

Year R Maths

Friday 25th September



EYFS Development Matters

Mathematics

1-3 years

- Combine objects like stacking blocks and cups. Put objects inside others and take them out again.
- Take part in finger rhymes with numbers.
- React to changes of amount in a group of up to three items.
- Compare amounts, saying 'lots', 'more' or 'same'.
- Counting-like behaviour, such as making sounds, pointing or saying some numbers in sequence.
- Count in everyday contexts, sometimes skipping numbers - '1-2-3-5.'
- Climb and squeezing selves into different types of spaces.
- Build with a range of resources.
- Complete inset puzzles.
- Compare sizes, weights etc. using gesture and language - 'bigger/little/smaller', 'high/low', 'tall', 'heavy'.
- Notice patterns and arrange things in patterns.

Mathematics

3-4 years

- Fast recognition of up to 3 objects, without having to count them individually ('subitising').
- Recite numbers past 5.
- Say one number for each item in order: 1,2,3,4,5.
- Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle').
- Show 'finger numbers' up to 5.
- Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.
- Experiment with their own symbols and marks as well as numerals.
- Solve real world mathematical problems with numbers up to 5.
- Compare quantities using language: 'more than', 'fewer than'.
- Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'.
- Understand position through words alone - for example, "The bag is under the table," - with no pointing.
- Describe a familiar route.
- Discuss routes and locations, using words like 'in front of' and 'behind'.
- Make comparisons between objects relating to size, length, weight and capacity
- Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc.
- Combine shapes to make new ones - an arch, a bigger triangle etc.
- Talk about and identifies the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc.
- Extend and create ABAB patterns - stick, leaf, stick, leaf.
- Notice and correct an error in a repeating pattern.
- Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'



Mathematics

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.

Mathematics

Early Learning Goals - End of Year Expectations

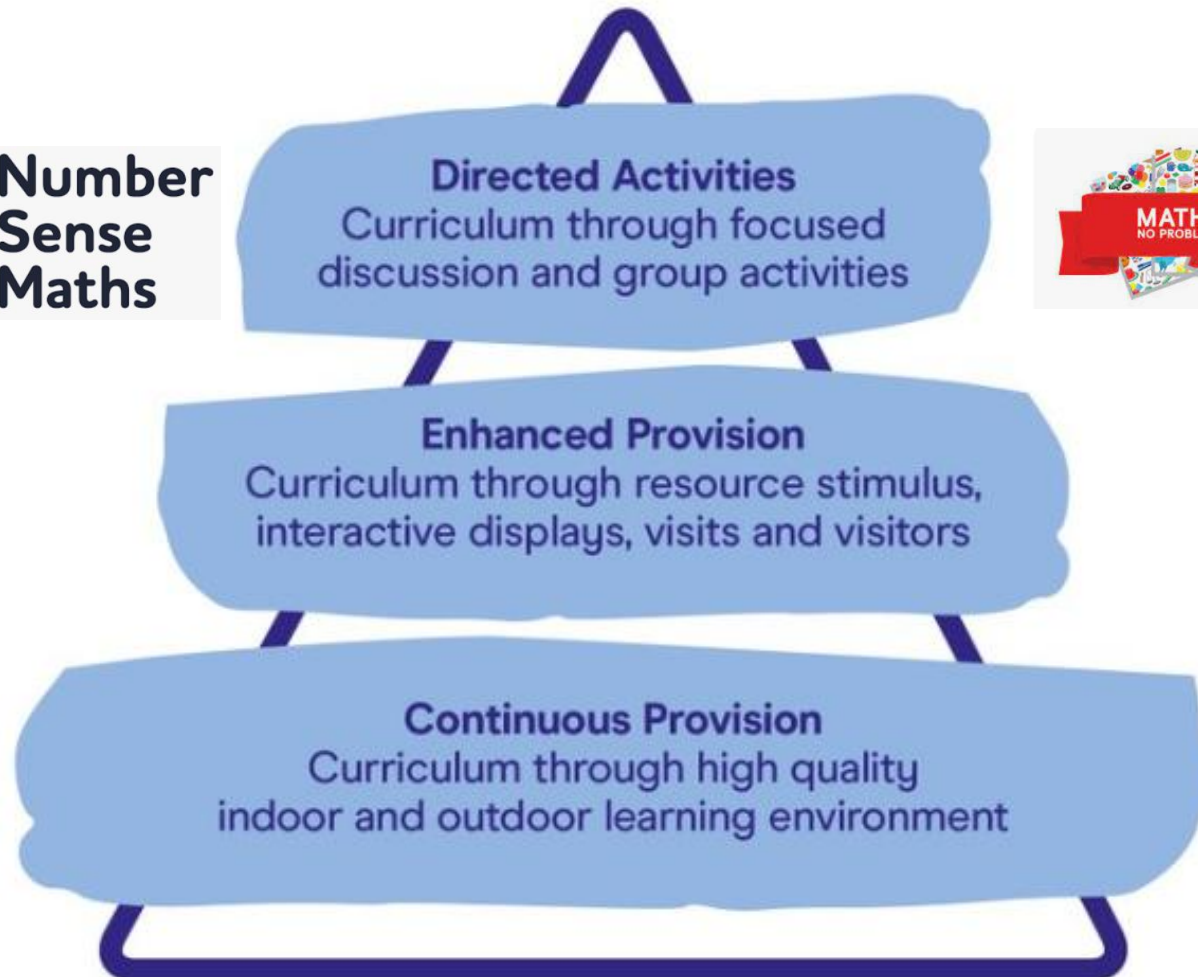
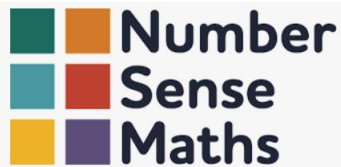
Number

