Curriculum Statement: Maths

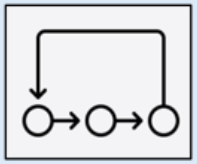
'Tell me and I forget, teach me and I remember, involve me and I learn.' Benjamin Franklin

Whole-School Vision:

At Quest Primary School, we work collaboratively with The Collegiate Trust schools to deliver the shared vision of an ***'exceptional education for all.'*** We passionately believe that '**Learning Changes Lives**' and are determined that through our school values of **excellence, responsibility and aspiration**, all children will develop to their full potential during their time at Quest Primary.

We have identified the 5 strategies below which form the outline of our offer, to ensure every child receives excellent inclusive teaching as standard. Our teachers use these consistently in lessons and adapt the strategies to the needs of their own class and to individual pupils.

Whole-School Strategies to Support Inclusive Teaching & Learning

Explicit Instruction	Checking for Understanding	Repeated Exposure	Scaffolded Practice	Communication
				

Maths Curriculum Vision:

At Quest Primary School the mathematics curriculum has been developed to ensure every child can achieve and experience success in mathematics. Maths is the foundation for understanding the world and so we strive for our children to become resilient, independent, confident and fluent mathematicians who understand that mathematics is a fundamental part of everyday life. We want children to leave Quest Primary with a love of mathematics, using their skills in a range of situations. Our curriculum incorporates the statutory requirements of the National Curriculum 2014. We use the White Rose scheme of work and The TCT Maths Framework to plan lessons to meet the specific needs of each class.

Our maths curriculum is designed with the intent that when our children leave Quest Primary, they are resilient, independent, confident and fluent mathematicians who understand that mathematics in a fundamental part of everyday life. We deliver a curriculum that:

- Allows every child to access learning and make accelerated progress through our inclusive and scaffolded methods.
- Ensures high expectations for every child regardless of starting point.
- Allows children to be confident with the basic skills that are developed, built upon and repeated throughout their school journey.

▪ Embeds a deeper understanding of maths by utilising a concrete, pictorial, abstract approach so that children understand what they are doing rather than just learning to repeat routines.
▪ Enhances understanding through the development of reasoning skills and challenges children through problem solving tasks.
▪ Uses a corrective approach where children are given instant feedback and misconceptions are addressed immediately.
▪ Encourages our children to be resilient learners by allowing them to make mistakes and learn from them quickly.

At Quest Primary School, we recognise that for our pupils to aspire and be successful academically and in the wider areas of their lives, they need to be given rich and sustained opportunities to develop their cultural capital. In-depth analysis and discussion about our pupils' backgrounds, life experiences and culture has helped us to design a curriculum with five key principles underpinning every subject area. These are interwoven through our Maths curriculum as below.

The Quest Primary Values, as realised through our Curriculum		
Excellence	**Responsibility**	**Aspiration**
Our curriculum is designed to promote excellence in all that we do and learn. Our high expectations of what every child can achieve, ensure that children are given opportunities throughout the planned curriculum, to achieve excellence in their subject knowledge and skills, so that they are ready to move on to the next stage of their learning. Excellence is valued, promoted and celebrated every day at Quest Primary and can be seen in our learning, behaviours and attitudes to all we do.	Our curriculum promotes children developing as responsible learners, taking responsibility for their own learning through their behaviour and actions, as well as supporting the learning of others. Subject curriculums promote how to take responsibility for our physical and mental health, as well as online safety and support our children to be well-rounded individuals and a school community, who understand the impact their words and actions have on others, and their own futures.	Our curriculum is aspirational for all our children, including those with SEND and from disadvantaged backgrounds. It is our intent that all children leave Quest Primary well-prepared for the next stage in their academic careers and with the knowledge and skills required to ensure they can partake successfully in the world around them. Our curriculum supports them to become confident, respectful and well-informed young citizens who believe they can achieve their dreams.

