



Year 4 term 5 and 6

Oral and Mental calculation

- Read and write numbers to 10,000 including those with one decimal place
- Count on and back in 0.1 s, 1s, 10 s or 100 s from any number up to 10,000.
- Count backwards through zero to include negative numbers.
- Count up and down in tenths.
- Count in fraction steps, e.g. $\frac{1}{5}, \frac{2}{5}, \frac{3}{5} \dots$
- Order a set of random numbers to at least 10,000 including amounts of money and measures and numbers involving decimals
- Round any number to the nearest 10, 100 or 1000
- Recall and use addition and subtraction facts for 100.
- Recall and use addition and subtraction facts for multiples of 100 totalling 1000.
- Derive and use addition and subtraction facts for 1 and 10 (including with decimal numbers to one decimal place).
- Use partitioning to double or halve any number, including decimals to one decimal place.
- Count in multiples of 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 20, 25, 50, 100, 250, 500 and 1000.
- Recall multiplication facts for all times up to 12 x 12 and derive associated division facts Multiply and divide numbers by 10, including those which have answers to one decimal place
- multiply together three numbers
- Recognise and use factor pairs
- Identify and use patterns of similar calculations for addition and subtraction and for multiplication and division statements

Week	Main focus of teaching
1	<p>Number – Place value & Counting</p> <ul style="list-style-type: none"> • End of year expectations- count in multiples of 6, 7, 9, 25 and 1000. • End of year expectations- find 1000 more or less than a given number. • End of year expectations- count backwards through zero to include negative numbers. • End of year expectations- recognise the place value of each digit in a four-digit number (thousands, hundreds, tens and ones). <i>Partition numbers into tens, ones, tenths and hundredths using manipulative to support</i> • End of year expectations- compare and order numbers beyond 1000. • End of year expectations- identify, represent and estimate numbers using different representations. • Step 15 & End of year expectations- round any number to the nearest 10,



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	<p>100 and 1000.</p> <ul style="list-style-type: none"> • Step 15 & End of year expectations- 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. • <i>Identify the value of each digit to at least one decimal place</i> • Round decimals with one decimal place to the nearest whole number. • Order and compare numbers with the same number of decimal places up to two decimal places <i>including on a number line</i> • Steps 13-15 - Solve problems that involve number and place value
3	<p>Addition and subtraction</p> <ul style="list-style-type: none"> • End of Year expectations - Estimate answers • <i>Consider the most appropriate strategy to solve a calculation: calculate mentally, use a jotting or a written method</i> • End of Year expectations - Add numbers with up to 4 digits and decimals with at least one decimal place using a compact written method. • End of Year expectations - subtract numbers with up to 4 digits and decimals with at least one decimal place using a compact written methods of subtraction • End of Year expectations - use inverse to check the answers to calculations • Steps 13-15 - Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
4&5	<p>Fractions & Decimals</p> <ul style="list-style-type: none"> • Step 15 - use factors and multiples to recognise equivalent fractions and simplify where appropriate (e.g., $6/9 = 2/3$). • Step 15 - recognise that hundredths arise when dividing tenths by ten. • Step 15 - make connections between fractions of a length, of a shape and as a representation of one whole or set of quantities. • End of year expectations - recognise and show, using diagrams, families of common equivalent fractions. • End of year expectations - count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. • End of year expectations - add and subtract fractions with the same denominator. • End of year expectations - recognise and write decimal equivalents of



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	<p>any number of tenths or hundredths.</p> <ul style="list-style-type: none">• End of year expectations - recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$.• End of year expectations - 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.• End of year expectations - round decimals with one decimal place to the nearest whole number.• End of year expectations - compare numbers with the same number of decimal places up to two decimal places.• Steps 13-15 - Solve problems involving using fractions to calculate quantities, including non-unit fractions where the answer is a whole number• Steps 13-15 - Solve problems involving using fractions to divide quantities including non-unit fractions where the answer is a whole number.
6	<p>Measurement</p> <ul style="list-style-type: none">• End of year expectations - - estimate, compare and calculate different measures, including money in pounds and pence.• Step 15 - relate this to arrays and multiplication.• End of year expectations - convert between different units of measure (e.g. kilometre to metre; hour to minute).• End of year expectations - measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.• End of year expectations - find the area of rectilinear shapes by counting squares.• <i>Read and interpret the scale on a range of measuring instruments –link to number line</i>• <i>Consider the most appropriate strategy to solve a calculation calculate mentally, use a jotting or a, written method</i>
7	<p>Measures –Money</p> <ul style="list-style-type: none">• Step 15 - use my understanding of decimal notation and place value to record metric measures, including money.• Step 15 & End of Year expectation - estimate, compare and calculate money in pounds and pence.• Estimate answers



