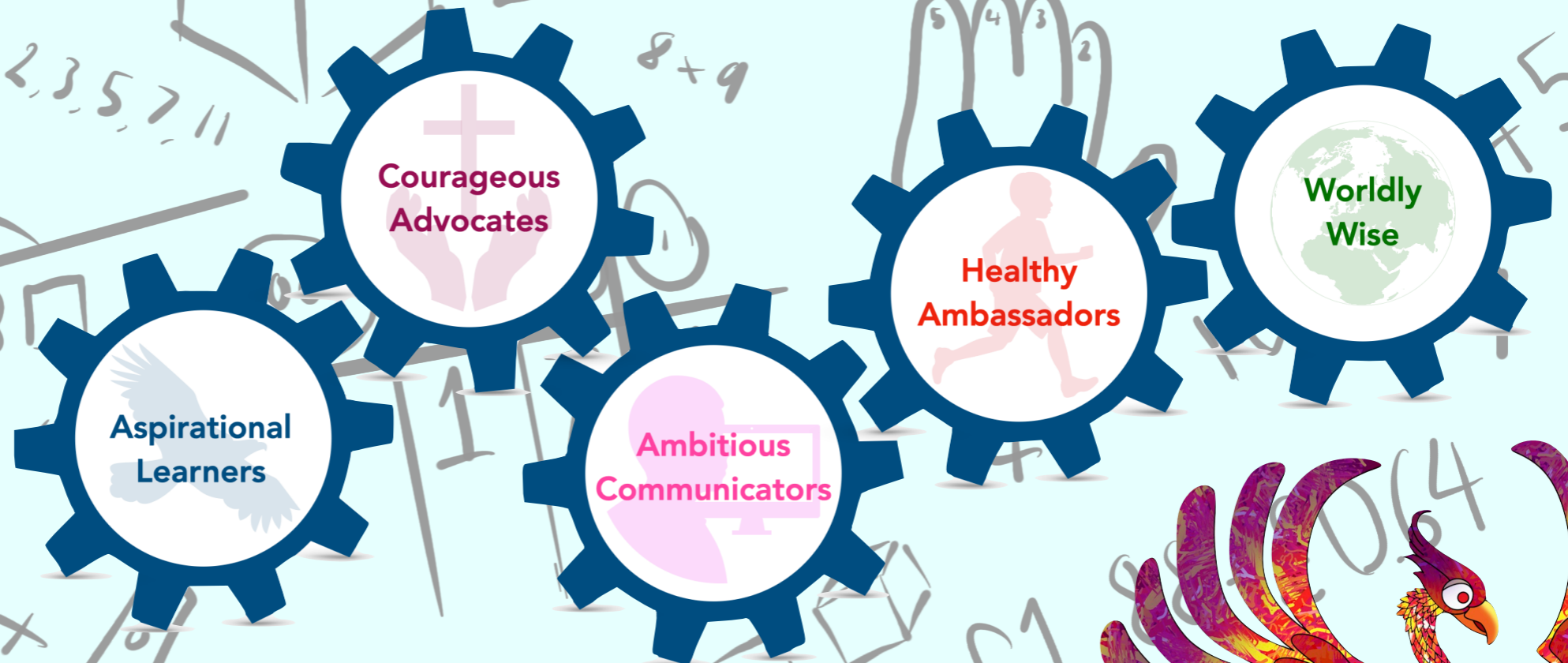


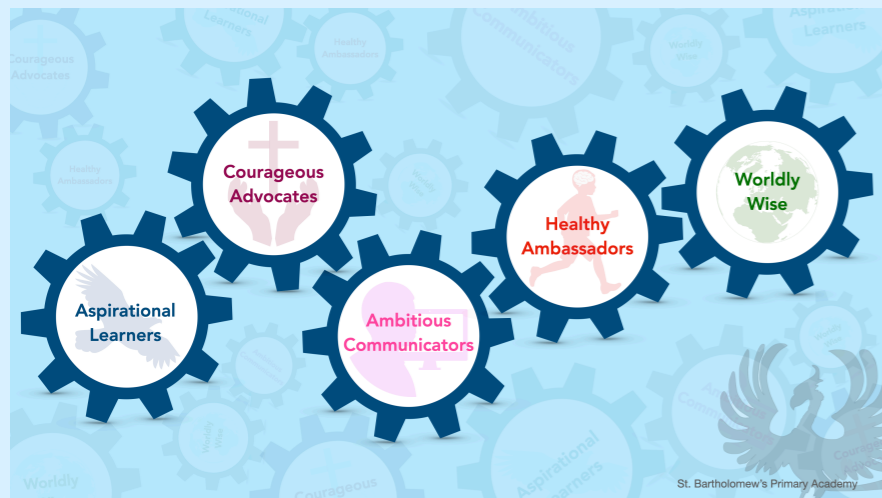
Mathematics Flight Path

Hand in hand we learn, we grow, we soar



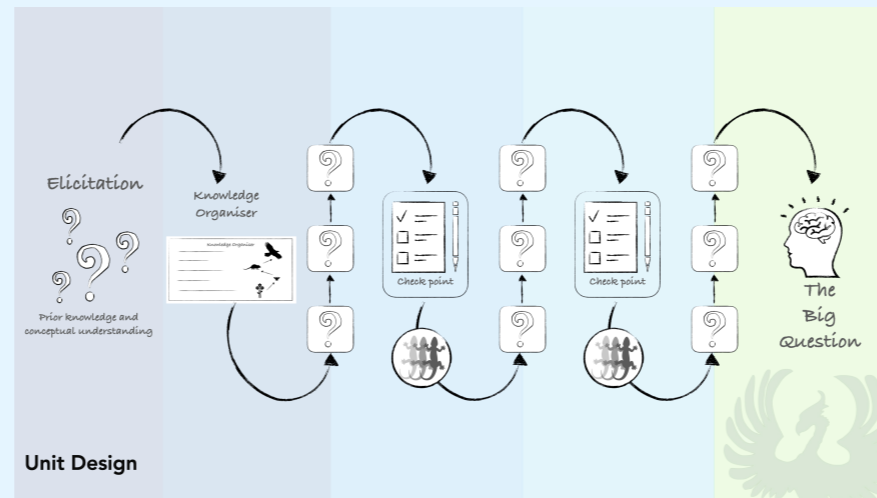
Courage Kindness Perseverance Trust Respect Love

Our Curriculum Drivers



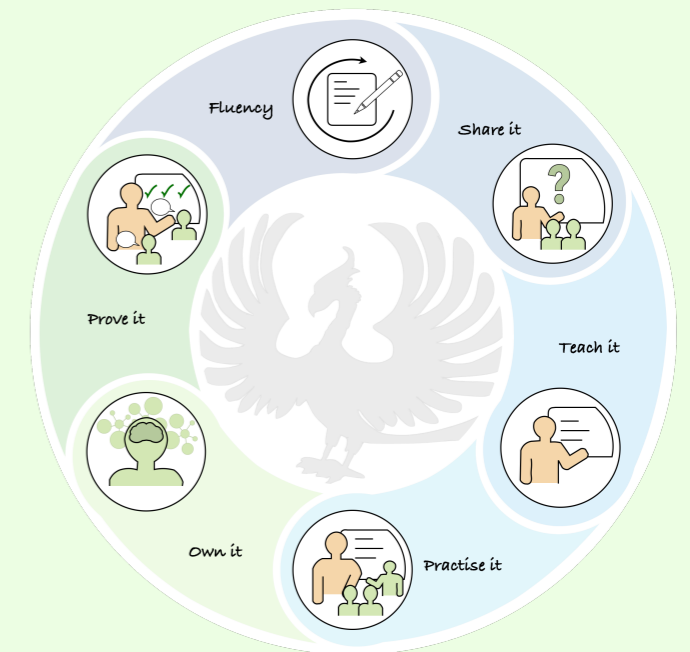
These articulate the ambition of our curriculum and how it will enable children to be confident, successful and ambitious citizens, prepared for life outside of school.

Our Unit Design



These are the principles that teachers adhere to when designing a unit of work, to ensure it builds upon prior learning and leads to secure schema.

Our Lesson Design



This is the structure we follow during lessons to reduce cognitive load and ensure all children are able to succeed.

Curriculum Intent

Maths mastery is a **'deep, sustainable conceptual understanding for all.'**

We achieve this through talking about, investigating and representing mathematical concepts. Children grow to 'notice' number and invest the time in experimenting, solving, concluding and explaining these patterns. They appreciate that mental calculations and written procedures, when chosen appropriately, can be performed efficiently, fluently and accurately to attain solutions. They develop a breadth of understanding of number, parts of a whole (fractions, decimals & percentages), geometry, measure, statistics and problem solving and are able to apply this to the world around them. These skills prepare children for further education and beyond, and enable them to foster a sense of confidence in their ability to understand the need for mathematics for their successful future.

Start with a story

Our

Representation

and

Structure

four

Vocabulary and

full

sentences

pillars

Small steps

in

learning

Implementation

