



Maths



at South Kirkby Academy

Our aim at South Kirkby Academy is to deliver a coherent, engaging maths curriculum which is vocabulary and representation rich, supporting children's mastery in all areas of mathematics using the curriculum prioritisation framework and ready-to-progress criteria. We work with the underpinning belief that all children should have a deep understanding of the mathematics they are learning.

Children across Key Stage 2 are taught daily maths sessions lasting 1 hour and 15 minutes in total.

Our carefully designed and implemented maths curriculum consists of three main strands:

Daily Review where children revisit concepts to avoid the natural process of forgetting. This method of daily retrieval practice supports building the children's long-term memory and level of fluency in recall.

Core Maths where children cover the 'core' maths mastery curriculum. Teachers follow the NCETM curriculum prioritisation framework to ensure depth of knowledge and logical sequencing of lessons.

Fluency where children recall and embed multiplication facts daily.

Challenge in these areas is delivered through precise assessment for learning, where teachers make decisions about when to progress children based on how secure their knowledge of the mathematical concept is. Children who understand a mathematical concept are challenged by 'going deeper', working through rich and sophisticated mathematical problems rather than being accelerated through new content.

Support is provided through the use of concrete manipulatives, high quality pictorial representations, quality teaching, appropriate scaffolding and a gradual release of responsibility, where children are guided until they are able to succeed in a mathematical concept independently. When appropriate, children receive targeted pre-teaching, post-teaching and intervention as strategies to ensure that they reach their full potential.

Where children are working significantly below their year group curriculum, a personalised provision for mathematics is implemented, ensuring that work is accessible and achievable, and that they find enjoyment and success in every maths lesson.

By the time they leave South Kirkby Academy in Year 6, we expect the vast majority of our children to:

- *Be fluent in written methods for all four operations, including long multiplication and division, and in working with fractions, decimals and percentages.*
- *Have deep conceptual understanding and the ability to recall and apply mathematical knowledge rapidly and accurately.*
- *Reason mathematically by following a line of enquiry, using their knowledge of relationships and generalisations, and justify their reasoning using mathematical language.*
- *Solve problems by applying their mathematics to a variety of problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.*



The Journey of Maths at



KS3



Assessment Point

Y6 Spring

Multiplication & Division
Area, perimeter, position
and direction
Fractions & Percentages

Y6 Summer

Statistics
KS2 SATS
Ratio & Proportion
Calculation Structures (2)
Problem solving (2
unknowns)
Order of operations
Mean average

Y6 Autumn

Calculation Structures (1)
Multiples of 1000
Numbers up to 10,000,000
Draw, compose &
decompose shapes

Y5 Summer

Fractions
Converting units
Angles and
transformations

Y5 Spring

Area and scaling
Decimal fractions
Factors, multiples, primes

Y5 Autumn

Decimal fractions
Money
Negative numbers
Short multiplication/division

Y5

Y4 Summer

Fractions review
Fractions greater than 1
Symmetry (2D)
Time
Division with remainders

Y4 Spring

7 times tables & patterns
Multiplicative relationships
Coordinates

Y4 Autumn

Review of column strategies
Numbers to 10,000
Perimeter
3, 6 and 9 times tables

Y3 Spring

Right angles
Additive relationships
Securing mental calculation
Column addition
2, 4, 8 times tables
Column subtraction

Y4 Autumn

Y4

Y3 Summer

Unit fractions
Non-unit fractions
Parallel & perpendicular
sides in polygons
Time

Y3 Autumn

Adding and Subtracting
across 10
Numbers to 1,000

Y3

KS1