

Maths in Reception



Meeting aims

- What does the maths curriculum look like?
- How is maths taught in school in Reception?
- How can you help at home?
- Useful resources/links

The Statutory Curriculum

Mathematics Early Learning Goals:

Number

Children at the expected level of development will:

- 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.

Numerical Patterns

Children at the expected level of development will:

- 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.

Our Chosen Curriculum

The Mastery Approach

Maths mastery is a **teaching and learning approach** that aims for pupils to develop a deep understanding of maths rather than being able to memorise key procedures or resort to rote learning.

To support this approach we use resources from :

White Rose Maths

NCETM - National Centre for Excellence in the Teaching of Mathematics

Numberblocks

Maths hub mastery training


Maths Meetings!

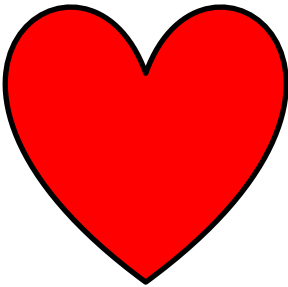
Every day in school we hold a 'maths meeting'.

This is time to:

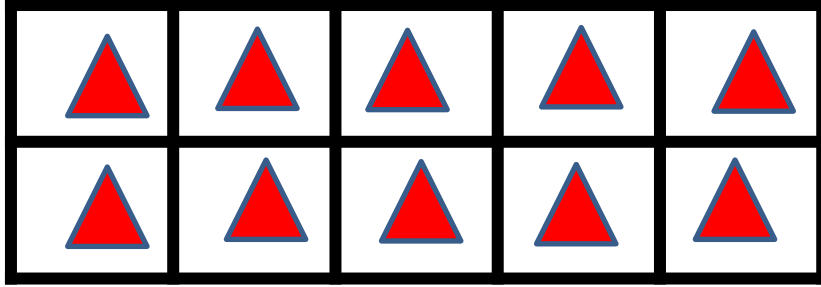
- Practise skills already taught
- Explain thinking
- Clarify what has been understood so far
- Discover and correct misconceptions
- Remember how much we love maths

Growth mindset – encourage

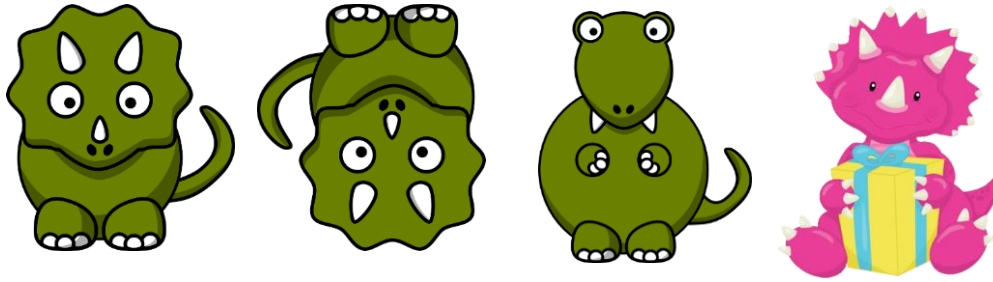
I  maths

We  maths

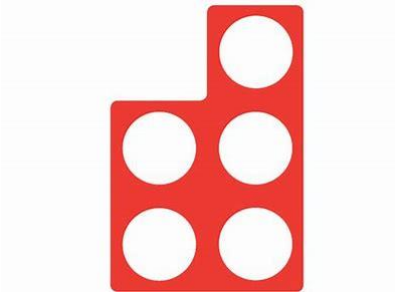
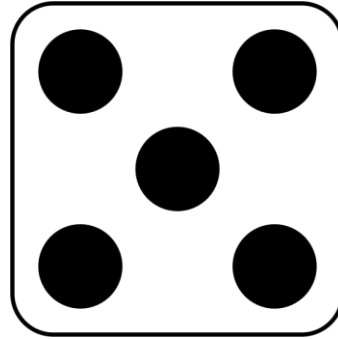
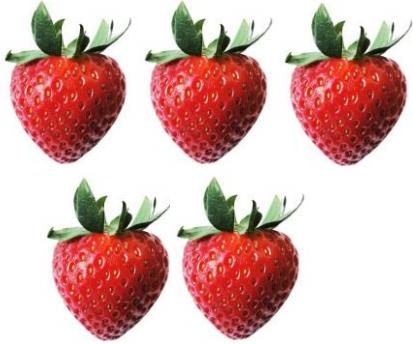
Today is Wednesday



