

School Curriculum 2020

Mathematics at East Ayton Primary School

Principles and Purpose

- Mathematics teaching at East Ayton Primary School is underpinned by three key National Curriculum aims 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.
 - **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
- Understanding that mathematics needs to be intrinsically linked to real life and developed through subjects across the curriculum.
- Appreciating the importance of mathematical understanding as an essential life skill.
- To engage in problem-solving activities with confidence and resilience.
- Seeing mathematics as enjoyable, and fostering an interest and engagement as part of life-long learning.

Entitlement & Enrichment

- Confidence and resilience is developed through high quality, rigorous, daily teaching of mathematical knowledge and skills.
- Where possible, the teaching of knowledge and skills will be rooted in real-life learning opportunities.
- Children are exposed to a rich climate of differentiated problem-solving.
- Coverage of National Curriculum requirements is ensured through the use of Abacus Maths long-term planning.
- Support for the teaching and learning has come through a partnership with a high performing local school.
- The development of mathematical teaching has also been informed by observing different approaches in other local schools.
- Other sources of enrichment include:
 - Outdoor learning in the Forest Schools area.
 - 'Marvellous Maths' at a local Secondary School for children assessed at Greater Depth.
 - Coastal Opportunities Area Maths Day.

Breadth & Balance

- From Reception onwards, mathematics teaching and learning follows the sequence of units outlined in Abacus Maths.
- Abacus Maths is based on a spiral approach to the teaching of knowledge and skills, which are embedded through the re-visiting of key concepts allowing children to make connections and build on prior learning.
- Knowledge and skills are applied through regular provision of problem-solving opportunities.
- Half-termly Abacus assessment tasks inform teacher assessment of learning.

The Teaching Narrative

- Delivery of National Curriculum mathematics is supported through the use of Abacus Maths, which organises teaching and learning into a series of half-termly units. The units focus on specific mathematical concepts which are revisited multiple times throughout the year.

Resources

- Abacus Maths materials.
- N-rich materials.
- Testbase.
- Classroom Secrets.
- Numicon.

Review & Evaluate

- A yearly plan outlining the actions needed to ensure progress.
- Termly meeting with subject leader to review progress with the action plan.