- 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

- 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.

What does Maths look like in EYFS?



What does Maths looks like in EYFS?



- Learning through play.
- Outdoor activities.
- Counting, counting and more counting!
- Pattern spotting.
- Number recognition and ordering to 10.
- Learning number bonds up to 10.
- Shape recognition, 2D and 3D.
- Addition and subtraction using single digit numbers.

At St Anthony's, we want all our children



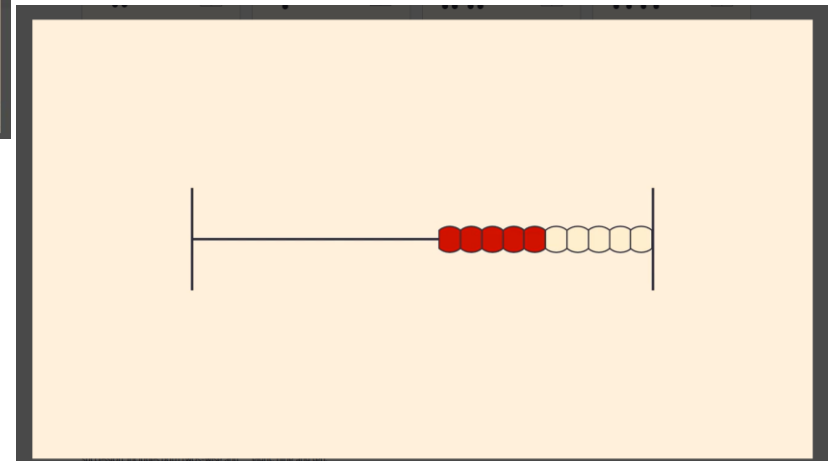
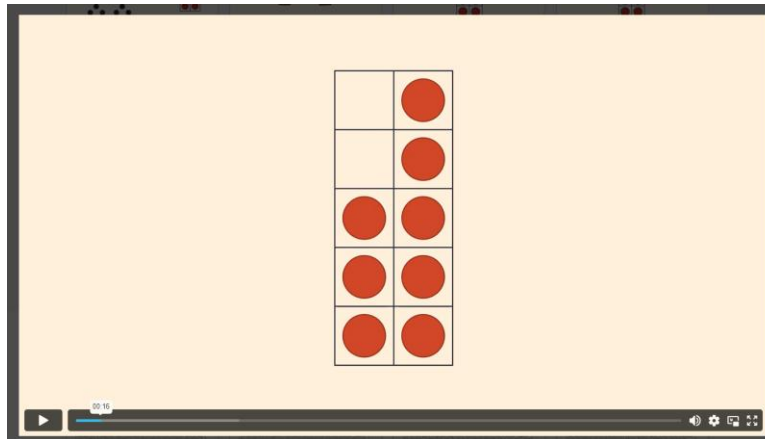
- to be active participants in their own learning
- to be confident and numerate
- to be fluent in their maths
- to be able to reason about their learning using the correct mathematical vocabulary
- to be able to apply their skills and knowledge as they progress, through sustainable learning
- *to develop an appreciation that maths is a key skill that equips them for life*
- to not feel anxious and enjoy maths!



