# Maths Policy 23-24

*At Knights Enham Junior School, we want children to enjoy mathematics and feel confident in using their skills and knowledge independently. We aim to keep problem solving at the heart of our teaching and learning to equip children with the skills needed to understand the relevance of Mathematics in real life contexts.*

## Intent

The National Curriculum for Mathematics (2014) aims to ensure that all pupils:

1. Become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

2. **Reason** mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language

3. Can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

In addition to achieving the learning outcomes and statutory requirements set out in the National Curriculum, at Knights Enham Junior School we also aim to:

- Deliver a mathematical curriculum using the CPA approach (concrete, pictorial and abstract),
- Provide opportunities that are linked to real life context,
- Ensure children have developed mental strategies that can be applied in all areas of problem solving and have learnt the key facts vital for Maths,
- Prioritise the teaching and learning of times tables through-out the school using Times Tables Rockstars,
- Promote a positive attitude to Mathematics,
- Cater for a range of learning and teaching styles, giving children a wide range of experiences,
- Develop initiative and an ability to work both independently and in collaboration with others,
- Use mathematical language with confidence and ease,

## Implementation

### Staff

- All staff to plan weekly maths lessons using the set planning template and following the CPA approach. Tasks and questions to be used from a variety of resources found in the maths shared folder, for example, 'I see reasoning' and 'White Rose'
- Active Maths delivered once per week to apply mathematical knowledge in different contexts and scenarios
- All staff to use and refer to the calculation policy when planning and delivering lessons,
- All children to be provided with problem solving and reasoning opportunities, irrespective of ability,
- I do, we do, you do to develop recap knowledge
- Lessons to start with 'L Power' to activate prior learning,
- Children's progress to be continually assessed using: daily and weekly assessment, Insight tool and end of phase data drops,
- High impact teaching to be employed to ensure gaps are closed in children's learning,
- Use of times table scheme on a regular basis,
- Class teachers to work with SENDCo and use diagnostic tools to identify and deliver focussed interventions,
- Staff to mark in accordance with school's marking policy.

### Expectations

- Maths to be taught daily
- 'L Power' to be used as a daily starter
- At least one **practical** lesson to be taught each week, giving the children opportunity to explore concepts and concrete resources
- Lessons to be delivered in accordance with the progress of the pupils
- Support and challenge delivered through questioning to consolidate and deepen learning.

### Books

- All books in years 4,5 and 6 to have margins on each page (3 squares wide)
- Each lesson to have a date and 'I can' written (or on sheet) and underlined
- children to cut and stick in each question individually then show the working out beside before advancing to another question
- Questions to be individually marked
- Next steps used to consolidate

### Subject Leader

- Undertake lesson observations/learning walks/book scrutiny/pupil conferencing to monitor and support staff in the implementation of maths and the assessment of progress of pupils.
- Feedback to staff and record the impact of support on the progress of pupils.
- Attend training that evolves subject knowledge and develops Maths leadership in school.
- Purchase resources that will develop maths learning in school.

- Deliver training to staff through staff meetings and inset.

**Impact**

- Teaching and learning is consistent across all years and classes,
- High standards and quality of teaching and learning across the school in Maths,
- Improved outcomes for all pupils,
- Improved SEND and GD outcomes through appropriate scaffolding and challenge,
- A variety of tasks that are in accordance with the 3 National Curriculum aims of Mathematics,
- Lessons and teaching that show real life context,
- Children can be seen to use a variety of problem-solving strategies including the CPA approach.

**School Values**

**Resilience** – '**mathematical resilience**' is how pupils in our school approach Mathematics with confidence, persistence in the face of difficulty and a willingness to discuss, reflect and apply.

**Collaboration** – Children are regularly provided with opportunities to work with others to complete mathematical challenges.

**Nurture** – All children are provided with work at their level so that they can achieve and have a sense of success in their learning.

**Respect** – Children understand and respect each other's opinions, mathematical thinking and strategies. Children accept that there is more than one way to solve a problem.

**Independence** – Children have the skills and knowledge to feel confident to tackle problems independently, using the mathematical tools and equipment provided.