EYFS Parent Workshop

November 2022

Maths is…

3 & 4-year-olds: Mathematics

- I can quickly recognise groups of up to 3 objects, without having to count them individually *(this is called 'subitising').*
- I can say numbers in order past five.
- I can say one number for each item in order: 1,2,3,4,5.
- I know that the last number I reach when counting a small set of objects tells me how many there are in total (*this is called the 'cardinal principle').*
- I can show 'finger numbers' up to 5.
- I can match the correct numeral (number symbol) to the right amount, up to 5, e.g. point to the number 3 when I count 3 snails.

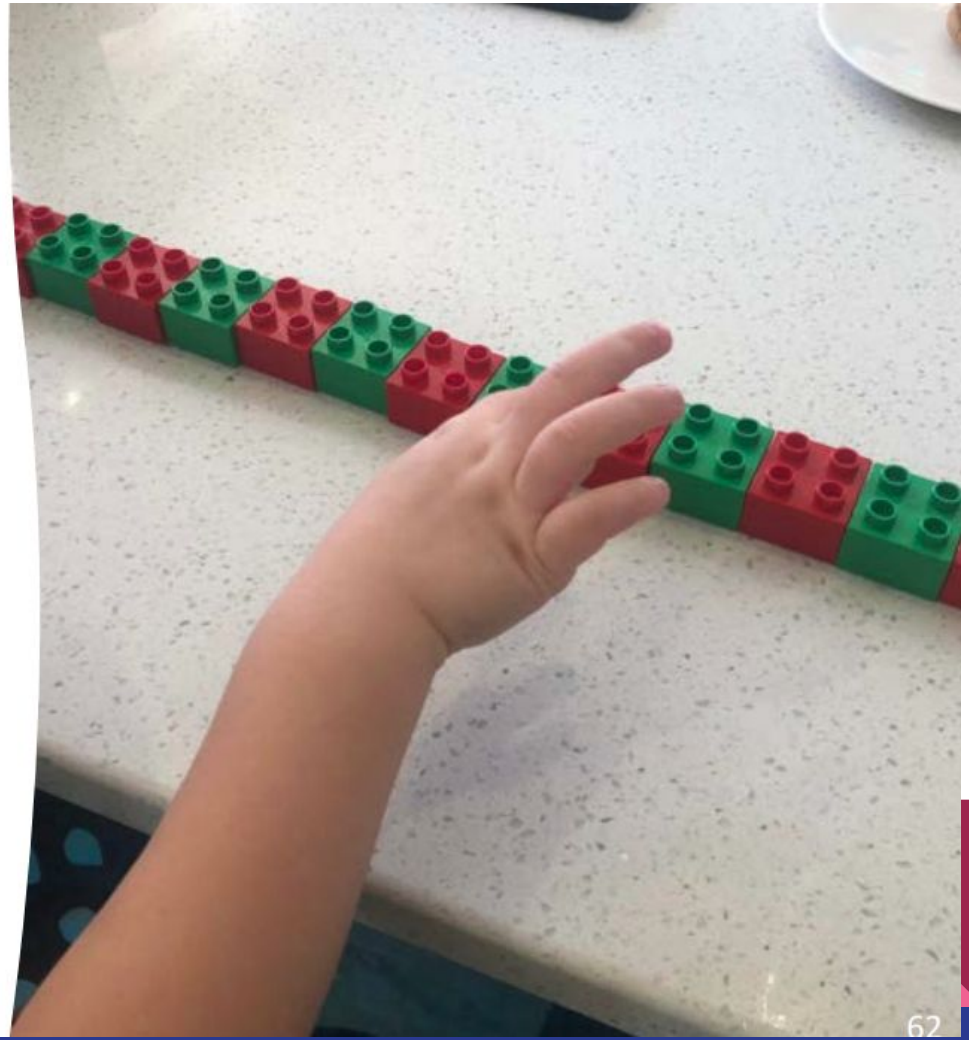
What can you see?

3 & 4-year-olds: Mathematics

- I like to experiment with making my own marks and symbols as well as numerals.
- I can use mathematical words to compare amounts ‘more than’, ‘fewer than’.
- I like to explore 2D (flat) and 3D (solid) shapes. I can talk about shapes using everyday words like ‘pointy’. I can use mathematical words like: ‘sides’, ‘corners’, ‘straight’, ‘flat’, ‘round’.
- I can understand position through words alone, e.g. “The bag is under the table.” – with no pointing.
- I can describe a familiar route.
- I can talk about routes and locations, using words like ‘in front of’ and ‘behind’.

