## Year I Maths - Key Objectives

Count to and across 10	0 from any number
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Count, read and write numbers to 100 in numerals

Read and write mathematical symbols: +, - and =

Identify "one more" and "one less"

Use number bonds and subtraction facts within 20

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

Recognise, find and name a half

Recognise, find and name 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

Recognise and use language relating to dates

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

Recognise and name common 2-D shapes

Recognise and name common 3-D shapes

## Year 2 Maths - Key Objectives

Count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backward

Recognise the place value of each digit in a two-digit number

Compare and order numbers from 0 up to 100; use <, > and = signs

Use place value and number facts to solve problems; recall and use addition and subtraction facts to 20 fluently, and derive and use related facts to 100 Add and subtract numbers using concrete objects, pictorial representations, and mentally

Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems

Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers

Calculate mathematical statements for multiplication and division within the multiplication tables

Recognise, find, and write fractions 1/3,  $\frac{1}{4}$ , 2/4 and  $\frac{3}{4}$  of a length, shape, set of objects or quantity

Write simple fractions for example,  $\frac{1}{2}$  of 6 = 3 and recognise the equivalence of  $\frac{2}{4}$  and  $\frac{1}{2}$ 

Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value

Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times

Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line

Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces

Interpret and construct simple pictograms, tally charts, block diagrams and simple tables

# Year 3 Maths - Key Objectives

Count in multiples of 4, 8, 50 and 100

Compare and order numbers up to 1000

Add and subtract numbers mentally, including round numbers to HTU

Add and subtract using standard column method

Estimate answers to calculations and use the inverse to check answers

Know 3×, 4× and 8× tables

Count up and down in tenths

Understand that tenths are objectives or quantities divided into ten equal parts

Compare and order simple fractions

Recognise and show equivalent fractions

Find and write fractions of a set of objects

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

Measure, compare and calculate measures using standard units

Measure the perimeter of simple 2-D shapes

Add and subtract money, including giving change

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

Estimate and read time to the nearest minute

#### **Year 4 Maths - Key Objectives**

Count backwards through zero, including negative numbers

Recognise place value in four-digit numbers

Round any number to the nearest 10, 100 or 1000

Know tables up to 12 × 12

Use place value and number facts to carry out mental calculations

Use factor pairs and commutativity in mental calculations

Use short multiplication method

Recognise and use hundredths

Recognise and write decimal equivalents to  $\frac{1}{4}$ ,  $\frac{1}{2}$  and  $\frac{3}{4}$ 

Divide one- or two-digit numbers by 10 and 100, using tenths and hundredths

Round decimals with one decimal place to the nearest whole number

Compare numbers up to two decimal places

Convert between different units of metric measurement, including money

Find the area of rectilinear shapes by counting squares

Solve problems converting units of time

Compare and classify shapes, including quadrilaterals and triangles

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

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

Describe translations using a given unit to the left/right and up/down

Interpret and present discrete and continuous data on appropriate graphs

### Year 5 Maths - Key Objectives

Interpret negative numbers in context

Read Roman numerals to 1000, including years

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

Use rounding to check answers and determine accuracy

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

Use vocabulary: prime numbers, prime factors and composite numbers

Know prime numbers up to 19

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

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

Divide numbers using standard written short division

Convert between mixed numbers and improper fractions

Compare and order fractions whose denominators are multiples of the same number

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

Read and write decimal numbers as fractions

Round decimals with 2 decimals places to whole number or to one decimal place

Read, write, order and compare numbers with up to 3 decimal places

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

Understand and use common approximate conversions between metric and imperial

Measure and calculate the perimeter of composite rectilinear shapes

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

Use the properties of rectangles to find missing lengths and angles

Distinguish between regular and irregular polygons

Understand and use common approximate conversions between metric and imperial

Measure and calculate the perimeter of composite rectilinear shapes

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

Use the properties of rectangles to find missing lengths and angles

Distinguish between regular and irregular polygons

## Year 6 Maths - Key Objectives

Use negative numbers in context, and calculate intervals across zero

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 as appropriate

Use their knowledge of the order of operations to carry out calculations involving the four operations

Use common factors to simplify fractions

Compare and order fractions, including fractions > I

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

Associate a fraction with division and calculate decimal fraction equivalents (for example, 0.375) for a simple fraction

Multiply one-digit number with up to two decimal places by whole numbers

Use written division methods in cases there the answer has up to two decimal places

Solve problems involving the calculation of percentages (for example, of measures, and such as 15% of 360) and the use of percentages for comparison

Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts

Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts

Solve problems involving similar shapes where the scale factor is known or can be found

Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples

Use simple formulae

Generate and describe linear number sequences

Express missing number problems algebraically

Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit to a larger unit and vice versa, using decimal notation to up to 3 decimal places

Convert between miles and kilometres

Calculate the area of parallelograms and triangles

Calculate, estimate and compare volume of cubes and cuboids using standard units

Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius

Find unknown angles in any triangles, quadrilaterals, and regular polygons

Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles



Describe positions on the full coordinate grid (all four quadrants)

Draw and translate simple shapes on the coordinate plane, and reflect them in the axes

Interpret and construct pie charts and line graphs

Calculate and interpret the mean as an average