Hallfield Primary School

Growing, Learning, Achieving Together

Year 4 Maths Curriculum Overview

A Structure for Mathematics

The sequence for teaching builds skills over time with a deep understanding of mathematical concepts that can be applied to a range of concepts. Throughout a lesson, teachers should plan to include opportunities to practice, use and apply, problem solve and reason and explain. As per the Curriculum, Teaching and Learning policy, the teaching of mathematics embeds the principles of mastery and quality first teaching. Teachers use the practices of metacognition and self-regulation as well as managing cognitive load when planning and teaching. The following framework offers practical guidance and should be referred to in planning.

Prior knowledge

Teachers should be clear about the children's prior learning before entering the new teaching unit and how they are building on these to move children forward, as well as introducing new skills and concepts. The overview below shows how in each year group concepts are revisited and built on throughout a year.

Vocabulary

At the beginning of each new unit, children will be introduced to key vocabulary relevant to the unit. Throughout the unit these words will be learned and revisited. The vocabulary progresses throughout the year groups and is revisited within similar units from Year 1-6.

Discover

Within a lesson, a 'Discover Challenge' is introduced to the students linked to the main learning of the lesson. Here the children explore new maths problems and have a chance to tackle a challenge applying the maths knowledge they already know. The teacher encourages any strategies and children should not be afraid to make mistakes as a culture of learning from mistakes is embedded into lessons.

Share

Following on from the Discover, the children and teacher have a chance to share their strategies for how they approached the Discover questions. Often there are multiple solutions- this encourages different ideas, thinking and approaches within the class.

Think together

Next in the 'Think together' section the children and teacher have a go at some similar problems together. The children use what they have learnt to approach new but similar challenges. The main teaching input takes place in this section and the children have a chance to practise methods and strategies using models before doing their independent work.

Independent task

Having received the teaching input, the children progress onto their independent learning. The learning in books is designed to develop fluency of their knowledge and skills. The tasks set follow a pattern of practice to use and apply which aim to develop fluency of a skill involving a range of representations. Having practiced the skill, the following challenges aim to develop problem solving and reasoning skills and develop a deeper understanding of key ideas and concepts.

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End of unit check

Having covered a unit in a block of lessons, the children complete an 'End of Unit' check, which involves a set of questions covering all the knowledge, skills and concepts that have been taught. This is useful for teachers to address any misconceptions and gaps in learning that can be planned for in future lessons.

Term	Mathematical strand	Key coverage
Autumn	Number- place value	Place value – 4-digit numbers Numbers to 1,000 Rounding to the nearest 100 Counting in 1,000s Representing 4-digit numbers 1,000s, 100s, 10s and 1s Roman numerals to 100 Finding 1,000 more or less Comparing 4-digit numbers Ordering numbers to 10,000 Counting in 25s Negative numbers
	Number – addition and subtraction	Adding and subtracting 1s, 10s, 100s, 1,000s Adding two 4-digit numbers Subtracting two 4-digit numbers Equivalent difference Estimating answers to additions and subtractions
	Measurement - length	Kilometres Perimeter of a rectangle Perimeter of rectilinear shapes
	Number – multiplication and division	Multiplying by multiples of 10 and 100 Dividing by multiples of 10 and 100 Multiplying by 0 and 1 Dividing by 1 Multiplying and dividing by 6 Multiplying and dividing by 9 Multiplying and dividing by 7 6,7,9,11 and 12 times-tables
Spring	Number – multiplication and division	Problem solving – addition and multiplication Using written methods to multiply Multiplying a 2-digit number by a 1-digit number Multiplying more than two numbers Dividing a 2-digit number by a 1-digit number Division with remainders

		Dividing a 2-digit number by a 1-digit number Dividing a 3-digit number by a 1-digit number
	Measurement- area	What is area? Counting squares Making shapes Comparing area
	Number- fractions and decimals	Tenths and hundredths Equivalent fractions Simplifying fractions Fractions greater than 1 Adding fractions Subtracting fractions Problem solving – adding and subtracting fractions Calculating fractions of a quantity Tenths Dividing by 10 Hundredths Dividing by 100
Summer	Number- fractions and decimals	Making a whole Writing decimals Comparing decimals Ordering decimals Rounding decimals Halves and quarters Problem solving – decimals
	Measurement - money	Pounds and pence Pounds, tenths and hundredths Ordering amounts of money Rounding money Using rounding to estimate money Problem solving – money
	Measurement- time	Units of time Converting times
	Statistics	Charts and tables Line graphs
	Geometry- properties of shaoe	Identifying angles Comparing and ordering angles Identifying regular and irregular shapes Classifying triangles Classifying and comparing quadrilaterals

		Deducing facts about shapes Lines of symmetry inside a shape Completing a symmetric figure
	Geometry – position and direction	Describing position Drawing on a grid Reasoning on a grid Moving on a grid Describing a movement on a grid