3 & 4-year-olds: Mathematics

- I can make comparisons between objects relating to size, length, weight and capacity.
- I can choose the right shape when building, e.g. triangular prism for a roof.
- I can combine shapes to make new ones - an arch, a bigger triangle etc.
- I can talk about and identify patterns that I see around me, e.g. stripes on clothes, designs on wallpaper. I use everyday language like 'pointy', 'spotty', 'blobs' etc.
- I can make and extend ABAB patterns – stick, leaf, stick, leaf.
- I can spot an error in a repeating pattern and correct it.
- I am learning to use words such as 'first', 'then' 'after' to describe a pattern of events.

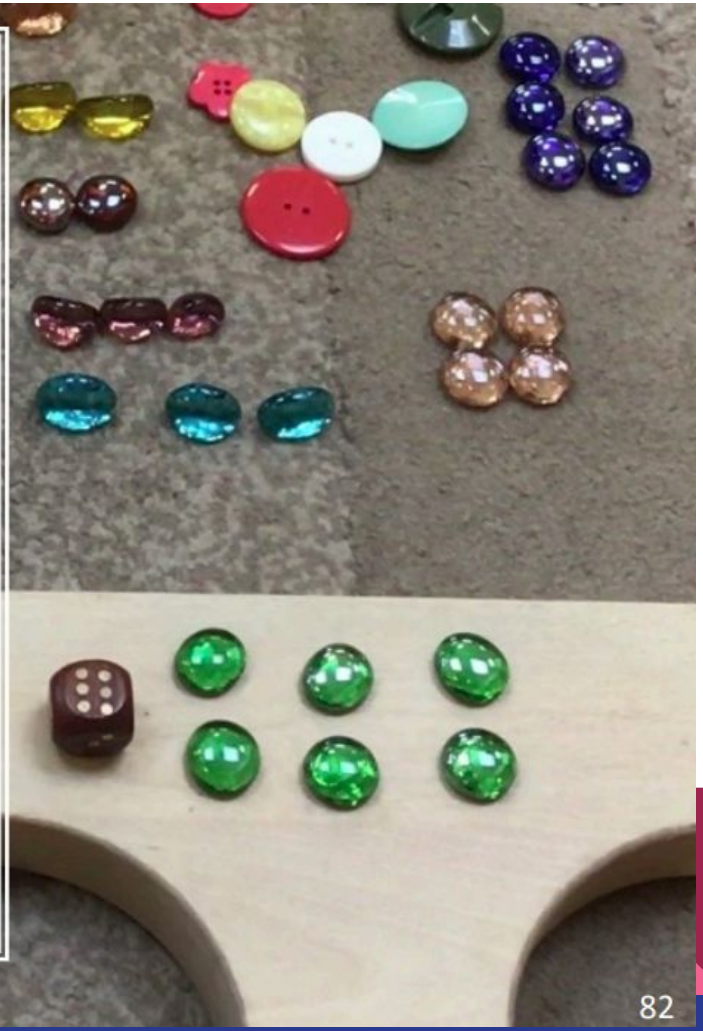


4 & 5-year olds: Mathematics

- I can count objects, actions and sounds.
- I can quickly recognise a group of up to five objects without counting. This is called 'subitising'.
- I can match the correct numeral (number symbol) to the right amount, e.g. I can play 'snap' where some cards have numerals, and some have dot arrangements.
- I can count beyond ten.
- I can compare numbers of items.
- I understand the 'one more than/one less than' relationship between consecutive numbers.

4 & 5-year olds: Mathematics

- I am learning about how numbers are made up of other numbers up to 10, e.g. 3 and 3 makes 6. This is called composition of number.
- I know and can say number bonds for numbers 0-5 and some to 10.
- I can select and rotate shapes, this helps me to learn spatial reasoning skills.
- I am learning about how shapes can be combined to make new shapes, e.g. two triangles can be put together to make a square. This helps me to recognise a shape can have other shapes within it, just like numbers can.
- I can continue, copy and create repeating patterns.
- I can compare length, weight and capacity, e.g. “This is heavier than that.”



Bunny ears video

Early Learning Goals for Maths

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.