5



Here is how deep learning might
look in Reception:
"I know what 5 looks like"



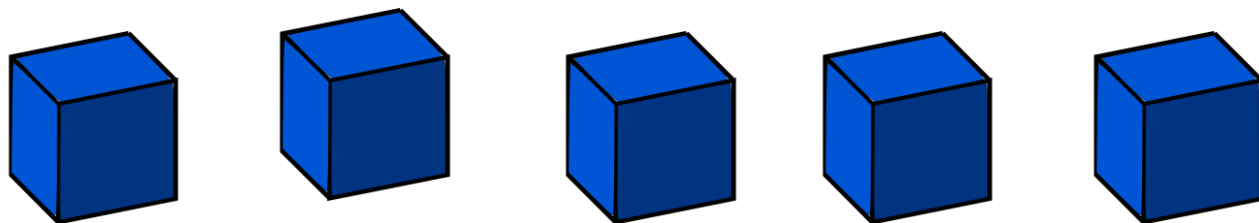
Counting Principles

In Reception, we will begin to explore the counting principles. There are 5 counting principles that children will need to master. These are:

- One to One Principle
- Stable Order Principle
- Order Irrelevance Principle
- Cardinal Principle
- Abstract Principle

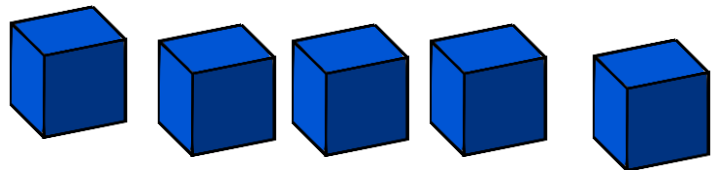
One to One Principle

This refers to the need to count each object in a group once (and only once!)

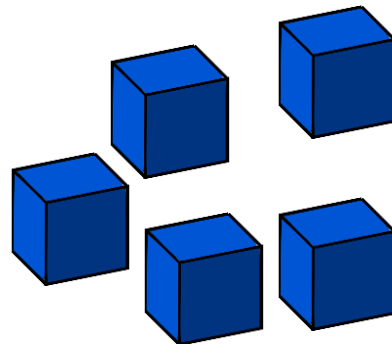


This takes practice as children can:

