

St Joan of Arc Catholic Primary School

Maths Curriculum

YEAR 5



AT A GLANCE	EXAMPLE
Use and apply mathematics	<ul style="list-style-type: none">• solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why• solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign• solve problems involving number up to three decimal places• solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those with a denominator of a multiple of 10 or 25
Counting & Number Relationships	<ul style="list-style-type: none">• count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000• recognise and use thousandths and relate them to tenths, hundredths and decimal equivalent• read, write, order and compare numbers with up to three decimal places scaling by simple fractions and problems involving simple rates• recognise mixed numbers and improper fractions and convert from one form to the other• read and write decimal numbers as fractions (e.g. $0.71 = \frac{71}{100}$) recognise the per cent symbol (%) and understand that per cent relates to “number of parts per hundred• write percentages as a fraction with denominator hundred, and as a decimal fraction• compare and order fractions whose denominators are all multiples of the same number• know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers• establish whether a number up to 100 is prime and recall prime numbers up to 19
Number facts	<ul style="list-style-type: none">• multiply and divide numbers mentally drawing upon known facts• identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers• use rounding to check answers to calculations and determine in the context of a problem, levels of accuracy• round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000• round decimals with two decimal places to the nearest whole number and to one decimal place• recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)



Calculations	<ul style="list-style-type: none"> • multiply and divide numbers mentally drawing upon known facts • multiply and divide whole numbers and those involving decimals by 10, 100 and 1000” • multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers • divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context • add and subtract fractions with the same denominator and multiples of the same number • multiply proper fractions and mixed numbers by whole numbers” • solve problems involving multiplication and division where larger numbers are used by decomposing them into their factors
Position and Transformation	<ul style="list-style-type: none"> • identify 3-D shapes, including cubes and other cuboids, from 2-D representations • identify, describe and represent the position of a shape following a reflection or translation • know angles are measured in degrees • estimate and compare acute, obtuse and reflex angles • draw given angles, and measure them in degrees (o) • identify angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180o)
Measure	<ul style="list-style-type: none"> • convert between different units of metric measure • estimate volume and capacity • measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres • calculate and compare the area of squares and rectangles including using standard units, square centimetres (cm²) and square metres (m²) • estimate the area of irregular shapes • use the properties of rectangles to deduce related facts and find missing lengths and angles • distinguish between regular and irregular polygons based on reasoning about equal sides and angles • complete, read and interpret information in tables using 24-hour clock notation;, including timetables • solve problems involving converting between units of time
Data Handling	<ul style="list-style-type: none"> • solve comparison, sum and difference problems using information presented in a line graph