



Maths
Speed Learning

Remember...

- We can't cover everything in just 15 minutes!
- We have planned this so you can begin to understand just one aspect of how children learn maths.
- We will be explaining the 'typical' development of a child.
- Don't forget to put your counter in the 'maths pot' at the end of the evening if you want to know more!

Important message

In all year groups, decisions about when to move a child on, is always based on the security of children's understanding and their readiness to progress to the next stage.

Children who grasp concepts rapidly will be challenged through a range of rich and sophisticated problems- this will be before teaching new content (This is the 'Mastery' approach- broader and deeper...)

Those who are not sufficiently fluent with earlier material should consolidate their understanding through additional practise, before moving on.

Our Oaks Federation Learning Characteristics in Maths-

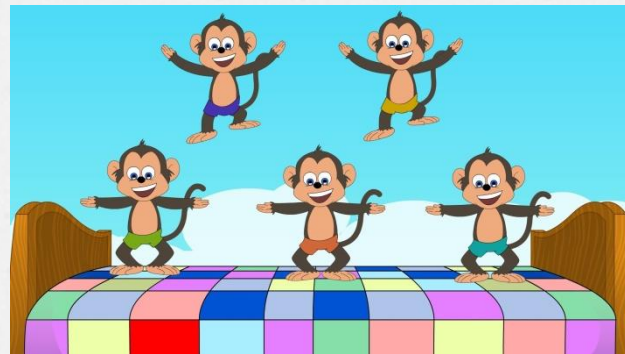
Children...

- take risks and see mistakes as part of their learning.
- ask questions and explore alternative solutions without fear of being wrong.
- enjoy exploring and applying mathematical concepts to understand and solve problems.
- explain their thinking and presenting their solutions to others in a variety of ways.

Language

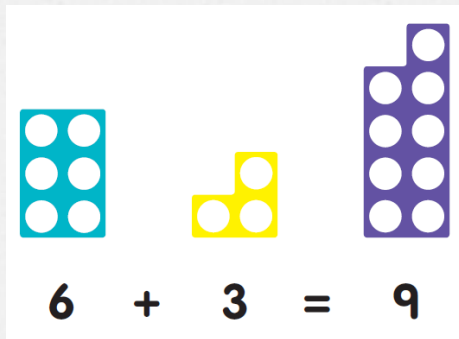
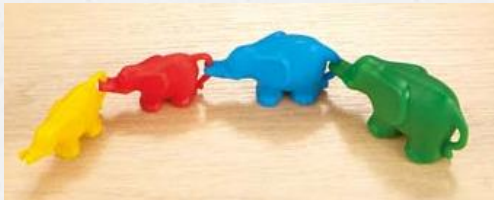
Maths started with the songs you sang to your children like 'ten green bottles' and 'five little monkeys' from an early age. This continues into the EYFS where children are supported to talk about all aspects of maths using the correct language.

Confidence with maths language is vital to future success, so don't stop singing!



Concrete Experiences

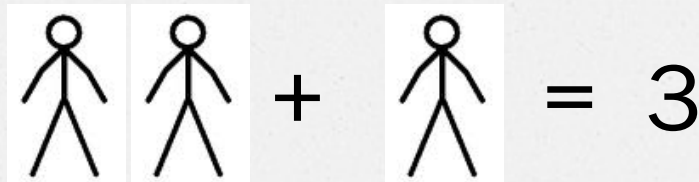
This is a 'hands on' component using real objects and it is the foundation for conceptual understanding



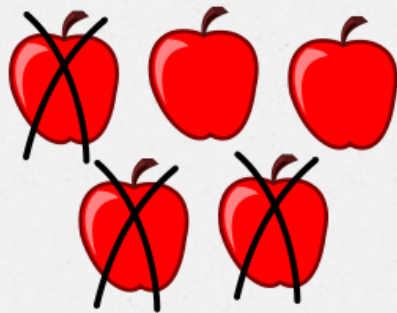
$$3 + 2 = 5$$

Pictorial Experiences

Using representations, such as a diagram or picture of the problem.