Skim

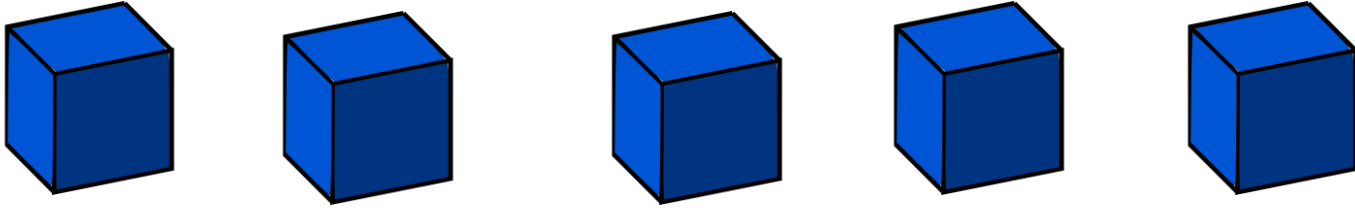


Flurry



Stable Order Principle

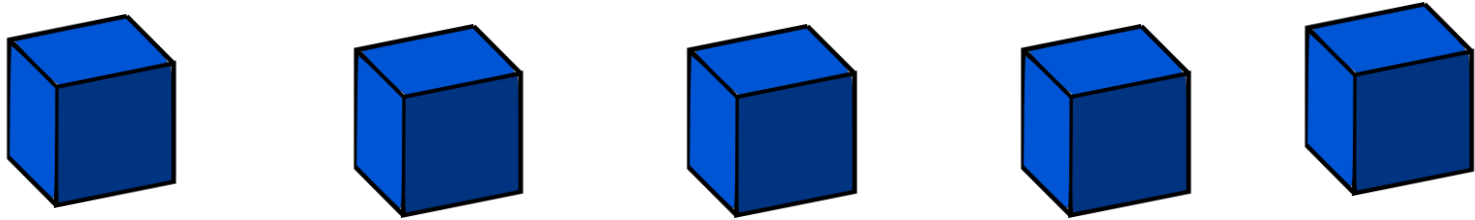
This refers to the number names being said in the correct order and knowing that the order will not change.



Counting songs and rhymes are great for practising this!

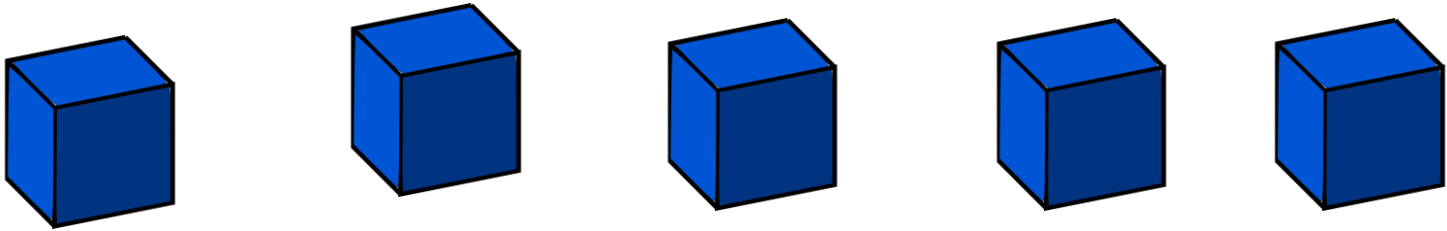
Order Irrelevance Principle

This demonstrates that the order in which the objects are counted is not important. We still have 5 objects, we have just counted them differently.



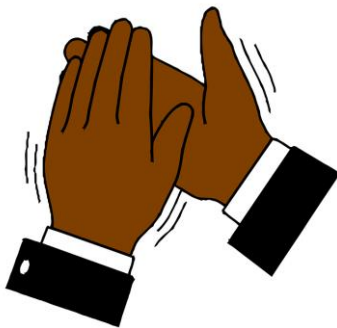
Cardinal Principle

This tells us that the final number said when counting a group tells us how many objects are in that group.



Abstract Principle

This refers to how anything can be counted, even things that cannot be touched or seen.



What does a Reception maths 'lesson' look like?

During our whole class maths input we focus on:

Small step learning: We break down concepts into small steps to ensure learning is imbedded and the children are ready for what comes next.

Vocabulary: Key vocabulary linked to the learning is repeated so the meaning is secured. E.g. subitise

Stem sentences: "1 and another 1 make 2, 2 is made of 1 and 1 more"

In Reception, children are not expected to record calculations in a formal way. They use pictures and mark making to explain their thinking.



We use a range of strategies to engage all of the children and help them to make progress in their learning and consolidate their understanding.



