



Maths Policy 2017 / 2018

AIMS

Our aim is to provide a high-quality mathematics education with a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject. Pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to science and other subjects.

All pupils should:

- become *fluent* in the fundamentals of mathematics, through varied and frequent practice with increasingly complex problems over time.
- develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- *reason* mathematically by following a line of enquiry, making connections 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.

The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress will always be based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly will be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material will consolidate their understanding, including through additional practice, before moving on.

MATHS

- The school's calculations policy is modelled by teaching staff daily.
- All children take part in daily counting (speaking focused) and written modelling of calculations
- We use learning shapes to ensure fluency, reasoning and problem solving opportunities in most lessons
- Learning is planned using the White Rose Maths Hub long term plans
- Topical mathematics vocabulary communicated to parents and pupils prior to learning and is displayed in classrooms.
- Children take part in a weekly arithmetic / mental maths test

Assessment

- **Short Term Assessment** is informal daily assessment based on a specific activity. It centres on the Learning Objectives (Can I?) and informs the teacher's future planning for individuals or groups. Outcomes are measured against the Attainment Outcomes tracking grids in the front of pupils' Maths books. The school Marking Policy is integral to this process.
- Pupils are assessed against Attainment Outcomes tracked in pupils' Maths Books and formally recorded in Oct, Dec, Feb, May and June.
- Maths is also assessed termly using PUMA termly assessments. A test is carried out at the end of every term. This gives valuable information such as the child's maths age and a Hodder score, which allows the rate of progress to be tracked. These tests are used as a planning tool as well as to track progress.

Maths WOW experiences will take place throughout the year to promote Maths in the wider world.

MENTAL MATHS

Through the use of our Calculations Policy we strive to deliver consistency and progression in Mental Maths throughout the school. It is important to recognise that the ability to calculate mentally lies at the heart of numeracy. Children's mental methods of calculation must be practised on a regular basis and secured alongside their learning. The ability to calculate in your head is an important part of mathematics. It is also an essential part of coping with society's demands and managing everyday events. The overall aim of this policy is that when children leave our school, they have a secure knowledge of number facts and are able to solve problems mentally, selecting an efficient strategy from a range of known approaches.

- Calculations are practised in daily Mental Maths starters, including an element of counting.
- Children in Y1-Y6 complete I Can Do Maths homework weekly. This is marked in differentiated groups with the children. Any new areas of learning are covered and misconceptions are addressed.
- Children in Y1-Y6 take part in Weekly Y1-6 Learn It tests (Friday)
- Children complete weekly tracked Mental Maths Tests or arithmetic practice

Assessment

- **Short Term Assessment** is informal daily assessment based on a specific activity. It centres on the Learning Objectives (Can I?) and informs the teacher's future planning for individuals or groups. Outcomes are measured against the Attainment Outcomes tracking grids in the front of pupils' books.
- Children's I Can Do Maths homework scores are tracked and analysed by the Maths Subject Leader.
- Arithmetic / Learn It scores are also tracked by the class teacher.

SEND

Urgent action pupils (children not meeting age related expectations / not making at least expected progress) will be provided with additional support, both during and outside the daily Maths session. IPM'S are in place for all SEND and children accessing intervention programmes.

Signed: _____

Head Teacher : Simon Robson

Maths Co-ordinator – Gemma McManus

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