

## Crow Orchard Primary School



### End of Term Expectations (End Points) for Maths

Year	Autumn Term	Spring Term	Summer Term
<u>6</u>	<ul style="list-style-type: none"> <li>• Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit.</li> <li>• Round any whole number to a required degree of accuracy.</li> <li>• Use negative numbers in context, and calculate intervals across zero.</li> <li>• Solve number and practical problems that involve ordering and comparing numbers to 10 000 000, rounding to a required degree of accuracy, using negative numbers and calculating intervals across zero.</li> <li>• Perform mental calculations with mixed operations to carry out calculations involving the four operations.</li> <li>• Solve multi-step problems in contexts, deciding which operations and methods to use and why e.g. find the change from £20 for three items that cost £1.24, £7.92 and £2.55; a roll of material is 6m long: how much is left when 5 pieces of 1.15m are cut from the roll?; a bottle of drink is 1.5 litres, how many cups of 175ml can be filled from the bottle, and how much drink is left?.</li> <li>• Solve problems involving addition and subtraction.</li> </ul>	<ul style="list-style-type: none"> <li>• Compare and order fractions, including fractions <math>&gt; 1</math></li> <li>• Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.</li> <li>• Multiply simple pairs of proper fractions, writing the answer in its simplest form e.g. <math>1/4 \times 1/2 = 1/8</math>.</li> <li>• Divide proper fractions by whole numbers e.g. <math>1/3 \div 2 = 1/6</math>.</li> <li>• Associate a fraction with division and calculate decimal fraction equivalents e.g. know that 7 divided by 21 is the same as <math>7/21</math> and that this is equal to <math>1/3</math> and e.g. 0.375 is equivalent to <math>3/8</math>.</li> <li>• Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places.</li> <li>• Multiply one-digit numbers with up to two decimal places by whole numbers.</li> <li>• Use written division methods in cases where the answer has up to two decimal places.</li> <li>• Solve problems which require answers to be rounded to specified degrees of accuracy. (Fractions)</li> </ul>	<ul style="list-style-type: none"> <li>• Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.</li> <li>• Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places.</li> <li>• Convert between miles and kilometres.</li> <li>• Recognise that shapes with the same areas can have different perimeters and vice versa.</li> <li>• Recognise when it is possible to use formulae for area and volume of shapes.</li> <li>• Calculate the area of parallelograms and triangles.</li> <li>• Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (<math>\text{cm}^3</math>) and cubic metres (<math>\text{m}^3</math>), and extending to other units e.g. <math>\text{mm}^3</math> and <math>\text{km}^3</math>.</li> <li>• Draw 2-D shapes using given dimensions and angles.</li> <li>• Recognise, describe and build simple 3-D shapes, including making nets.</li> </ul>

	<ul style="list-style-type: none"> <li>• Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.</li> <li>• Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.</li> <li>• 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, or by rounding, as appropriate for the context.</li> <li>• Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context.</li> <li>• Perform mental calculations, including with mixed operations and large numbers.</li> <li>• Identify common factors, common multiples and prime numbers.</li> <li>• Use his/her knowledge of the order of operations to carry out calculations involving the four operations. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</li> <li>• Solve problems involving addition, subtraction, multiplication and division.</li> <li>• Use estimation to check answers to calculations and determine, in the</li> </ul>	<ul style="list-style-type: none"> <li>• Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts e.g. one piece of cake that has been cut into 5 equal slices can be expressed as <math>\frac{1}{5}</math> or 0.2 or 20% of the whole cake.</li> <li>• Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts e.g. find <math>\frac{7}{9}</math> of 108.</li> <li>• Solve problems involving the calculation of percentages e.g. of measures, and such as 15% of 360 and the use of percentages for comparison.</li> <li>• Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons.</li> <li>• Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.</li> <li>• Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.</li> <li>• Describe positions on the full coordinate grid (all four quadrants).</li> <li>• Draw and translate simple shapes on the coordinate plane, and reflect them in the axis.</li> <li>• Interpret and construct pie charts and line graphs and use these to solve problems.</li> <li>• Calculate and interpret the mean as an average.</li> <li>• Use simple formulae e.g. perimeter of a rectangle or area of a triangle.</li> <li>•</li> </ul>
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context of a problem, an appropriate degree of accuracy.

- Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.
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