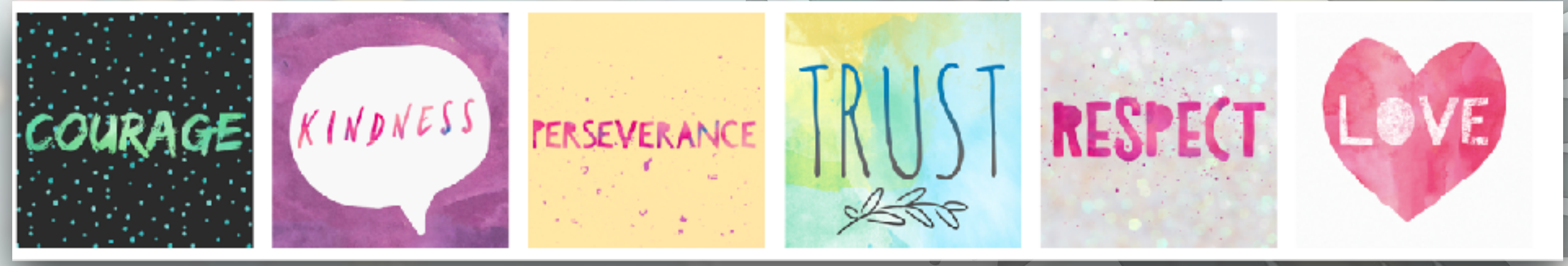
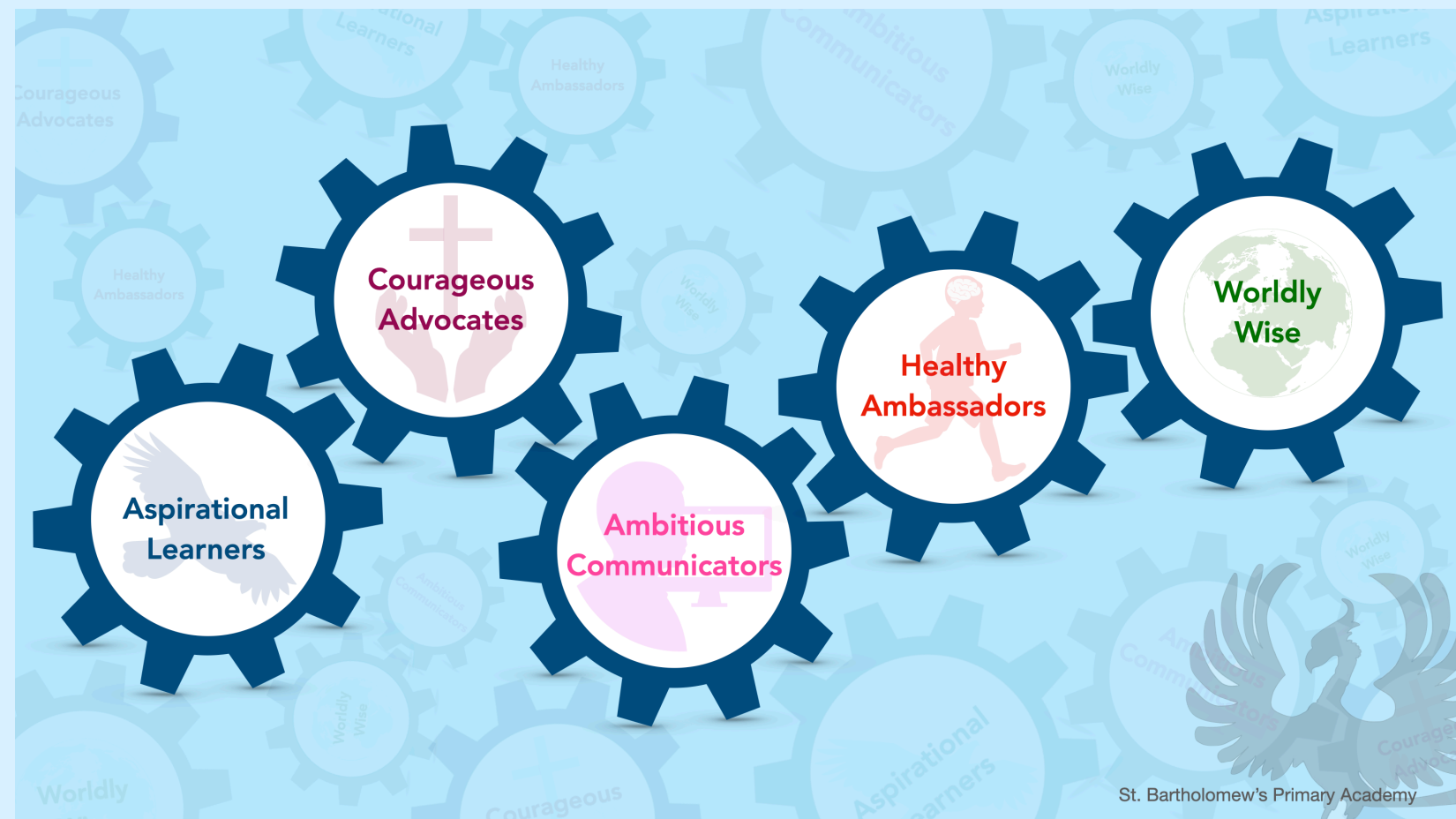


