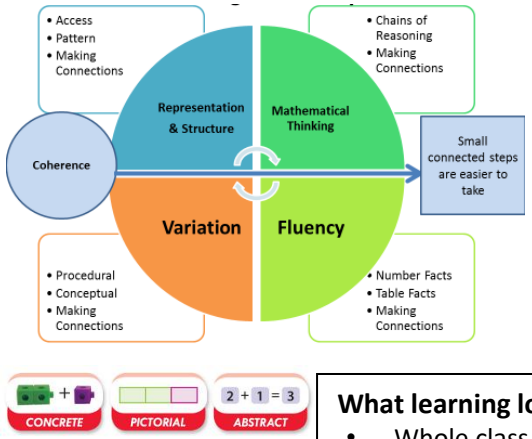
Vision:
We believe that in providing a high-quality mathematics education children can develop the ability to reason mathematically, develop real understanding and gain a sense of enjoyment and curiosity about the subject.

Culture of learning:
- Every child can be a mathematician.
- The ability to succeed is not fixed and this is clear in both lesson design and class teaching.
- A Concrete, Pictorial and Abstract (CPA) approach enables children to see the maths to understand it.
- Depth of understanding before breadth.
- Use of pre and post teach to enable pupils to consolidate understanding and close the gap.
- High expectations for all learners to succeed.

Duston Eldean Primary School
"TOGETHER WE GROW"

Maths at Duston Eldean Primary School



Aims: For all pupils to develop:
- A belief that they can achieve
- An understanding of the of maths skills in everyday life.
- An ability to make connections within mathematics.
- A fluent knowledge and recall of number facts and the number system.
- The ability to think independently and to persevere when faced with challenges.
- The ability to embrace the value of learning from mistakes.
- The ability to reason, generalise and make sense of solutions.
- A wide range of mathematical vocabulary.
- Fluency in performing written and mental calculations and mathematical techniques.
- The ability to use and apply mathematics across the maths and wider curriculum.

Key learning threads:
- **Oracy -** Developing the ability to reason and share ideas is central to our curriculum. Teachers will model the use of key mathematical vocabulary which will enable the children to articulate their thinking and explain their working. STEM sentences are used to scaffold thinking and deepen their understanding of concepts. When answering questions, children are encouraged to answer in full sentences and refer back to the original question. Central to all lessons is the opportunity for peer to peer and pupil to adult conversations. Maths Talk provides the opportunity to consolidate, explore and deepen understanding.
- **Diversity -** Children will be encouraged to think for themselves and develop their own approaches to solve problems. Different approaches will be investigated and the efficiency of each discussed. Through looking at different approaches, children will learn to look at maths in different ways and broaden their perception and understanding. A wide range of visual manipulatives will be used to understand the maths though 'seeing' the patterns and connections and children will be encouraged to use appropriate mathematical language will be used to explain thinking. They are then encouraged to select manipulatives themselves and to discuss the similarities and differences between them. To broaden children's knowledge and understanding of how mathematics is used in the wider world, rich and varied real life connections will be made and all lessons will start with a real-life problem.
- **Exploration** - Pupils will develop a positive attitude, fascination and excitement of maths through the discovery of patterns and connections. They will learn to see their own success in learning and will be encouraged to develop a 'can do' attitude, especially when problem solving and pattern spotting. Looking for all possible solutions to open ended questions will help to develop their reasoning and critical thinking skills. Seeking for solutions and methods for themselves will be encouraged rather than being given a formulae to follow to avoid procedural understanding and develop relational understanding by building on prior knowledge.

What learning looks like:
- Whole class teaching
- Continuous AfL is used to identify strengths and need for support.
- Learning starts with a problem to contextualise the maths and to give it a purpose.
- Small focus of learning for the lesson builds on prior learning.
- Precise and accurate mathematical language is used by both adults and pupils.
- Questions are planned to challenge thinking and to develop understanding.
- STEM sentence are used to support learning and expose connections.
- Choral and rehearing of key points help pupils to internalise learning.
- Children are encouraged to answer in full sentences to explain their thinking.
- Discussion plays a key part within lessons as pupils are given time to put into words their thinking to develop their reasoning.
- Progression through CPA to ensure children can 'see' and therefore understand the math rather than just following a procedure.
- 'I do', We do', 'You do' approach is used to model and scaffold the learning.
- Common misconceptions are addressed and planned for to draw attention to the key learning.
- Children are actively encouraged to seek for patterns and share what they notice within their learning.
- Independent learning enables children to apply their new skills and knowledge
- Greater depth within the concept is explored to extend thinking.
- Children requiring support are kept with the teacher or TA for further guided practice.
- Children self-mark so that they can identify errors and self-correct or seek support within the lesson to avoid misconceptions being reinforced.
- 'The answer is only the beginning'; is used to encourage children to prove and explain their thinking.
- Retrevial is planned in to revisit topics and keep learning fresh.