

St Joan of Arc Catholic Primary School

Maths Curriculum

YEAR 6



AT A GLANCE	EXAMPLE
Use and apply mathematics	<ul style="list-style-type: none">• solve problems involving addition, subtraction, multiplication and division• solve problems which require answers to be rounded to specified degrees of accuracy• solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate• solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why• use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy
Counting & Number Relationships	<ul style="list-style-type: none">• use negative numbers in context, and calculate intervals across zero• round any whole number to a required degree of accuracy• solve problems which require answers to be rounded to specified degrees of accuracy• solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts• use common factors to simplify fractions; use common multiples to express fractions in the same denomination• solve problems involving the calculation of percentages (e.g. of measures) such as 15% of 360 and the use of percentages for comparison• compare and order fractions, including fractions >1
Number facts	<ul style="list-style-type: none">• multiply 1-digit numbers with up to 2 decimal places by whole numbers• identify common factors, common multiples and prime numbers
Calculations	<ul style="list-style-type: none">• perform mental calculations, including with mixed operations and large numbers• multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication• use written division methods in cases where the answer has up to two decimal places• divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context• use their knowledge of the order of operations to carry out calculations involving the four operations• add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions• multiply simple pairs of proper fractions, writing the answer in its simplest form• divide proper fractions by whole numbers (e.g. $1/3 \div 2 = 1/6$)• associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (eg. $3/8$)



Position and Transformation	<ul style="list-style-type: none"> • recognise, describe and build simple 3-D shapes, including making nets • draw 2-D shapes using given dimensions and angles • draw and translate simple shapes on the coordinate plane, and reflect them in the axes • describe positions on the full coordinate grid (all four quadrants) • recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles • solve problems involving similar shapes where the scale factor is known or can be found • compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons • illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius
Measure	<ul style="list-style-type: none"> • use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places • convert between miles and kilometres • use, read, write and convert between standard units, [...], using decimal notation to up to three decimal places • recognise that shapes with the same areas can have different perimeters and vice versa • recognise when to use formulae for area and volume of shapes • calculate the area of parallelograms and triangles • calculate, estimate and compare volume of cubes and cuboids using standard units
Data Handling	<ul style="list-style-type: none"> • interpret and construct pie charts and line graphs and use these to solve problems • calculate and interpret the mean as an average
Algebra	<ul style="list-style-type: none"> • express missing number problems algebraically • use simple formulae expressed in words • generate and describe linear number sequences • find pairs of numbers that satisfy number sentences involving 2 unknowns • enumerate all possibilities of combinations of two variables.