

# Mathematics



# Curriculum expectations

- become **fluent in the fundamentals of mathematics** 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
- **solve problems** by applying their mathematics to a variety of problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions

# Mastery- greater depth of understanding

We believe that pupils who grasp concepts rapidly should be **challenged** through being **offered rich and sophisticated** problems before any acceleration through new content.

Those who are **not sufficiently fluent** with earlier material should consolidate their understanding through additional practice using models and images alongside practical resources before moving on.

# What is problem solving?

Providing a range of puzzles and other problems helps pupils to reason strategically to:

- find possible ways into solving a problem
- sequence an unfolding solution to a problem
- use recording to help their thinking about the next step.

*“prove it!”*

*“Can you explain your answer?”*

*“How do you know?”*

*“How did you get to this conclusion?”*

# How do we develop basic skills?

Minute maths tests

Times tables ladder

Morning Maths

Homework