Intent, Implementation and Impact in Maths		
Intent	**Implementation**	**Evidence of Curriculum Impact** **(How will this be measured?)**
• Children experience the power and enjoyment maths can bring. • Through teaching maths at Quest Primary, children start to gain a curiosity of the subject and to ask questions within their learning. • Through in-depth teaching children adapt to a 'can do' attitude with maths and foster a positive attitude to challenges they face in mathematics.	• Lessons are planned and sequenced so that new knowledge and skills build on what has been taught before. • Teachers follow the White Rose Scheme of work to ensure all objectives and domains within the national curriculum are taught and understood by children.	**Children:** • Children's resilience and confidence when faced with a challenge will be apparent. This will be due to the deep understanding they have with the foundations in maths that provides the building blocks to tackle any type of challenge or question.

• As a school we take a mastery approach to teaching maths, this approach enables all children to master the mathematics curriculum and draws inspiration from a range of sources. • Concepts are taught through manageable small steps which build on skills children have learnt. • Our expectation is that the majority of pupils move through the programmes of study at broadly the same pace. Decisions about when to progress will always be based on the security and depth of the pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly work on further challenge within the learning block rather than be accelerated through new content. • Through teaching mistakes and misconceptions children begin to build resilience to the challenges they face within the maths curriculum. • We want children to be able to recognise that maths is a life skill and that it is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world. • Children have a fluent understanding of the fundamentals of maths which allows them to solve complex problems, develop arguments and identify relationships with maths. Through this, children are able to see that maths is an interconnected subject and children are able to make rich connections between each domain and objective.	• Children receive daily one hour maths lessons that involve clear teaching followed by students completing a range of fluency, and reasoning challenges. • Teachers use a range of concrete, pictorial and abstract resources to aid the children to master the objective in which they are learning. This can be seen in the following ways: **Concrete** – children have the opportunity to use concrete objects and manipulatives to help them understand and explain what they are doing. **Pictorial** – children then build on this concrete approach by using pictorial representations, which can then be used to reason and solve problems. **Abstract** – With the foundations firmly laid, children can move to an abstract approach using numbers and key concepts with confidence. • The main aim of all lessons is to develop children's knowledge, understanding and skills, applying these to a variety of contexts. • As well as White Rose, teachers use the TCT Maths Framework to help understand misconceptions that can arise through objectives; the document also provides a range of questions that can help support children's understanding. • Teachers have access to progression maps within maths to allow them to see the journey in which the children go on throughout primary school in each domain.	• Through questions within lessons, children will show the ability to reason and confidently explain what they are doing. • Children will begin to ask their own questions as their inquisitive minds within maths begin to form. • Children will use previous learning to help them try and explore new objectives and will form links with each domain. • Children will leave Quest Primary with an enjoyment of maths and a sense of curiosity for the subject to help them continue to progress in later years. **Children's Work:** • Through children's books evidence of progression, build-up of skills, reasoning and use of vocabulary is seen. **Teachers:** • After termly assessments, progress data will show improvement from all children. • Teachers will confidently check for understanding in each lesson and their targeted response and questioning will be evident in the progress children make in maths. • Within each class, discussions will be facilitated to analyse misconceptions within topics and for children to confidently understand how to correct themselves and why certain elements cannot work within maths.

• Children will gain a rich vocabulary of mathematical terms through every lesson and can use this through problem solving and everyday situations.	• Teachers plan which vocabulary will be explored within their lesson and ensure children begin using the correct vocabulary in day-to-day lessons. • Retrieval and practice of knowledge is key. After lunch every day children answer 4 questions that involve using a wide variety of skills and knowledge that children would have been taught in previous weeks. This allows children to retain information and for misconceptions to be seen by the teacher. • Pre-teach and other interventions are in place to help aid the development of key concepts and foundations within maths for those children that may need extra support and guidance.	
National Curriculum Objectives		
We follow the National Curriculum Programmes of Study for Maths at Key Stage 1 and Key Stage 2. These can be found here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/335158/PRIMARY_national_curriculum_-_Mathematics_220714.pdf		
Curriculum Overview for Maths		

