

# Whitehouse Primary School- Core Key Skills in Mathematics for Year 4

## Place Value

- Count in multiples of 6, 7, 9, 25 and 1000
- Find 1000 more or less than a given number
- Count backwards through zero to include negative numbers
- Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)
- Order and compare numbers beyond 1000
- Identify, represent and estimate numbers using different representations
- Round any number to the nearest 10, 100 or 1000
- Solve number and practical problems that involve all of the above and with increasingly large positive numbers
- Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value

## Multiplication and Division

- recall multiplication and division facts for multiplication tables up to  $12 \times 12$
- Use place value, known and derived facts to multiply and divide mentally, including:
- Multiplying by 0 and 1; dividing by 1; multiplying together three numbers
- Recognise and use factor pairs and commutatively in mental calculations
- Multiply two-digit and three-digit numbers by a one-digit number using formal written layout
- Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects

## Addition and Subtraction

- add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
- Estimate and use inverse operations to check answers to a calculation
- Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why

<p><b><u>Measure</u></b></p> <ul style="list-style-type: none"> <li>• Convert between different units of measure [for example, kilometre to metre; hour to minute]</li> <li>• Estimate, compare and calculate different measures, including money in pounds and pence</li> <li>• Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres</li> <li>• Find the area of rectilinear shapes by counting squares</li> <li>• Read, write and convert time between analogue and digital 12- and 24-hour clocks</li> <li>• Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days</li> </ul> <p><b><u>Statistics</u></b></p> <ul style="list-style-type: none"> <li>• Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs</li> <li>• Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs</li> </ul>	<p><b><u>Geometry – Properties of shape</u></b></p> <ul style="list-style-type: none"> <li>• Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes</li> <li>• Identify acute and obtuse angles and compare and order angles up to two right angles by size</li> <li>• Identify lines of symmetry in 2D shapes presented in different orientations</li> <li>• Complete a simple symmetric figure with respect to a specific line of symmetry</li> </ul> <p><b><u>Geometry – Position and direction</u></b></p> <ul style="list-style-type: none"> <li>• Describe positions on a 2D grid as coordinates in the first quadrant</li> <li>• Describe movements between positions as translations of a given unit to the left/right and up/down</li> <li>• Plot specified points and draw sides to complete a given polygon</li> </ul>	<p><b><u>Fractions, Decimals and %</u></b></p> <ul style="list-style-type: none"> <li>• recognise and show, using diagrams, families of common equivalent fractions</li> <li>• Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.</li> <li>• Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number</li> <li>• Add and subtract fractions with the same denominator</li> <li>• Recognise and write decimal equivalents of any number of tenths or hundredths</li> <li>• Recognise and write decimal equivalents to <math>\frac{1}{4}</math>, <math>\frac{1}{2}</math>, <math>\frac{3}{4}</math></li> <li>• Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths</li> <li>• Round decimals with one decimal place to the nearest whole number</li> <li>• Compare numbers with the same number of decimal places up to two decimal places</li> <li>• Solve simple measure and money problems involving fractions and decimals to two decimal places</li> </ul>						
Emerging	Expected	Exceeding	Expected	Emerging	Exceeding	Expected	Emerging	Exceeding