$$2 + 1 = 3$$



$$5 - 3 = 2$$

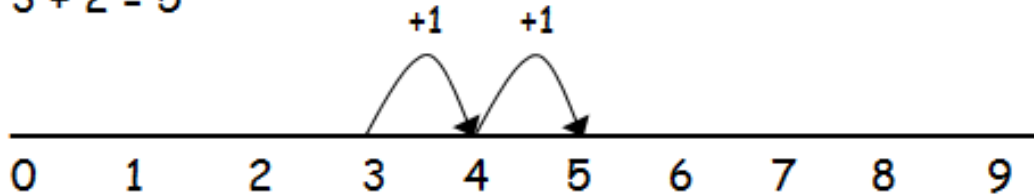


$$4 - 3 = 1$$

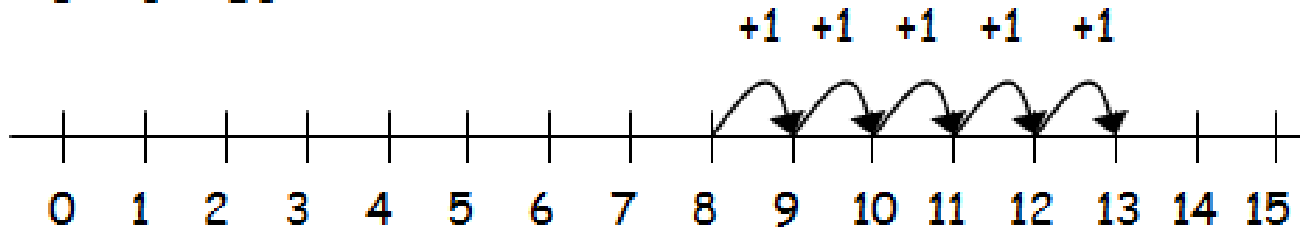
Pictorial experiences continued...

Using a structured number line

$$3 + 2 = 5$$



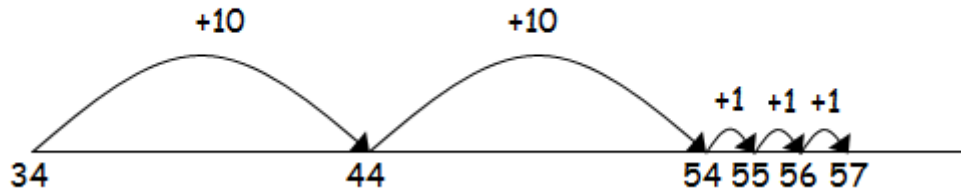
$$8 + 5 = 13$$



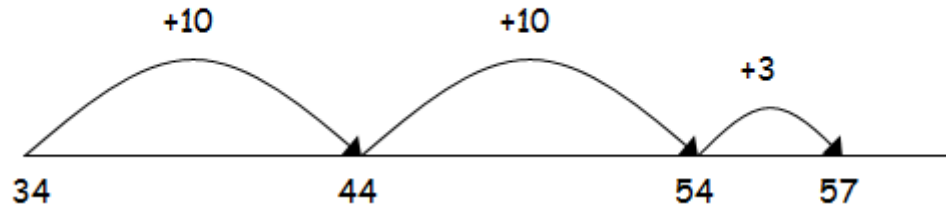
Moving towards the abstract

Using an 'empty' number lines

$$34 + 23 = 57$$



$$34 + 23 = 57$$



$$34 + 23 = 57$$



Abstract or using symbols

The symbolic stage - a child is now capable of representing problems by using mathematical symbols, for example...

$$34 + 23 = 57$$

$$36 - 12 = 24$$

They will begin to do more mentally in their head or use numerical strategies (ie. partitioning) to work out the answer.

Teach, Practise, Apply

We teach the children the different mathematical strategies and allow them time to practise these. We use the interactive whiteboards and laptops to vary the approach.

Once confident with a strategy, we then ask them to apply it through problem solving activities and games.

Try to not let your child overhear you talking about maths in a negative way, even if you remember it being hard or less interesting than we make it in school today.

Maths is all around us...



Jack lives at number 48 but he moves ten doors up the road, what number does he live at now?



January						
			1	2	3	
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31



More information...

<http://www.oakscelearningfederation.co.uk/how-maths-is-taught/>

