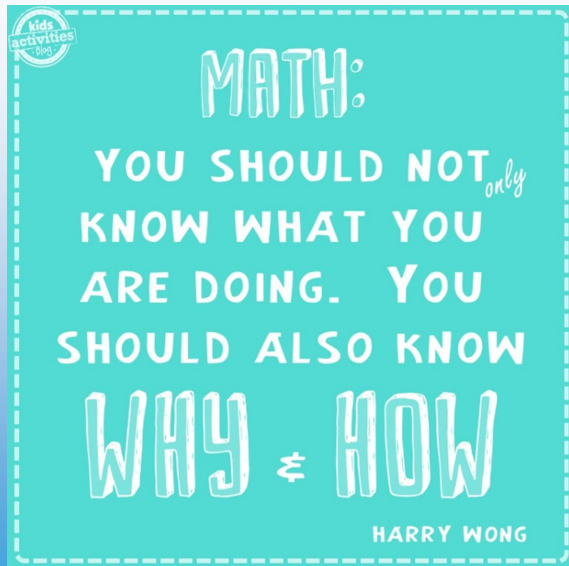


How can you help at home?

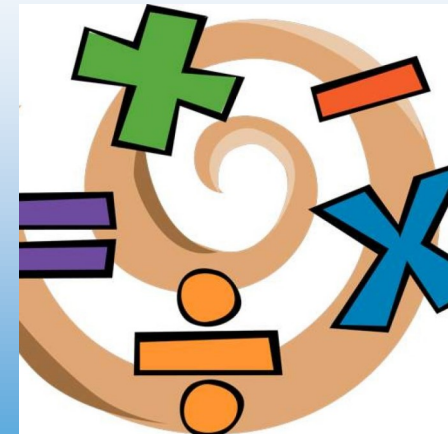
- Times tables practise – SO important! They are the foundation to everything in Maths.
- Encourage your children to use working out – CPA when they are struggling – not always just numbers and digits.
- Create a positive mindset around Maths. If they hear '*I was rubbish at Maths*' they may adopt this mindset and begin to think they cannot reach their potential.
- Encourage children to attend homework club if struggling.
- Sit down with children for their Maths homework so you can see what they are struggling with.
- Use resources such as TTRS, BBC bitesize and Numbots at home.

It is especially important for children to acquire proficiency with **whole numbers and fractions and for working with 2- and 3-dimensional shapes in the primary phase** because of how much they are used in **later topics and key stages.** – OFSTED Research May 2021



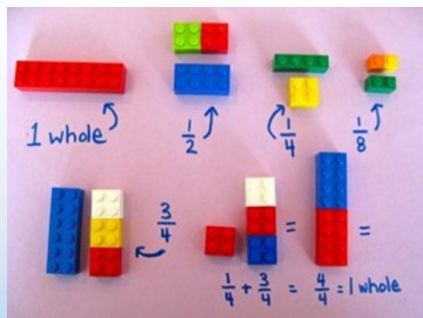
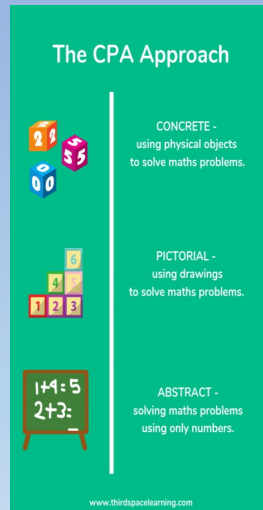
Maths at IHJS

Stay and Learn Morning



CPA – Concrete -Pictorial - Abstract

- Throughout our lessons, children will be shown Maths through interactive resources and modelling of:
- **Concrete Maths** – using objects and physical resources
- **Pictorial Maths** – drawings to help solve problems
- **Abstract Maths** – using digits and numbers
- Children will also be expected to use elements of all of the above in their lessons – although maybe not all on the same day.



$$64 + 59 =$$

$$60 + 4$$

$$50 + 9$$

$$60 + 50 = 110$$

$$4 + 9 = 13$$

$$110 + 13 = 123$$

$$123$$

$$\begin{array}{r} 52 \\ 6 \overline{) 312} \\ \underline{30} \\ 12 \\ \underline{12} \\ 0 \end{array}$$

What is Fluency?

- Fluency in maths is about developing number sense and being able to use the most appropriate method for the task at hand; to be able to apply a skill to multiple contexts.
- The National Curriculum states that pupils should become fluent in the fundamentals of mathematics through varied and frequent practice.
- While a part of this is about knowing key mathematical facts and recalling them efficiently, fluency means so much more than this as it allows pupils to delve much deeper.
- *Eg: Their fluency in calculations such as their multiplication facts has led to pupils tackling more complex problems with greater confidence and resilience.*
- *Because they are no longer having to tackle remembering how to do the calculations needed or the most appropriate strategy to choose each time, they are able to put all their energy into how to solve their mathematical problem.*

What is Reasoning and Problem Solving?

- Fluency in maths works through intelligent practice (rather than just mechanical repetition). Once a child has grasped a mathematical concept, the idea is that they are exposed to varied fluency activities and then R&PS.
- These activities then require them to use verbal reasoning to justify and explain their thinking in order to solve word problems/problems in an unfamiliar context.
- Children are expected to use the correct mathematical vocabulary and stem sentence starters to really help them explain their understanding when reasoning.
- A problem solving task is all about breaking things down bit by bit – it requires working out – one of the biggest problems when children are faced with these!