

MATHS CURRICULUM AT THOMAS READE

National Curriculum 2013:

Aims to ensure that all pupils:

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

Intent:

- To provide a curriculum that caters for the needs of all individuals.
- To develop children's mathematical skill and understanding and ensure that they become confident mathematicians who are not afraid to take risks.
- To develop independent, inquisitive learners who have secure mathematical foundations and an interest in self-improvement.
- To provide challenge for children through high quality activities with a focus on: fluency, reasoning and problem solving.
- To enable children to gain enjoyment and self-esteem through learning and doing mathematics and pleasure from their ability to use it to solve problems.

Implementation:

- High quality first teaching delivers appropriately challenging work for all individuals.
- Teachers follow The National Curriculum, Thomas Reade Calculation Policy and Development Matters.
- Teachers and Teaching Assistants are regularly given opportunities to extend their mathematical knowledge and delivery of the curriculum through CPD and Staff Meetings.
- Pupils taught using concrete, pictorial and abstract experiences.
- Pupils taught a range of problem-solving skills including: "Spotting a Pattern", "Working Systematically", "Trail & Improvement", "Visualisation", "Working Backwards", "Reasoning Logically" and "Conjecture".
- The use of planning resources including Hamilton, White Rose Maths, NCETM (National Centre for Excellence in the Teaching of Maths) & NRICH (National Research Institute of Cultural Heritage).
- Through revisiting topics, children given opportunities to ensure learning is "baked" into long term memory.
- The use of a range of mathematical resources.
- Rich questioning using accurate mathematical vocabulary.
- Using elements of Maths Mastery to enrich the curriculum.
- Continuous monitoring of pupils' progress against expected attainment for their age.
- Interventions and personalised learning opportunities for children who need to close the gaps and for children that need challenging.
- AFL through self and peer assessment.
- Effective deployment of support staff during maths lessons.
- Assessment – ongoing formative assessment and end of term/year summative assessment tests (Pearson – Arithmetic and Reasoning).
- Weekly times tables and number bond challenges.
- Early Bird Maths (concise mathematical activities to complete as children come into the classroom).

- Cross Curricular Opportunities – when relevant, mathematics will be linked to other areas of the curriculum.
- Whole school Maths days.
- Maths moderation (In House & Abingdon Maths Partnership).

Impact:

- EYFS: GLD Expected Standard 83% (11% above National)
- KS1: Expected Standard or Greater Depth 80% (4% above National)
- KS2: Expected Standard or Greater Depth 76% (3% below National)

Next Steps:

- Develop role of Subject Leader
- Embed elements of “Mastery” into the curriculum.
- Ensure that KS2 results are above average.

Reviewed October 2019