



# Mathematics at Shaw School

## Vision Statement



Mathematics is an important creative discipline that helps us to better understand the world and God’s amazing universe. We want all in our school community at Shaw to experience the beauty, power and enjoyment of mathematics and develop a sense of curiosity about the subject.

At Shaw School we use our personal learning goals, values and growth mindset to help all in our school community develop a positive attitude to maths, believe all children can achieve in maths and teach for a secure and deep understanding of mathematical concepts. We know that making mistakes is ok and we can learn from these. We know that sometimes we just can’t do something....YET!

**We aim for all pupils to:**

- Become fluent in the key areas of mathematics so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- Solve problems by applying their mathematics to a variety of problems with increasing confidence, including in unfamiliar contexts and to model real life scenarios.
- Reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language.
- Have an appreciation of number and number operations, which enables mental calculations and written procedures to be performed efficiently, fluently and accurately to be successful in mathematics.

<b>Mathematics lesson – 45 minutes Every day</b>	<b>Arithmetic lessons – 15 minutes Every day</b>
<b>“Learning together”</b>	<b>Skills sessions</b>
<b>Teach, Do, Teach, Do</b>	<b>Arithmetic / Intervention / Practice</b>

**Mathematics lessons**

A Mastery approach to Mathematics teaching is used where maths concepts are taught in units/blocks based on the National Curriculum statements. Small steps are then used each day to deliver the learning in manageable steps.

**Typical lesson design:**

- Small step explained – referring to working wall – previous learning and the next step.
- Introduction, Hook, Modelling
- Practice together
- Do it – up to 5 examples – What it is (standard), What it’s also (non-standard) – **Challenge fluency**
- Secure it – True/false, What it’s not! Active argument – **Challenge understanding**
- Deepen it – Problem solving, empty boxes / symbols, Here’s the answer, generate the questions, Always/Sometimes/Never, apply to unfamiliar contexts, make connections – **Challenge thinking**
- Lesson recap

**Arithmetic sessions**

Re-cap on previous learning from Maths lessons or key learning areas such as number bonds, doubles, times tables, quick re-call division facts etc.