SJSB Maths Key Skills Progression

YEAR 6

Solve problems across these key curriculum contexts

Calculate the area of parallelograms and triangles
Calculate and compare volume of cubes and cuboids

Finding missing angles in triangles, quadrilaterals and regular polygons
Recognise vertically opposite angles and find missing angles

Convert units of measure between smaller and larger units
Convert between miles and kilometres

Use simple formulae

Use common factors to simplify fractions
Compare and order fractions of any size

Multiply a number with up to two decimal places by whole numbers
Use written division with answers of up to two decimal places

Use order of operations to carry out calculations

Construct and interpret pie charts
Calculate and interpret the mean as an average

Divide numbers using long division, interpreting the remainders as appropriate

Divide proper fractions by whole numbers
Calculate decimal fraction equivalents for simple fractions

Use negative numbers to calculate intervals across zero

Recognise vertically opposite angles and find missing angles
Describe positions on the full co-ordinate grid
Translate shapes on a co-ordinate grid and reflect in the axes

Add and subtract fractions with different denominators and mixed numbers
Multiply simple pairs of proper fractions

YEAR 5

Identify 3-d shapes from 2-d representations
Know angles are measured in degrees and compare acute, obtuse and reflex angles

Describe translations using a given unit to the left/right and up/down
Interpret and present discrete and continuous data on appropriate graphs

Find the area of rectilinear shapes by counting squares

Convert between different units of metric measurement, including money

Interpret negative numbers in context

Recognise and use square and cube numbers, and know the notation

Read Roman numerals to 1000, including years

Use the properties of rectangles to find missing lengths and angles
Distinguish between regular and irregular polygons

Describe positions on a 2-D grid using co-ordinates

Identify multiples and factors, including finding factor pairs and common factors

Use vocabulary: prime numbers, prime factors and composite numbers

Compare numbers up to two decimal places

Divide numbers using standard written short division

Multiply and divide numbers by 10, 100 or 1000, including decimals

Complete a simple symmetric figure with respect to a specific line of symmetry.

Recognise and use hundredths
Round decimals with one decimal place to the nearest whole number

Convert between mixed numbers and improper fractions
Compare and order fractions whose denominators are multiples of the same number

Use long multiplication for multiplying numbers of up to 4 digits by one or two digits

Use short multiplication method
Divide one- or two-digit numbers by 10 and 100, using tenths and hundredths

Compare and classify shapes, including quadrilaterals and triangles

Identify, name and write equivalent fractions including tenths and hundredths
Add and subtract fractions with denominators that are multiples of the same number

Multiply proper fractions and mixed numbers by whole numbers with support

Recognise and write decimal equivalents to ¼, ½ and ¾

Calculate the area of rectangles, and estimate the area of irregular shapes

Read and write decimal numbers as fractions
Round decimals with 2 decimals places to whole number or to one decimal place

Solve problems converting units of time

Draw and measure angles to the nearest degree
Identify angles at a point, in a turn and on a straight line

Describe and represent the result of a reflection or translation
Complete, read and interpret information in tables, including timetables

Recognise % symbol and explain as a fraction with denominator 100 (parts out of 100)

Measure and calculate the perimeter of composite rectilinear shapes

Understand and use common approximate conversions between metric and imperial

Count backwards through zero, including negative numbers

YEAR 4

Estimate answers to calculations and use the inverse to check answers

Add and subtract numbers mentally, including round numbers to HTU
Add and subtract using standard column method

Count in multiples of 6, 7, 9, 25 and 1000

Understand that tenths are objectives or quantities divided into ten equal parts
Compare and order simple fractions

3,4 and 8 times tables

Compare and order numbers up to 1000

Recognise equivalent fractions

Add and subtract fractions with common denominators (less than one)

Present data including tables and bar charts

Measure, compare and calculate measures using standard units including perimeter of 2D

Daily counting and multiplication practise

Tell and write the time from an analogue clock, including using Roman numerals

Identify horizontal, vertical, parallel and perpendicular lines
Identify whether angles are greater or less than a right angle

Know tables up to 12 × 12
Use factor pairs and commutativity in mental calculations

Recognise place value in four-digit numbers

YEAR 3

Count in multiples of 4, 8, 50 and 100

Combine amounts of money to make a value, including using £ and p symbols

Recognise, find, name and write 1/3, 1/4, 1/2 and 3/4 of size, shape or quantity

Read and write mathematical symbols: +, - and =

Know 2×, 5× and 10× tables, including recognising odd & even numbers

Calculate mathematical statements using x and ÷ symbols

One more and One less

Add and subtract 1-digit and 2-digit numbers to 20, including zero

Symmetry and sides – 2D
Edges, faces and vertices – 3D

Understand and use the inverse relationship between addition and subtraction

Begin to read maths problems more independently

Add and subtract mentally and with objects one- and two-digit numbers

Take part in whole class reading opportunities

Develop skills for life and learning through outdoor learning

Recall and use number addition/subtraction facts to 20, and derive related facts

Interpret and construct simple tables, tally charts and pictograms

Recognise and use language relating to dates

Compare and order numbers up to 100 using <, > and =

Recognise place value in two-digit numbers

Recognise and name common 3-D shapes

Tell the time to the nearest 5 minutes, including drawing clocks

Count in steps of 2s, 3s and 5s, and steps of 10

YEAR 2

Count, read and write numbers to 100 in numerals

Count to and across 100 from a given number

Number bonds and subtraction facts within 20

Recognise, find and name a half and a quarter

Measure and begin to record length, mass, volume and time

Recognise and know the value of all coins and notes

Use language to sequence events in chronological order

Tell the time to the half-hour, including drawing clocks

Recognise and name common 2-D shapes

YEAR 1

They explore characteristics of everyday objects and shapes and use mathematical language to describe them.

Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems.

They solve problems, including doubling, halving and sharing.

Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer.

Say which number is one more or one less than a given number.

Children count reliably with numbers from 1 to 20

EYFS

They recognise, create and describe patterns.

Outdoor provision with mathematical focus

Build a solid foundation in education based on areas of provision

Dream Believe