Copy a pattern sequence accurately
- Create a pattern sequence
- Describe a pattern sequence
- Make a growing pattern



SSM IN CONTINUOUS PROVISION

NUMBOTS

SUPPORTING AT HOME

Completing the homework activities

Use incidental learning when out shopping, sorting washing etc.

Baking with children.

Using specific language ie – longer, shorter, taller, heavy, light.

Use the number lines and hundred squares we send home.

Noticing patterns and rote counting in 1's, 2's, 10's.