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	<ul style="list-style-type: none"> • <i>Consider the most appropriate strategy to solve a calculation calculate mentally, use a jotting or a written method</i> • Add two or more amounts of money with up to 5 digits (including decimals with two decimal places) using a written method of addition where appropriate. • Subtract amounts of money with up to 5 digits (including decimals with two decimal places) using a written method of subtraction where appropriate. • Use inverse to check the answers to calculations • <i>Calculate change from multiples of 10 or 100 to £500</i> • Steps 13-15 - Solve problems involving money
8&9	<p>Multiplication and division</p> <ul style="list-style-type: none"> • Estimate answers • Step 15 & End of year expectations - can recall multiplication and division facts for multiplication tables up to 12 x 12. • Step 15 - use my multiplication tables knowledge to calculate mentally with multiples of ten. • Step 15 & End of year expectations - recognise and use factor pairs for numbers to 50 and commutativity in mental calculations. • Step 15 - write statement about the equality of expressions. E.g., $37 \times 9 = 30 \times 9 + 7 \times 9$ $(2 \times 3) \times 4 = 2 \times (3 \times 4)$ • Step 15 - use the formal written method of short multiplication (3 digit by 1 digit and short division (3 digit \div 1 digit) with exact answers. • End of year expectations - multiply two-digit and three digit numbers by a one-digit number using formal written layout. • End of year expectations - use place value, known and derived facts to multiply and divide mentally, including: by 0 and 1; dividing by 1; multiplying together three numbers. • Use inverse to check the answers to calculations • Steps 13-15 - Solve problems involving multiplying and adding, scaling problems and harder correspondence problems such as which n objects are connected to m objects. • Steps 13-15 - Solve problems division (including remainders) and integer scaling problems
10	<p>Geometry – Properties of shape</p> <ul style="list-style-type: none"> • Step 15 & End of year expectations - compare and classify quadrilaterals



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	<p>(for example, parallelogram, trapezium, rhombus) using geometric properties</p> <ul style="list-style-type: none">• Step 15 - compare and order angles up to two right angles by size by using a protractor to the nearest multiple of 10• Step 15 - recognise line symmetry in a variety of diagrams, including where the line of symmetry does not dissect the original shape.• Step 15 & End of year expectations - complete a simple symmetric figure with respect to a specific line of symmetry.• End of year expectations - identify acute and obtuse angles and compare and order angles up to two right angles by size.• End of year expectations - identify lines of symmetry in 2D shapes presented in different orientations.• Draw sides to complete a given polygon on a grid• <i>Continue to identify horizontal and vertical lines and pairs of perpendicular and parallel lines.</i>• Steps 13-15 - Solve problems involving shapes
11	<p>Geometry – Position & Direction</p> <ul style="list-style-type: none">• Step 15 & End of year expectations - describe positions on a 2-D grid as coordinates in the first quadrant.• Step 15 & End of year expectations - describe movements between positions as translations of a given unit to the left/right and up/down.• Step 15 & End of year expectations - plot specified points and draw sides to complete a given polygon.• Step 15 - use co-ordinate plotting ICT tools.• Plot specified points on a grid• Steps 13-15 - Solve problems involving position and/or direction
12	<p>Statistics</p> <ul style="list-style-type: none">• Step 15 & End of year expectations - interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.• Step 15 - use a range of scales in my representations.• Step 15 - beginning to relate the graphical representation of data to recording change over time.• Step 15 & End of year expectations - solve comparison, sum and difference problems using information in bar charts, pictograms, tables and other graphs.



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Measurement –Time

- **Step 15 & End of year expectations** - Read, write and convert time between analogue and digital (*12 hour and 24 hour clocks.*)
- **Step 15 & End of year expectations** - solve more complex one- step conversion problems in contexts, deciding which operations to use and why.