



Fulbrook Middle School – KS2 Learning Journey

KS3

Mathematics in History and Art

Problem Solving in Measurement

Mathematical Problem Solving

Multiplication and Division
Rate, scaling and mental strategies.
Long and short multiplication & division.
Areas of similar shapes and scale factors.

Use long multiplication to multiply up to 4-digit numbers by numbers between 10 and 35;
Use short division to divide 4-digit numbers by single-digit numbers, and 11 and 12
Use long division to divide up to 4-digit no by 2-digit numbers.

Solve problems involving similar shapes where the scale factor is known;
Solve problems involving similar shapes where the scale factor can be found.
Describe ratios between unequal quantities, .
Solve ratio problems, e.g. in context of recipes
Solve problems involving unequal quantities.
Find percentages of amount.

Measures and Data
SI & Imperial units; conversion.
Areas, volumes and perimeters Timetables and intervals.
Time graphs, pie charts and averages.

REVISION & SATS

areas and perimeters of rectilinear shape (triangle, rectangle, parallelogram).
Recognise that shapes with the same areas can have different perimeters and vice versa.
Find volumes of cubes and cuboids.

Multiply and divide fractions.
Use long division to divide 3-digit numbers by 2-digit numbers; divide any remainders to give fractions, or decimals

Decimals and Fractions
Rounding, adding, multiplying and dividing decimals.
Equivalent fractions/decimals: comparing.
Finding fractions of amounts.
Ratio /proportion.

Place value in 7-digit numbers .
Round to the nearest 10,000, 100,000 or 1,000,000
Use negative numbers in context of temperature;.
Calculate intervals across zero

Place Value
Addition/Subtraction
Integers (including negative numbers).
Rounding, estimation, mental strategies, brackets.

Understand and use simple formulae.
Express missing number problems algebraically.
Find pairs of numbers that satisfy an equation with two unknowns.
Generate and describe linear number sequences.

Algebra

Recognise fraction and decimal equivalents $1/2, 1/4s, 1/5s, 1/8s$.
Use short division to by 11 and 12.
Use short division to divide 4-digit numbers by 1-digit numbers and by 11 and 12, with fraction remainders.

Multiplication and Division
Factors, multiples, prime numbers.
Short multiplication and short division.
Revision all methods.

Addition and subtraction of numbers with 3 decimal places.
Multiply and divide by 10, 100 and 1000 (answers from 3dp to 7-digit whole numbers).
Round decimals to the nearest whole, tenth and hundredth.
Use written addition to add nos with 3 decimals in context of measures (litres, km, kg); Use rounding to estimate totals.

Place Value with 6 digits,
Addition/Subtraction
Whole numbers & rounding.
Column methods.

place value in numbers with three decimal places
Multiply and divide by 10, 100 and 1000
Round to the nearest 0.01, 0.1 or 1;
Add 2 or 3 numbers with 2 decimal places in a measures contexts

Decimals and Fractions
Written addition, including money.

Shape
2-D shapes, circles, angles.
3-D shapes, nets.
Co-ordinates.

Draw 2D shapes to given dimensions.
Know the totals of angles inside triangles and quadrilaterals.
Calculate missing angles
Find that opposite angles are equal; find angles in polygons

Compare pairs of numbers 6-digit numbers using < and >
Use column addition to add pairs of 5-digit numbers with 6-digit answers

YEAR 6

Calculate time intervals in hours and minutes.
Plot line graphs and interpret them.

Measures & Data
Time, including intervals.
Line graphs.

Addition and Subtraction
Column methods.
Revise using place value.

Multiplication and Division
Long multiplication.
Short division with remainders.

multiply & divide by 10, 100, 1000 across the decimal point.
Round decimals to the nearest tenth or whole number.
Use column addition with decimals.

Decimals, Percentages and Fractions
Decimals: $x \div 10, 100$, rounding.
Adding, subtracting & multiplying fractions.
Simple percentages.

Find common multiples and factors.
Identify prime numbers.
Simplify fractions using multiples and factors
Compare and order fractions with unrelated denominators
Find unit and non-unit fractions of amounts

Number bonds to 1 for 2 digit decimals.
Doubling and halving.
Convert between metric units.
Convert between metric & imperial units.
Read timetables.
Calculate time intervals including 24hr clock.

Decimals and Fractions
Decimals, including calculation strategies with 2-place decimals.
Fractions of amounts

Multiplication and Division
Short multiplication.
Short division.

Plot points and draw polygons in two quadrants.
Work out new co-ordinates after a translation.
Reflect a shape and write the new co-ordinates.
Draw line graphs of times tables.

Shape
2-D, 3-D shapes, polygons, angles.
Co-ordinates

Place value for 6-digit numbers.
Negative numbers.
Roman numerals.

Convert $1/2, 1/4, 3/4, &$ multiples of $1/10$ to percentages

Addition and Subtraction
Mental calculation strategies.
Written methods.

Divisibility tests.
Testing for Primes.
Short division by a single digit with remainder.

Rounding 5 digit numbers to the nearest 10, 100, 1000, 10000.
Multiply 3 digits by one digit using short multiplication.

Multiplication and Division
Mental calculation strategies.
Short multiplication.
Division vertical layout.

Measures
International SI units, imperial units.
Perimeter, area, volume.

Subtract decimals with up to 2 digits.
Subtract 5 digit numbers with exchange.

Addition and Subtraction
Written addition, incl. money.
Subtraction incl. finding change

5 digit numbers.
Addition of 5 digit numbers with exchange.
Number bonds to 100.
Ordering 5 digit numbers.
Using negative numbers with temperature.

YEAR 5



welcome