MATHS
Intent, Implementation and Impact

Intent

Our intent is to provide pupils with the mathematical fluency and confidence to carry out a range of mathematical problems and solve them by utilising reasoning and problem solving skills in each and every lesson. We aim for pupils in Kingsteignton School to display positive approaches to maths and develop attitudes that embrace challenge. We are constantly striving to improve outcomes for all our pupils and achieve the aims of the National Curriculum: Fluency – Reasoning – Problem Solving. As a school we are committed to ensuring that children are able to recognise the importance of Maths in the wider world and that they are also able to use their mathematical skills and knowledge confidently in their lives in a range of different contexts. We intend to build knowledge, skills and understanding by revisiting at regular intervals and providing pupils with the opportunity to refresh and rehearse them through practice, consolidating and deepening at every age and stage.

Our aims in the teaching of mathematics are:

- To promote enjoyment of learning through practical, exploration and discussion.
- To become fluent in the fundamentals of mathematics.
- To ensure that teaching is challenging for all abilities.
- To develop the ability to solve and grapple with problems through decision-making and reasoning in a range of contexts
- To build upon children's knowledge and understanding from Year 1 to year 6.
- To build resilience
- To raise attainment of pupils working at greater depth
- To enable pupils to apply their mathematical skills in other subjects
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Implementation

We are passionate that children should be encouraged to be active participants in maths lessons. Our intention is for pupils to feel valued as part of a maths community. Pupils feel comfortable to share their thinking and understand that taking part even when they feel unsure. Children are encouraged to question one another; agree and disagree by

justifying their decisions and working together collaboratively. Staff use Blooms Taxonomy questioning to deepen discussion and challenge the children's mathematical understanding. Since lockdown we feel that pupils might need to develop and re learn resilience, working collaboratively with staff.

We intend for pupils to recall and apply mathematical concepts accurately. We teach pupils to be fluent in recognising relationships and making connections. By doing this, pupils will develop a conceptual understanding of the subject. We ensure a clear progression by using the White Rose Maths scheme of work. Reasoning and problem solving is integral to all lessons at Kingsteignton School in order to provide a deeper and richer learning environment. Pupils combine different concepts to solve complex problems and apply knowledge to real life situations.

All lessons begin with a 'Can I' learning objective as a starting point. Pupils and staff discuss the vocabulary involved and 'Flash back' to prior learning. The learning objects link to the National Curriculum and are taken from the White Rose planning. The activities are modelled using a range of representations where children work collaboratively with their teacher to manipulate and explore concepts. The teacher will organise the findings of the exploration, compare/contrast strategies and guide towards the most efficient strategy. The journey through a lesson will begin with fluency, progressing to using and applying, followed by mastery style questioning. Pupils have the opportunity to choose their differentiated activity depending on their confidence and ability and challenges are provided for children. The lessons finish with a shared discussion and pupil feedback setting mastery questions for all. Assessments inform planning and those children who need extra support are identified and receive interventions.

All classrooms will have a display area specifically for mathematics. This is called a working wall and will display items the children need to support and develop the units learning. For example, key vocabulary, success criteria, models, stem sentences and key questions.

Where children are working significantly below the expected age related requirements of the curriculum scaffolding and **targeted** interventions take place. Likewise, children who are on track to be achieving greater depth are also given interventions where the can have more opportunities to grapple with problems.

Whole school book themes are used where all classes have the opportunity to grapple with problems and investigate mathematical scenarios. Cross curricular links will also be made.

Impact

Pupil progress is monitored through ongoing elicitations, verbal discussions with children, assessment tasks, termly assessment, teachers' judgments and PAS data sheets. At Kingsteignton School we use a clear marking policy which shows whether the children have achieved the learning objective. Verbal feedback is encouraged and children

respond to marking in green pen. Challenges, mastery, unit targets, target focus work and VAK activities (recorded on Tapestry) are all recorded in the maths books.

The impact of mathematics is evaluated through end of year assessment and government tests: through Governor meeting; visits and through our own monitoring of teaching, learning and pupil conferencing.

Through our implementation the impact on the pupils will be

- To ensure all children are ready for the next phase of their education.
- That pupils develop a mathematical fluency and confidence to carry out a range of mathematical problems and solve them by utilising reasoning and problem solving skills.

To build resilience, willing to share and explain