Science Flight Path

Hand in hand we learn, we grow, we soar

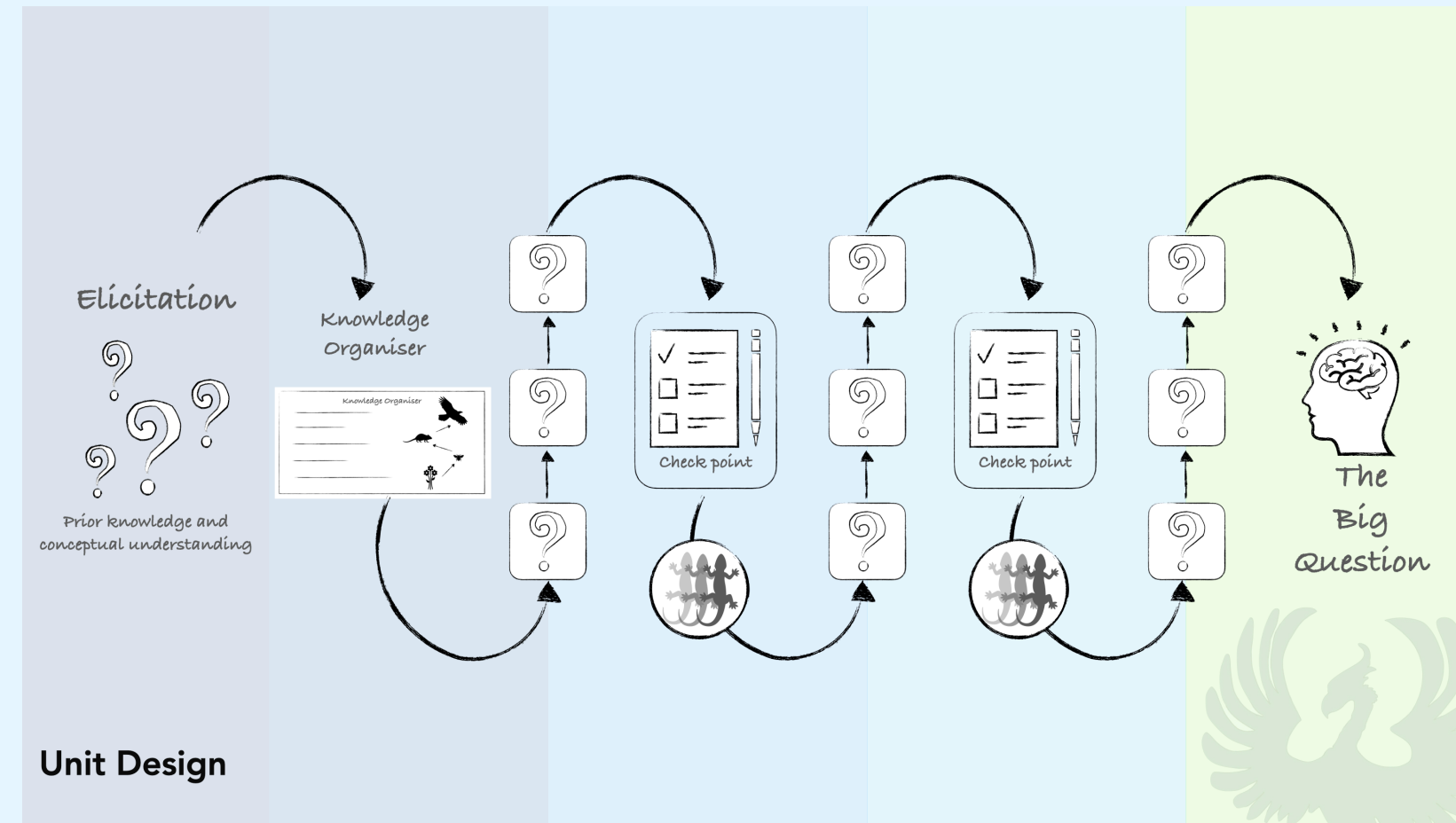


Our Curriculum Drivers



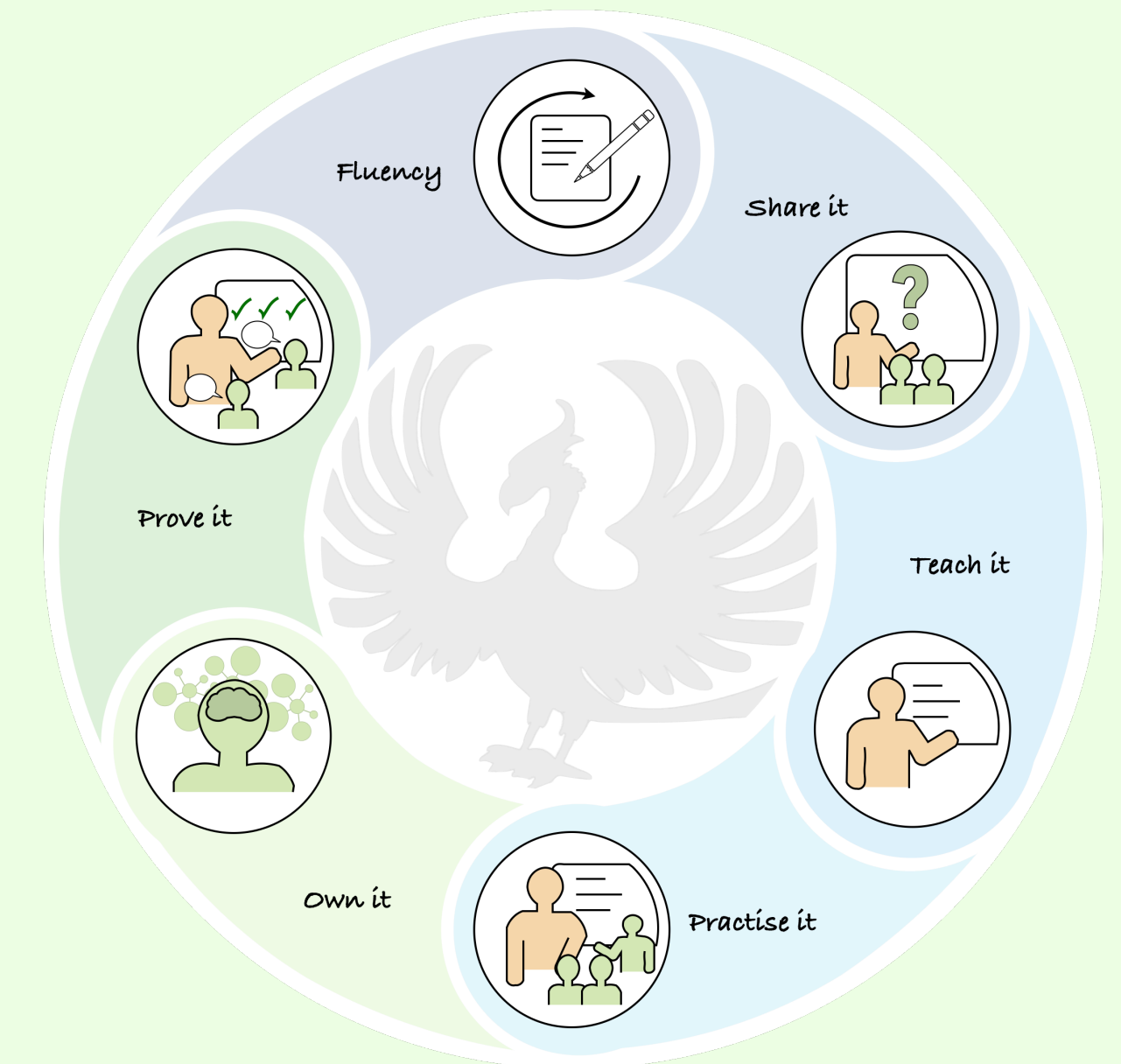
These articulate the ambition of our curriculum and how it will enable children to be confident, successful and ambitious citizens, prepared for life outside of school.

