



Key Performance Indicators in Mathematics at Fishbourne Church of England Primary School

These statements are used when making teacher assessments to build a picture of whether an individual child is working at the expected standard by the end of the academic year. They are used as an indicator alongside standardised assessments.

Year 1 KPIs Maths

Count to and across 100, forwards and backwards, from any number including 0
Count, read and write numbers to 100 in numerals and use counting strategies to solve number problems
Count in multiples of 2s, 5s and 10s
Given a number identify one more, one less
Represent and use number bonds and related subtraction facts within 20
Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = X - 9$
Can recall doubles and halves to 20
Recognise, find and name a half as one of two equal parts of an object, shape or quantity. Use the expression 'fraction of'
Compare, describe and solve practical problems for: • Lengths and heights • Mass and weight • Capacity and volume Time
Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times
Recognise and name common 2D and 3D shapes, including: • 2D shapes (rectangles, (including squares) circles and triangles) • 3D shapes (cuboid (including cubes), pyramids and spheres)

Year 2

In Year 2, children are assessed against the Assessment Framework provided by the DfE which can be seen here:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/740343/2018-19_teacher_assessment_frameworks_at_the_end_of_key_stage_1_WEBHO.pdf

Year 3 KPIs Maths

Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number
Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
Solve number problems and practical problems involving these ideas.
Add and subtract numbers mentally and using formal written methods including: • a three-digit number and ones • a three-digit number and tens • a three-digit number and hundreds
Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental methods
Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10
Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators
Recognise and show, using diagrams, equivalent fractions with small denominators
Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
Tell and write the time from an analogue clock, and 12-hour and 24-hour clocks
Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle
Interpret and present data using bar charts, pictograms and tables

Year 4 KPIs Maths

The pupil can recognise the place value of each digit in Th H T U numbers, within a range of contexts, including rounding, ordering, comparing
The pupil can round decimals with one decimal place to the nearest whole number
The pupil can add/subtract numbers up to 4 digits using formal written methods, within the context of a two-step problem, deciding which operation to use and why

The pupil can estimate and use inverse operations to check answers to a calculation
The pupil can use place value knowledge and known and derived facts to multiply and divide mentally (Factor pairs)
The pupil can use mathematical reasoning to solve problems involving multiplying and adding (e.g. area and perimeter) and including the distributive law ($HTU \times U$, $TU \times U$)
The pupil can solve problems using an understanding of the connections between hundredths, tenths, place value and decimal measures, e.g. money and decimals to 2 decimal places
Use factors and multiples to recognise equivalent fractions and simplify where appropriate
The pupil can solve problems by making connections between fractions of a length, of a shape and as a representation of one whole or a set of quantities
The pupil can measure and calculate using different metric units of measure in a range of contexts, e.g. time, distance, money
The pupil can use mathematical reasoning to compare and classify geometric shapes (incl. quadrilateral triangles), identify and compare acute and obtuse angles and complete simple symmetric figures in different orientations
The pupil can plot specified points and draw sides to complete a given polygon and describe movements between positions as translations
The pupil can interpret and present discrete and continuous data using appropriate graphical methods including bar charts and time graphs

Year 5 KPIs Maths

Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit
Interpret negative numbers in context, count forwards and backwards with positive and negative numbers including through zero
Add and Subtract numbers mentally with increasingly large numbers
Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
Solve problems involving multiplication and division, including scaling by simple fractions (eg $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{10}$) and problems involving simple rates (eg mph or currency)
Identify multiples and factors, including finding all factor pairs of a number, and common factor pairs of 2 numbers
Solve problems using multiplication and division including using their knowledge of factors and multiples, squares and cubes
Compare and order fractions whose denominators are all multiples of the same number
Read, write, order and compare numbers with up to 3 decimal places

Read and write decimal numbers as fractions (eg $0.71 = 71/100$)
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
Calculate and compare the area of squares and rectangles including using standard units, square centimetres and square metres
Measure and calculate the area of composite and rectilinear shapes in centimetres and metres
Convert between different units of metric measure (eg km and m; cm and m; cm and mm; g and kg; l and ml)
Draw given angles, and measure them in degrees
Distinguish between regular and irregular polygons based on reasoning about equal sides and angles
Complete, read and interpret information in tables, including timetables

Year 6:

In Year 6, children are assessed against the Assessment Framework provided by the DfE which can be seen here:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/740345/2018-19_teacher_assessment_frameworks_at_the_end_of_key_stage_2 WEBHO.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/740345/2018-19_teacher_assessment_frameworks_at_the_end_of_key_stage_2_WEBHO.pdf)