Year 6 Mathematics – End of Year Expectations

Place value	• The pupil can demonstrate an understanding of:
	  ○ Place value *(E.g. what is the value of the '7' in 276,541?)*
	  ○ Large numbers *(E.g. find the difference between the largest and smallest whole numbers that can be made from using three digits)*
	  ○ Decimals *(E.g. 8.09 = 8 + 9? ; 28.13 = 28 + ? + 0.03)*

Addition, subtraction, multiplication and division	• The pupil can:
	  ○ multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication
	  ○ divide numbers up to 4 digits by a two-digit whole number using the formal written method of short and long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context *(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?; ; 20 × 7 × 5 = 20 × 5 × 7 = 100 × 7 = 700; 53 ÷ 7 + 3 ÷ 7 = (53 +3) ÷ 7 = 56 ÷ 7 = 8)*
	  ○ perform mental calculations, including with mixed operations and large numbers
	  ○ identify common factors, common multiples and prime numbers
	  ○ use their knowledge of the order of operations to carry out calculations involving the 4 operations
	  ○ use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy

Fractions, Decimals and Percentage	• The pupil can demonstrate an understanding of: ○ The relationship between fractions and can express them as equivalent quantities *(E.g. one piece of cake that has been cut into 5 equal slices can be expressed as 1/5)* • The pupil can recognise the relationship between decimals and percentages and can express them as equivalent quantities *(E.g. one piece of cake that has been cut into 5 equal slices can be expressed as 1/5 or 0.2 or 20% of the whole cake)* • The pupil can calculate using fractions, decimals or percentages *(E.g. knowing that 7 divided by 21 is the same as 21/7 and that this is equal to 13; 15% of 60; 112 + 34; 79 of 108; 0.8 x 70)*
Area	• The pupil can calculate area of a variety of 2D shapes *(E.g. squares, rectangles and triangles)*
Time	• The pupil can calculate with measures *(E.g. calculate length of a bus journey given start and end times; convert 0.05km into m and then into cm)*
Geometry – Shape	• The pupil can recognise, describe and build simple 3-D shapes, including making nets
Geometry – Position and Direction	• The pupil can describe positions on the full coordinate grid (all four quadrants) • The pupil can draw and translate simple shapes on the coordinate plane, and reflect them in the axes
Statistics	• The pupil can use mathematical reasoning to find missing angles (e.g. the missing angle in an isosceles triangle when one of the angles is given; the missing angle in a more complex diagram using knowledge about angles at a point and vertically opposite angles).