At St Bartholomew's, we use 'Can Do Maths', supplemented by a variety of Mastery based resources from the NCETM (Mastering of Number, Ready to Progress and Curriculum Prioritisation Documents) to ensure pupils will:

- Become fluent in the fundamentals 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 sophistication, 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.

Every lesson begins with a hook story; to ensure the mathematical concepts have meaning to the children and they are able to visualise and engage with the lesson.

Every lesson has appropriate choices of manipulatives and representations available; these are important tools in helping students to think and reason in more deep, meaningful ways.

High expectations on both the teacher's and children's use of mathematical vocabulary and answering in full sentences; to ensure children can make links with mathematical concepts and have the tools to talk and discuss mathematical principles and make generalisations.

Every lesson follows the necessary small steps of learning; to ensure **ALL** children are able to access the ARE gateway and follow lessons through well thought out small, manageable progression points.

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Impact

In order to evaluate the level to which children are retaining knowledge and able to apply their learning to a range of situations, we use a range of techniques:

- CPD to ensure that teacher pedagogy and assessment is secure.
- Regular feedback, marking and pupil voice feedback.
- Subject monitoring including book scrutinies.
- Regular low stakes assessment, using a range of creative approaches.
- More formal assessment to track progress and to identify gaps.
- Cross trust moderation to ensure secure teacher judgements.
- Cross-curricular opportunities to enable opportunities to apply the skills through other curriculum areas.

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