**Asking
questions**

**Using concrete
objects.**

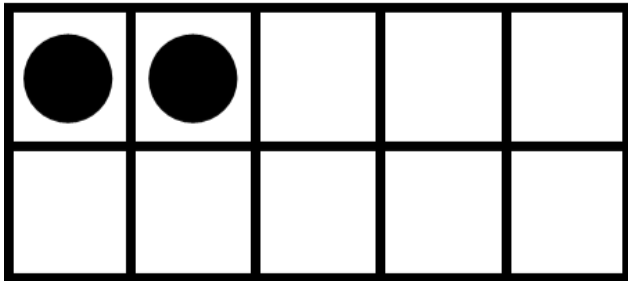
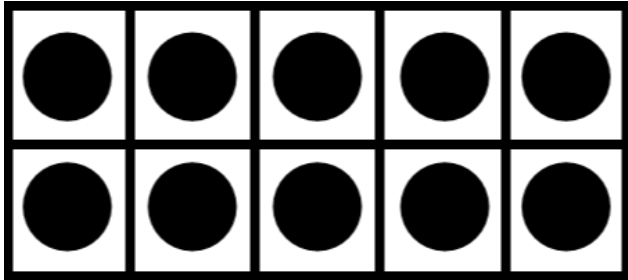


Working in groups

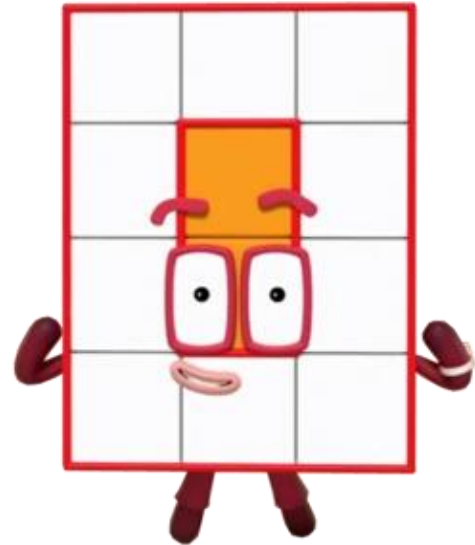
Challenges to help your child investigate more deeply. These include problem solving, open-ended tasks and asking your child to prove their thinking.