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.

Science

Science is a body of knowledge and a process that allows us to explain and understand the world around us.

Intent

We believe that a high-quality science education should engage, stimulate and challenge pupils, equipping them with the knowledge and skills to better understand the world around us. Our science curriculum prioritises building knowledge in a meaningful and sequential way, allowing pupils to make links and build on what they already know. Our pupils will learn about, and be inspired by, the work of great scientists. They will develop a growing understanding of the contribution science has made to society, both past and present. Our pupils will develop their enquiry skills through first hand activities that inspire them to deepen their own scientific knowledge and conceptual understanding of biology, chemistry and physics. Our aim is for all pupils to be equipped with the scientific knowledge to understand the uses of science today and in the future. We aim to build strong schema by using a concept based approach.

Implementation

Science is taught weekly at St Bartholomew's. We have used 'The 10 Big Ideas of Science Education' (<https://thescienceteacher.co.uk/big-ideas/>) alongside 'Developing Experts' (<https://www.developingexperts.com/>) and the National Curriculum to design our bespoke science curriculum. Our carefully planned units of study build on what the children already know. The sequence of lessons within each unit aims to develop children's scientific knowledge and understanding of increasingly complex scientific phenomena and processes. Our science curriculum, unit design and mastery lesson approach encourage children to make links, frequently revisit past learning and deepen their growing understanding of the world around us. Scientific vocabulary is mapped and taught rigorously to ensure that children can recognise, understand and use scientific vocabulary accurately and confidently. Opportunities to revisit and remember key knowledge and practise key skills are imbedded throughout our curriculum.

Impact

Children at St Bartholomew's will:

- Demonstrate their growing scientific knowledge by completing regular 'checkpoint' assessments and by answering 'big questions', using the correct scientific vocabulary to describe and explain the phenomena and processes they have observed.
- Make predictions and links backed up by their own scientific understanding.
- Plan and carry out scientific investigations both individually and as a group, using a range of equipment to make accurate measurements, and explaining the meaning and importance of a 'fair test' (KS2).
- Use a range of methods to communicate scientific information and present it in a systematic, scientific manner, including ICT, diagrams, graphs and charts.
- Develop an understanding of the work of great scientist and how scientific discoveries have shaped our understanding of the world around us.

