Year 4 End of Year Expectations: Mathematics

Appleton Academy

Year 4 Mathematics			
Number and Place Value			
Number and Place Value	**Addition and Subtraction**	**Multiplication and Division**	**Fractions, Decimals and Percentages**
❖ 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.	❖ 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.	❖ Recall multiplication and division facts for multiplication tables up to 12 × 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 commutativity 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.	❖ Recognise and show, using diagrams, families of common equivalent fractions count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. ❖ 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. ❖ Add and subtract fractions with the same denominator. ❖ Recognise and write decimal equivalents of any number of tenths or hundredths. ❖ Recognise and write decimal equivalents to 1/4, 1/2, ¾. ❖ 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. ❖ Round decimals with one decimal place to the nearest whole number. ❖ Compare numbers with the same number of decimal places up to two decimal places. ❖ Solve simple measure and money problems involving fractions and decimals to two decimal places.

Year 4 End of Year Expectations: Mathematics

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Year 4 Mathematics			
Geometry and Measures			
Measures	**Geometry – Properties of Shapes**	**Geometry – Position and Movement**	**Statistics**
❖ Convert between different units of measure [for example, kilometre to metre; hour to minute]. ❖ Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. ❖ Find the area of rectilinear shapes by counting squares. ❖ Estimate, compare and calculate different measures, including money in pounds and pence. ❖ Read, write and convert time between analogue and digital 12- and 24-hour clocks. ❖ Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days	❖ Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. ❖ Identify acute and obtuse angles and compare and order angles up to two right angles by size. ❖ Identify lines of symmetry in 2-D shapes presented in different orientations. ❖ Complete a simple symmetric figure with respect to a specific line of symmetry.	❖ Describe positions on a 2-D grid as coordinates in the first quadrant. ❖ Describe movements between positions as translations of a given unit to the left/right and up/down. ❖ Plot specified points and draw sides to complete a given polygon.	❖ Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. ❖ Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.