Maths

Year 6

Age Related Expectations

|  |  |
| --- | --- |
| Statement |  |
| Read, write, order and compare numbers up to 10,000,000. |  |
| Determine the value of each digit in numbers up to 10,000,000. |  |
| Round any whole number to a required degree of accuracy. |  |
| Use negative numbers in context and calculate intervals across zero. |  |
| Use estimation to check answers to calculations. |  |
| Solve addition and subtraction multi-step problems in contexts. |  |
| Identify common factors, common multiples and prime numbers. |  |
| Perform mental calculations, including with mixed operations and large numbers. |  |
| Multiply multi-digit numbers up to 4 digits by a 2-digit whole number using the formal written method |  |
| Divide numbers up to 4 digits by a 2-digit whole number using the formal written method |  |
| Divide numbers up to 4 digits by a 2-digit number using short division where appropriate. |  |
| Solve problems involving addition, subtraction, multiplication, and division. |  |
| Use knowledge of the order of operations to carry out calculations involving the four operations. |  |
| Use common factors to simplify fractions & common multiples to express fractions in same denomination. |  |
| Compare and order fractions, including fractions >1. |  |
| Add and subtract fractions with different denominators and mixed numbers. |  |
| Multiply simple pairs of proper fractions, writing the answer in the simplest form. |  |
| Divide proper fractions by whole numbers. |  |
| Associate a fraction with division to calculate decimal fractions equivalents for simple fraction. |  |
| Identify the value of each digit to 3 dp and x and ÷ numbers by 10, 100 and 1000 |  |
| Multiply 1-digit numbers with up to 2 decimal places by whole numbers. |  |
| Use written division methods in cases where the answer has up to 2 decimal places. |  |
| Solve problems which require answers to be rounded to specified degrees of accuracy. |  |
| Recall and use equivalences between simple fractions, decimals and percentages |  |
| Solve problems involving the relative sizes of two quantities with missing values. |  |
| Solve problems involving the calculation of percentages and the use of percentage comparisons. |  |
| Solve problems involving similar shapes where the scale factor is known or can be found. |  |
| Solve problems involving unequal sharing & grouping using knowledge of fractions & multiples. |  |
| Express missing number problems algebraically. |  |
| Use simple formulae. |  |
| Generate and describe linear number sequences. |  |
| Find pairs of numbers that satisfy an equation with two unknowns. |  |
| Use, read, write, and convert between standard units - decimal notation up to 3 decimal places. |  |
| Convert between miles and kilometres. |  |
| Recognise that shapes with the same areas can have different perimeters and vice versa. |  |
| Calculate the area of parallelograms and triangles. |  |
| Recognise when it is possible to use the formulae for the area of shapes. |  |
| Calculate, estimate and compare volume of cubes and cuboids, using standard units. |  |
| Recognise when it is possible to use the formulae for the volume of shapes. |  |
| Solve problems involving calculation & conversion of units of measure, using decimals to 3 dp |  |
| Compare and classify geometric shapes based on the properties and sizes. |  |
| Describe simple 3D shapes. |  |
| Draw 2D shapes given dimensions and angles. |  |
| Recognise and build simple 3D shapes, including making nets. |  |
| Find unknown angles in any triangles, quadrilaterals, and regular polygons. |  |
| Recognise angles and find missing angles. |  |
| Illustrate and name parts of circles, including radius, diameter and circumference. |  |
| Draw and translate simple shapes on the co-ordinate plane and reflect them in the axes. |  |
| Describe positions on the full co-ordinate grid (all four quadrants). |  |
| Interpret and construct pie charts and line graphs and use these to solve problems |  |
| Calculate and interpret the mean as an average. |  |