Teen numbers

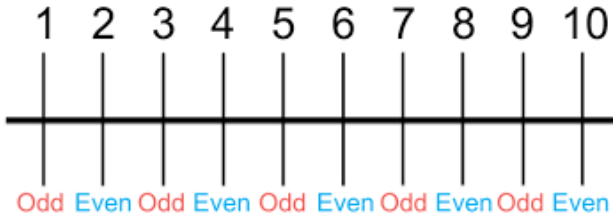
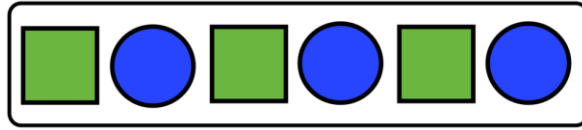
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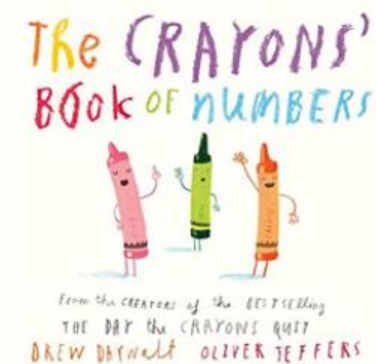
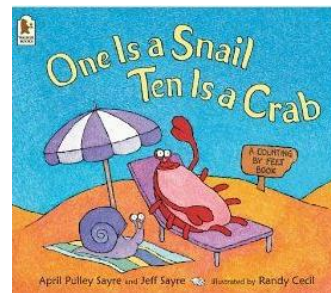
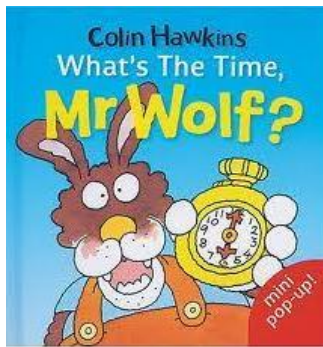
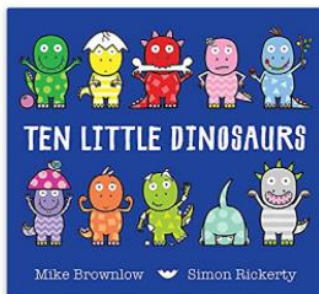
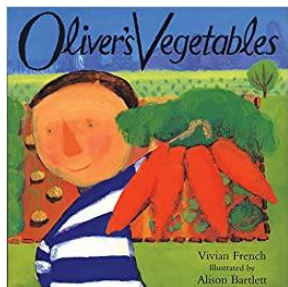
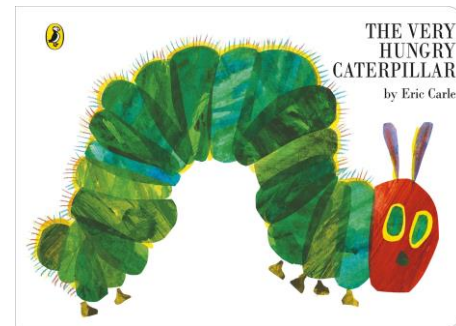
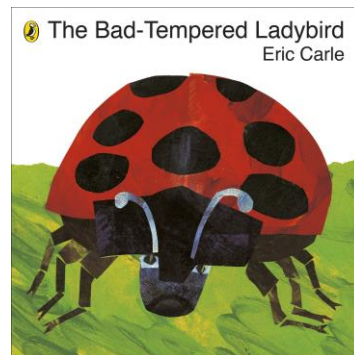
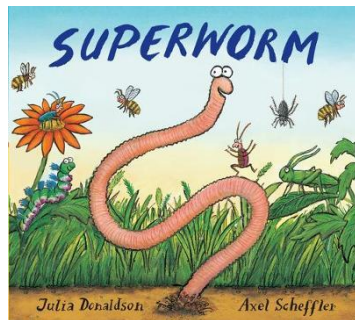
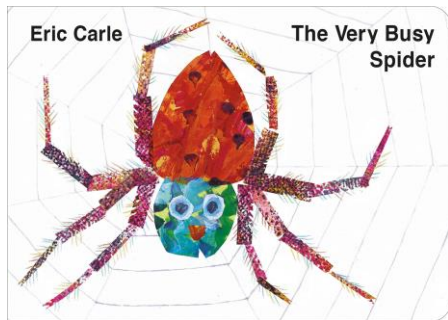
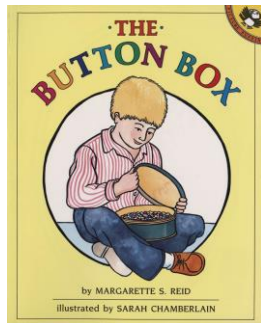
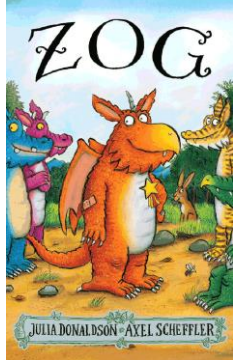
12



Patterns



Maths through stories



How you can help at home?

Games

- Snakes and ladders
 - Board games
 - Card games - snap, pairs
 - Number hunts
 - Hide and seek
 - Bingo
 - Counting songs
-
- Tell your children that maths is fun and you enjoy it.



Useful websites

Information sites:

- <https://www.ncetm.org.uk/classroom-resources/ey-numberblocks-at-home/>
- <https://whiterosemaths.com/for-parents/>

Games and Activities:

- <https://www.bbc.co.uk/cbeebies/shows/numberblocks>
- www.busythings.co.uk (Login can be sourced for your child's teacher)
- <https://www.bbc.co.uk/cbeebies/games>

Any Questions?

Some books containing maths concepts:

10 Black Dots Donald Crews

One Fox Kate Read

One is a Snail and Ten is a Crab April Pulley Sayre & Jeff Sayre

I Spy numbers Scholastic

We all went on safari Laurie Krebs

How Many Talking Math

The Perfect Fit Naomi Jones