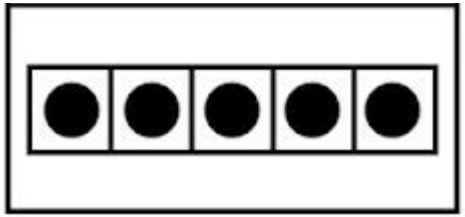
Early Learning Goals for Maths

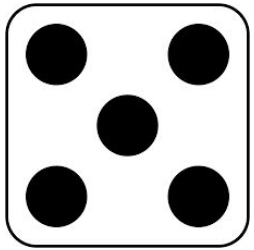
Numerical Patterns

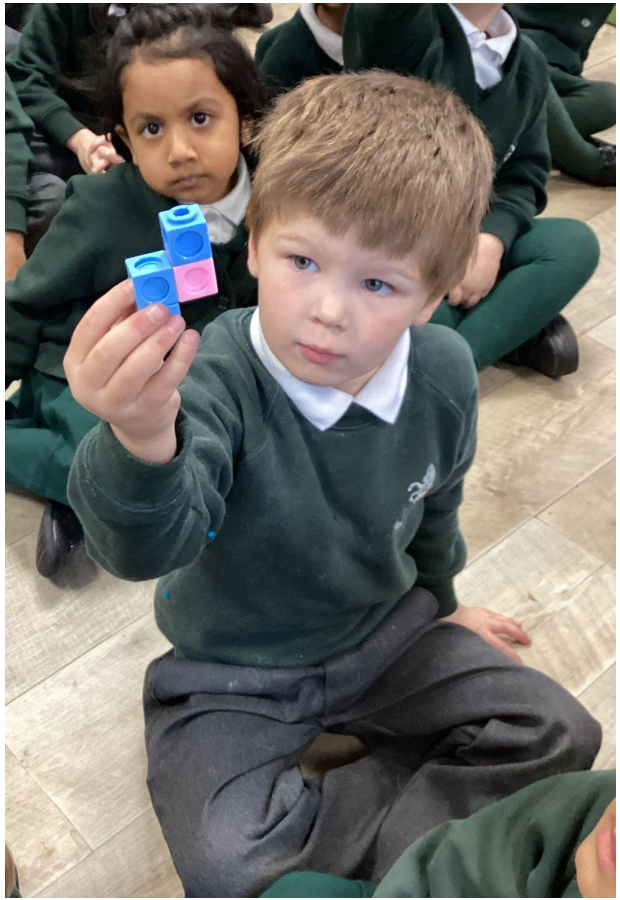
- Verbally count beyond 20, recognising the pattern of the counting system.
- Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
- Explore and represent patterns within numbers up to 10, including evens, odds,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

Fluency

In Reception, we aim to teach so that children have a deep understanding of number - number sense. We want to develop children's number sense so they understand the number, not just recognise it. They also need to know that numbers can be represented in different ways.



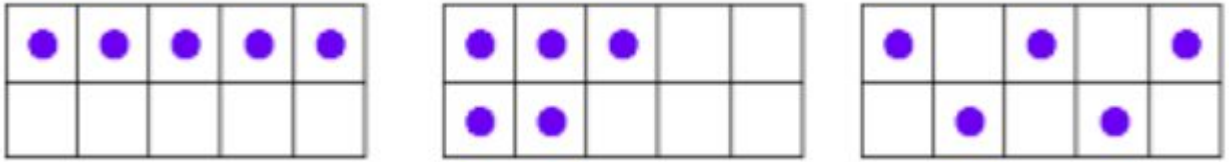




More Fluency

Recognising Amounts (Subitising)

Understanding that the total stays the same even when the objects move



By becoming fluent in maths facts, it allows our brain to concentrate on higher level skills.

Reasoning

Reasoning in maths helps children to be able to explain their thinking, therefore making it easier for them to understand what is happening in the maths they are doing. It helps them think about how to solve a problem, explain how they solved it and to think about what they could do differently.

For example:

- True and false statements *eg adding one to a number always makes it smaller*
- Spotting incorrect maths *eg 1, 2, 3, 4, 6, 5, 7, 8, 9, 10*
- Explaining how we worked something out

Problem Solving

Problem solving in maths allows children to use their maths skills in lots of contexts and in situations that are new to them. It allows them to seek solutions, spot patterns and think about the best way to do things rather than blindly follow maths procedures.

For example:

- Spotting, following and creating patterns
- Estimating and predicting
- Finding ways to partition numbers. 5+0, 4+1, 3+2 etc.

The CPA Approach

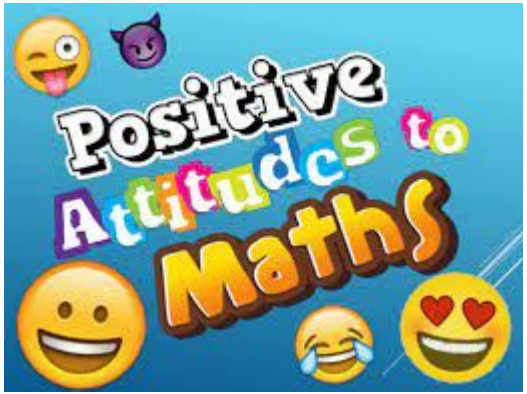
The Concrete, Pictorial, Abstract approach (CPA) is a highly effective approach to teaching that develops a deep and sustainable understanding of maths in pupils.

What Can you do as parents?

Maths skills can be developed at home by involving children in everyday activities such as baking, looking at the best supermarket deals or sharing out sweets equally. This also develops their problem solving and reasoning skills! Don't underestimate yourself, or the power you have as a parent getting involved in your child's learning.