QUEST PRIMARY
LEARNING CHANGES LIVES

White Rose Maths Curriculum Map

Number	Geometry	Measurement	Statistics

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	NUR	Getting to know you (Baseline)			*Number rhymes*			*Same/Different*			*Number: 1 more*		
	REC				**Just Like Me!** Match, sort, compare amounts, size, mass & capacity, pattern			**It's Me 1, 2, 3!** Representing and compare 1, 2, 3 / Circles & triangles / Positional language			**Light and Dark** Representing numbers to 5 / One more and less / Shapes with 4 sides / Time		
	Yr 1	Place Value (within 10)				Addition and Subtraction (within 10)					Shape	Place Value (within 20)	
	Yr 2	Place Value (within 100)			Addition and Subtraction (bonds to 20)					Money (£ and p)		Multiplication & Division	Consolidation
	Yr 3	Place Value			Addition and Subtraction					Multiplication and Division			
	Yr 4	Place Value				Addition and Subtraction			Length & Perimeter		Multiplication and Division		
	Yr 5	Place Value			Addition and Subtraction		Statistics		Multiplication and Division			Perimeter and Area	
	Yr 6	Place Value			Addition, Subtraction, Multiplication and Division				Fractions				Position & Direction
Spring	NUR	*Number rhymes 1 - 3*			*Combining to 3*			*Pattern*			Consolidation		
	REC	**Alive in 5!** 0, comparing to 5, composition of 4 and 5, compare mass and capacity			**Growing 6, 7, 8** 6, 7, 8, making pairs, combining 2 groups, length and height, time			**Building 9 and 10** 9 & 10, comparing numbers to 10, bonds to 10, 3D shape, pattern					
	Yr 1	Consolidation	Addition and Subtraction: within 20			Place Value (within 50) Multiples of 2, 5, 10			Length and Height		Weight and Volume		Consolidation
	Yr 2	Multiplication and Division				Statistics		Properties of Shape			Fractions		
	Yr 3	Multiplication and Division			Money		Statistics		Length and Perimeter			Fractions	Consolidation
	Yr 4	Multiplication and Division			Area			Number: Fractions			Decimals		
	Yr 5	Multiplication and Division			Fractions						Decimals and Percentages		
	Yr 6	Decimals			Percentages		Algebra	Converting Units	Perimeter, Area and Volume		Ratio		Statistics
Summer	NUR	*Number rhymes*			*More and less*			*Sharing*			*Pattern / Number rhymes*		
	REC	**To 20 and Beyond** Building numbers and counting patterns beyond 10, spatial reasoning,			**First, then, now** Adding more, taking away, spatial reasoning, compose and decompose			**Find My Pattern** Doubling, sharing and grouping, even and odd, spatial reasoning, visualise and build			**On the Move** Deepening understanding, patterns and relationships, spatial reasoning, mapping		
	Yr 1	Consolidation	Multiplication and Division *Reinforce multiples of 2, 5, 10*			Fractions		Position and Direction	Place Value: within 100		Money	Time	
	Yr 2	Length and Height		Position and Direction		Consolidation and problem solving		Measurement: Time		Mass, Capacity and Temperature			Consolidation
	Yr 3	Fractions			Time			Properties of Shape		Mass and Capacity			
	Yr 4	Decimals		Money		Time	Statistics		Properties of Shape		Position and Direction		
	Yr 5	Consolidation	Decimals			Properties of Shape			Position and Direction		Converting Units		Volume
	Yr 6	Properties of Shape			Consolidation or SATs preparation		Consolidation, investigations and preparations for KS3						

ELP pupils are taught using White Rose Maths targeted to their specific level of need

QUEST PRIMARY

LEARNING CHANGES LIVES