		Number
		Sense
		Maths



  **Number**
  **Sense**
  **Maths**





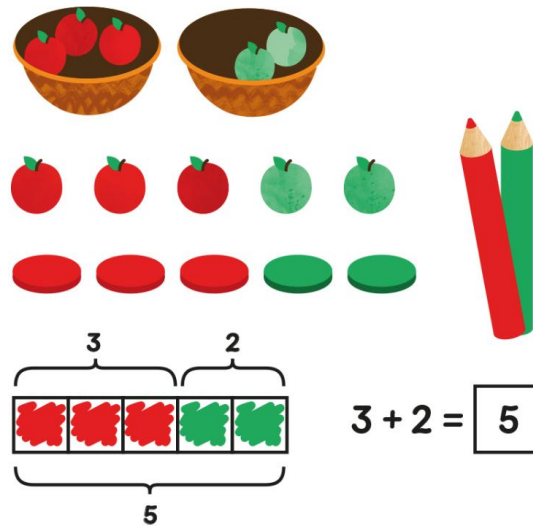


Resources can be powerful tools to support mathematical thinking and reasoning skills.

They help our children to be able to engage practically with new learning and to support their ability to visualise new concepts and knowledge.

At St Anthony's, we apply a CPA approach to maths learning which embeds the importance of using physical, concrete resources to support learning opportunities.

The use of visual images and concrete resources are crucial to the conceptual understanding of mathematics.



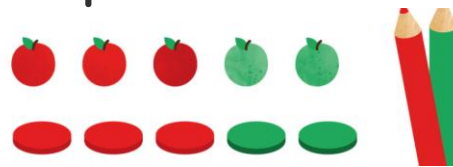
The Concrete, Pictorial, Abstract approach (CPA) is a highly effective approach that develops a deep and sustainable understanding of maths.

It is an essential technique within the teaching of maths for mastery.

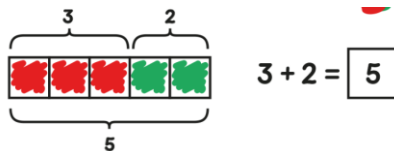
Children (and adults!) can find maths difficult because it is abstract. The CPA approach builds on children's existing knowledge by introducing abstract concepts in a concrete and tangible way. It involves moving from concrete materials,



to pictorial representations,



to abstract symbols and problems.



Abstract representation of the addition problem. On the left, a horizontal bar is divided into five segments. The first three segments are red and the last two are green. Above the red segments is a bracket labeled '3'. Above the green segments is a bracket labeled '2'. Below the entire bar is a bracket labeled '5'. To the right of the bar is the equation $3 + 2 = \boxed{5}$.

How can you help your child with Maths at home?

- Take away their fear. Maths is fun!
- Reassure and praise whenever possible.
- Let them see you using Maths in your everyday routines - portioning meals between the family, chopping vegetables into halves and quarters etc.
- Play with numbers and shapes through games.
- Seeing mistakes as an opportunity to learn and using them as a discussion point.
- Recognising the **importance** and value of maths in our everyday lives e.g. managing money and telling the time.

Alternatives to maths resources

Counters



or you could use...

Smarties



3D shapes



or you could use...

groceries



Counting Bears



or you could use...



anything you have a lot of!



You can use anything you have...

Cards for number
recognition and counting



Pasta for counting



Toys to put in size order



Magnetic numbers for
number recognition

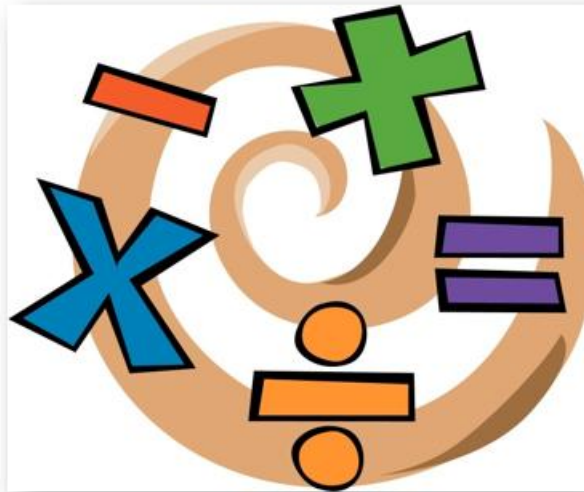
Don't Forget Outside!



Home Learning



St Anthony's Catholic Primary School
Arithmetic Home Learning Workbook



Home learning booklets from the
summer term.

Thank you for coming

Any questions?



[Maths No Problem for parents](#)