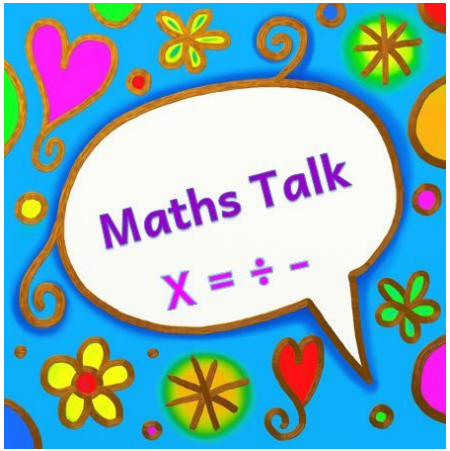
Top Tip 1

Positive mindset is EVERYTHING! You may find yourself from time to time saying ‘I was never good at Maths.’ Children will pick up and mirror this energy. We would advise parents to use positive language such as ‘It’s fine to make mistakes, we all do’ or ‘It’s ok that you find this tricky, let’s look through it together.’ Positivity can go a long way to improving their attitude towards Maths.



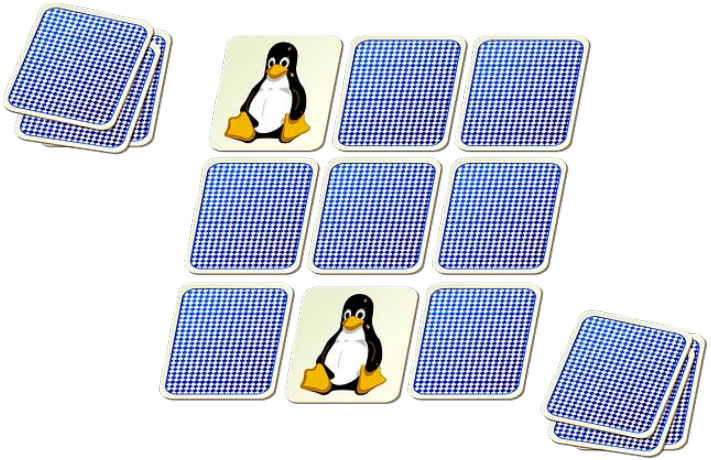
Top Tip 2

Use Maths talk every day. This could be as simple as asking your child to count the chicken nuggets up to 10! Then helping to share them out equally. You could further develop their knowledge by asking questions such as: What if I had double this amount? What if you ate 3 of those nuggets? How many would be remaining? Physical objects in everyday life really help this process.



Top Tip 3

Develop their memory skills. It has been found that the younger generation have little need to memorise things such as phone numbers. Start off with something simple like memorising a phone number. Make a game out of it to help develop their memory skills.



Top Tip 4

Play maths games together. Games have always been a fun way to engage children in their learning and a great bonding tool between adults and their children. Simple counting games, or games linked to their current objective in Maths, can support the children in engaging in their learning and retaining what they have learned.

Top Tip 5

Numbers and shapes are EVERYWHERE. Help your child to recognise that numbers and shapes are everywhere. Asking them what the shape of a sign is on a walk or what number they see on the sign can be really important in developing their knowledge of Maths in real life contexts. This could be developed further by asking questions such as: if you were counting to ten, what would the next number be?

Practical Learning at Home

Stories, songs and rhymes

- Count people/tings/objects on a page
- Look for shapes in a picture
- Sing songs and rhymes (Youtube is great for this)

Imaginative play

- Set the table for your toys. How many spoons will you need?
- Build a tower. Whose tower is tallest? How many bricks did you use?
- Sell food in a shop – this is great for counting, money and recognising shapes in food.

Water

- Put different things in the bath or in a bowl to discuss heavy and light items
- How much water different containers hold to compare weight and capacity

Cooking/Baking

- Weigh out the ingredients when baking. Talk about how long it will take to cook.
- Decorate cakes with patterns.
- Cut food into different shapes.
- Count out how much you will need of an ingredient.

Playdough

- Make numbers, 2D and 3D shapes
- Make a pattern with shapes and colour
- Build playdough models using time words such as now, next, etc…

Routine

- Talk about today, tomorrow, yesterday
- Count to 20 when washing hands
- Count when tidying or picking things up. How many lego bricks did you pick up? How many of those were blue?
- Counting things on a walk.
- Looking for shapes and numbers in the world around us.

Online Interactive Maths Games and Resources

- Topmarks offer a range of fun online games for your child to practise a range of concepts.
- Youtube have a range of songs and rhymes to practise counting, shapes, adding, subtracting, multiplication and much more!
- BBC Bitesize have a range of free games, songs and videos to support learning key facts at home: https://www.bbc.co.uk/bitesize/articles/zks4kmn
- The White Rose Apps for subitising and number 1 minutes games.