Keep Hatch Primary School

Maths

At Keep Hatch Primary Schools we recognise that math's is an essential life skill which helps children understand the world & enables them to think logically & problem solve.

Intent - We aim to...

- Successfully provides teaching that all children access using concrete, pictorial and abstract approach.
- Provide children with essential number skills.
- Deliver a mastery curriculum that allows children to deepen their understanding of mathematical concepts.
- Have high expectations of all the children in our school regardless of their attainment level
- To ensure discussion and vocabulary are encouraged through Maths talk.

Implementation - How do we achieve our aims?

A consistent approach

At Keep Hatch Primary School we follow the White Rose Maths scheme of learning, which is an ambitious, connected curriculum accessible to all pupils from Reception to the end of Year 6. This scheme allows us to teach mathematics through three broad concepts- fluency, reasoning and problem solving. Alongside this, the teachers do have the opportunity to use other resources to further; Teaching of times tables is explicit and progressive from Y1-Y6. Children access rich experiences when learning number skills. Lots of resources, contexts and opportunities for applying knowledge and regular assessment opportunities within maths at regular intervals so that teaching accurately meets the needs of the children.

Key Concepts

- Fluency
- Reasoning
- Problem Solving

Key Skills

- Estimating
- Calculating
- Recalling
- Reasoning
- Solving Problems
- Applying

Daily practice

Within LKS2 & UKS2, maths is an **integral part of learning** and is taught daily, carefully addressing the small steps in learning through focus 5 activities for early work.

Assessment

Continuous assessment and end-of-term tests ensure progression and identify next steps. Past SATs papers (for Y2 & Y6) are used termly to monitor attainment against a national benchmark. AfL in class allow children to achieve their potential in lessons.

Deep understanding of concepts

The *White Rose Maths* scheme of learning is designed to give sufficient time for teachers to explore and understand concepts in depth rather than covering them superficially and revisiting several times. This practice and consolidation helps children to grasp the links between topics and to understand them more deeply. Alongside this scheme, we are using Reaching Deeper challenges which can be applied to majority of maths units with the children providing the evidence of how the questions apply or not.

Strong Foundations

In EYFS you will see...

Teaching is embedded within a language-rich environment & appropriate Maths vocabulary is introduced and displayed throughout the setting.

Children explore maths resources that they will continue to use in KS1 e.g. Numicon, scales etc.

As children move through Reception there are more opportunities for them to work in adult-led groups, ensuring they are 'Year 1 ready'.

Children have access to opportunities to experience Maths/numbers in everyday life through continuous provision and use of stories linked with the topic.

Implementation (continued)

Maths given a high profile

Maths takes a high profile across the school. In EYFS, classrooms have a designated Maths area for children to explore.

In KS1 & KS2, learning is celebrated in the corridors and on displays; times table achievements is recognised on the school newsletter each week.

Quality first teaching

All teachers have high expectations of all children. High quality, inclusive teaching is provided for every child.

Learning is personalised to the individual needs of children and aims to narrow the attainment gap. For some children this is scaffolded by resource/adult support; for others opportunities are always given to challenge and deepen the individuals understanding.

Manipulatives & visuals

Practical resources are used regularly in all classes, **accessed by all children.** Resources are carefully selected by teachers to best demonstrate mathematical concepts. Models and pictorial images enable children to 'see' and understand Maths they are being taught rather than a reliance on it to 'do' the Maths. This will enable them to reason and problem solve more effectively. Key resources are identified for each year group to ensure a consistent and progressive approach through which children build on knowledge year-on-year.

Strong vocabulary development

Clear and consistent Maths vocabulary is used in all classrooms. STEM sentences are displayed in lessons and children are encouraged to draw upon these to develop and describe solutions to problems.

Supportive learning areas

In all classrooms, Maths displays offer support by displaying key **vocabulary, representations, stem sentences RD Challenges, teacher models & aide memoires.** In EYFS & KS1 photographs are presented to show the learning which has taken place.

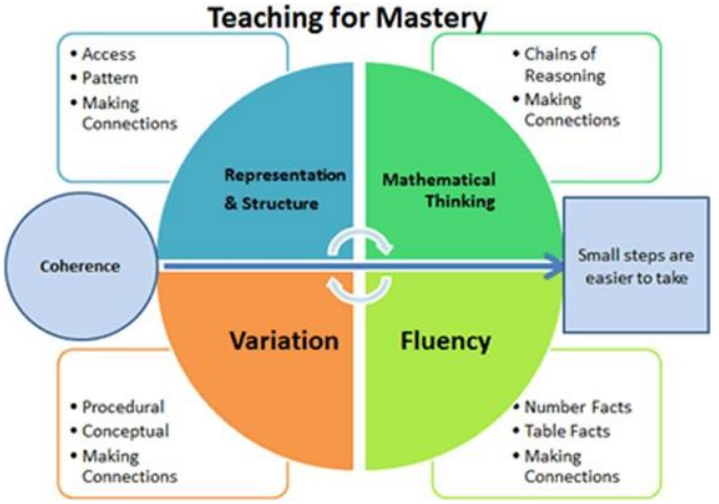
A mastery model

Teaching draws on the **Five Big Ideas**, drawn from research evidence, underpinning teaching for mastery.

- **Coherence** — Lessons broken down into small connected steps.
- **Representation** — Used to expose the mathematical structure being taught.
- **Mathematical Thinking** — Thinking deeply about maths, reasoning and discussing ideas.
- **Fluency** — Supporting fluency in number facts and mathematic procedures.
- **Variation** — Learning practices thinking through standard & non-standard examples.

NUMBOTS — KS1

TIMES TABLE ROCK STARS — KS2



Impact - How will we know we achieved our aims?

- Consistent teaching and high expectations so children are more fluent.
- Children will be able to recall number facts that are age appropriate, particularly times table knowledge.
- Maths transferrable skills will become cross curricular in D&T, cooking or computing lessons.
- Lessons are targeted for children who need accelerated progress.
- Children are able to tackle investigations with adults facilitating the learning.