Maths

Long Term Plan

Intent

All children require mathematical understanding to access as full a life as possible. Mathematical development depends on becoming confident and competent in learning and using key skills.

At Castle School we understand how children's mathematical thinking first develops and how it can be nurtured to ensure real understanding and support essential life skills. Mathematics includes counting, sorting, matching, seeking patterns, making connections, recognising relationships and working with numbers, shapes, space and measures. The teaching of maths always starts from a practical basis and when the pupils are ready, taking their learning to a pictorial level and then abstract level.

Implementation

Maths forms an integral part of our everyday curriculum at Castle School. We endeavour to provide opportunities that allow the learners to practise and embed their skills and knowledge in a variety of practical and functional contexts and situations. Such an approach enables the children to apply their skills and knowledge in a relevant and purposeful manner, appropriate to their style of learning.

Maths skills and knowledge at Castle School are taught through the Early Years Foundation Stage Curriculum, National Curriculum, Routes for Learning and appropriate accredited courses.

Impact

Mathematics equips children with a powerful set of tools to understand and change the world. These tools include logical reasoning, problem solving skills and the ability to use abstract thinking. Mathematics is important in everyday life and is a creative discipline. It can involve moments of pleasure and wonder when a child solves a problem for the first time, discovers other solutions to a problem or finds hidden connections. Being taught to access mathematics in context will support daily living and increase pupil's abilities to make choices and decisions. We aim to teach our pupils mathematical skills to help communicate needs and wants and to be able to participate in a greater range of activities within the family home and wider community.

Early Years

Seven key features of effective practice as identified in the DfE Development Matters guidance (July 2021): The best for every child; High-quality care; The Curriculum; Pedagogy; Assessment; Self-regulation and executive function; Partnership with parents.

In planning and guiding what children learn, practitioners will reflect on the 3 characteristics of effective learning: playing & exploring, active learning, creating and thinking critically.

Communication and Language Children have opportunities to; Enjoy songs and rhymes, tuning in and paying attention. Say some of the words in songs and rhymes. Sing songs and say rhymes independently, for example, singing whilst playing. Learn new vocabulary. Use new vocabulary through the day in different contexts Ask questions to find out more and to check they understand what has been said to them. Describe events in some detail.
Personal, social and emotional development Children have opportunities to; Select and use activities and resources, with help when needed. This helps them to achieve a goal they have chosen, or one which is suggested to them. Show resilience and perseverance in the face of challenge.
Understanding the world Children have opportunities to; Talk about what they see, using a wide vocabulary. Identify shapes, numbers, position etc in their environment
Expressive Arts and Design Children have opportunities to; Join in with songs and rhymes, making some sounds. Notice patterns with strong contrasts and be attracted by patterns resembling the human face. Explore shapes and positions and use their imagination to build and construct in different ways and carry out different body movements
Literacy Children have opportunities to; Enjoy songs and rhymes, tuning in and paying attention. Say some of the words in songs and rhymes. Sing songs and say rhymes independently, for example, singing whilst playing.

	Pre Key Stage	Key Stage 1	Lower Key Stage 2	Upper Key Stage 2	Key Stage 3	Key Stage 4		Post 16 (Progression through Pre Entry→E1→E2→E3)		
						Pre Entry AQA UAS	E1→E2→E3 AQA Step Up to Maths	Pre Entry (to work towards Ascentis Pre Entry or Asdan Life Skills Challenge)	Entry Level (to work towards Ascentis Entry Level)	GCSE
Autumn 1	Number	Number – number and place value	Number – number and place value	Number – number and place value	Properties of Number	Properties of Number	Properties of Number	Number Skills	Whole Numbers	Number
					The Four Operations	The Four Operations	The Four Operations		Addition Skills	
Autumn 2		Number - The Four Operations (Addition and Subtraction)	Number - The Four Operations (Addition and Subtraction)	Number - The Four Operations (Addition and Subtraction Multiplication and Division)						Algebra
					Ratio	Ratio	Ratio		Subtraction Skills	
Spring 1	Shape	Number – fractions	Number – fractions	Number – fractions	Money	Money	Money	Addition and Subtraction	Money and Time	Ratio and Proportion
Spring 2		Measurement	Measurement	Measurement	The Calendar and Time	The Calendar and Time	The Calendar and Time		Measures	Probability
Summer 1	Measure	Geometry – properties of shapes	Geometry – properties of shapes	Geometry – properties of shapes	Measure	Measure	Measure	Data and Measure	Shape and Space	Geometry and Measures
					Geometry	Geometry	Geometry			
Summer 2		Geometry – position and direction	Geometry – position and direction	Geometry – position and direction	Statistics	Statistics	Statistics		Data Handling	Statistics