



Name _____ **Area - Maths**

Year **THREE**

Key: E = Entering D = Developing S = Secure

| Number – number and place | E | D | S |
|---|----------|----------|----------|
| Count from 0 in multiples of 4 and 8. | | | |
| Count from 0 in multiples of 50 and 100. | | | |
| Count up and down in tenths. | | | |
| Read and write numbers up to 1000 in numerals and in words. | | | |
| Read and write numbers with one decimal place. | | | |
| Identify, represent and estimate numbers using different representations, including the number line. | | | |
| Recognise the place value of each digit in a three-digit number (hundreds, tens, ones). | | | |
| <ul style="list-style-type: none"> Identify the value of each digit to one decimal place; Partition numbers in different ways (e.g. $146 = 100 + 40 + 6$ and $146 = 130 + 16$). | | | |
| <ul style="list-style-type: none"> Compare and order numbers up to 1000. Compare and order numbers with one decimal place. | | | |
| Find 1, 10 or 100 more or less than a given number; | | | |
| Round numbers to at least 1000 to the nearest 10 or 100; | | | |
| Find the effect of multiplying a one- or two-digit number by 10 and 100, identify the value of the digits in the answer. | | | |
| Describe and extend number sequences involving counting on or back in different steps. | | | |
| Read Roman numerals from I to XII. | | | |
| Solve number problems and practical problems involving these ideas. | | | |
| Number – addition and subtraction | E | D | S |
| Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method). | | | |
| <ul style="list-style-type: none"> Select a mental strategy appropriate for the numbers involved in the calculation. | | | |
| Understand and use take away and difference for subtraction, deciding on the most efficient method for the numbers involved, irrespective of content. | | | |
| Recall / use addition / subtraction facts for 100 (multiples of 5 and 10). | | | |
| Derive and use addition and subtraction facts for 100. | | | |
| Derive and use addition and subtraction facts for multiples of 100 totalling 1000. | | | |
| Add and subtract numbers mentally, including: | | | |
| <ul style="list-style-type: none"> a three-digit number and ones a three-digit number and tens a three-digit number and hundreds | | | |
| Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction. | | | |
| Estimate the answer to a calculation and use inverse operations to check answers. | | | |
| Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction. | | | |
| Number – multiplication and division | E | D | S |
| Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method). | | | |
| Understand that division is the inverse of multiplication and vice versa. | | | |
| Understand how multiplication and division statements can be represented using arrays. | | | |
| Understand division as sharing and grouping and use each appropriately. | | | |
| Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. | | | |
| Derive and use doubles of all numbers to 100 and corresponding halves. | | | |
| Derive and use doubles of all multiples of 50 to 500. | | | |
| 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 and progressing to formal written methods. | | | |
| Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. | | | |

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| Solve problems, including missing number problems, involving multiplication and division (<i>and interpreting remainders</i>), including positive integer scaling problems and correspondence problems in which n objects are connected to m objects. | | | |
| Number – fractions | E | D | S |
| <i>Show practically or pictorially that a fraction is one whole number divided by another (e.g. $\frac{3}{4}$ can be interpreted as $3 \div 4$).</i> | | | |
| Understand that finding a fraction of an amount relates to division. | | | |
| Recognise that tenths arise from dividing objects 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 use fractions as numbers: unit fractions and non-unit fractions with small denominators. | | | |
| Recognise and show, using diagrams, equivalent fractions with small denominators.= | | | |
| Add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$]. | | | |
| Compare and order unit fractions, and fractions with the same denominators (<i>including on a number line</i>). | | | |
| <i>Count on and back in steps of $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{3}$.</i> | | | |
| Solve problems that involve all of the above. | | | |
| Geometry – Properties of shapes and Position and direction | E | D | S |
| Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them. | | | |
| Recognise angles as a property of shape or a description of a turn. | | | |
| 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. | | | |
| Identify horizontal and vertical lines and pairs of perpendicular and parallel lines. | | | |
| Describe positions on a square grid labelled with letters and numbers. | | | |
| Measurement | E | D | S |
| Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). | | | |
| <i>Continue to estimate and measure temperature to the nearest degree (°C) using thermometers.</i> | | | |
| Understand perimeter is a measure of distance around the boundary of a shape. | | | |
| Measure the perimeter of simple 2-D shapes. | | | |
| Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks. | | | |
| Estimate/read time with increasing accuracy to the nearest minute. | | | |
| Record/compare time in terms of seconds, minutes, hours; <u>use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon, midnight.</u> | | | |
| Know the number of seconds in a minute and the number of days in each month, year and leap year. | | | |
| Compare durations of events [for example to calculate the time taken by particular events or tasks]. | | | |
| <i>Continue to recognise and use the symbols for pounds (£) and pence (p) and understand that the decimal point separates pounds/pence.</i> | | | |
| <i>Recognise that ten 10p coins equal £1 and that each coin is $\frac{1}{10}$ of £1.</i> | | | |
| Add and subtract amounts of money to give change, using both £ and p in practical contexts. | | | |
| <i>Solve problems involving money and measures and simple problems involving passage of time.</i> | | | |
| Statistics | E | D | S |
| ▪ <i>Use sorting diagrams to compare and sort objects, numbers and common 2-D and 3-D shapes and everyday objects.</i> | | | |
| ▪ <i>Interpret and present data using bar charts, pictograms and tables.</i> | | | |
| Solve one-step and two-step questions [for example, ‘How many more?’ and ‘How many fewer?’] using information presented in scaled bar charts and pictograms and tables. | | | |

End of term progress

| Autumn 2016 | Spring 2017 | Summer 2017 |
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