Repton Manor

Maths Year 6 Framework

Autumn

Number: Place Value

I can read, write, order and compare numbers to at least 10,000,000 and determine the value of each digit.

I can solve calculations using negative numbers in context, and calculate intervals across zero.

I can round any whole number up to a required degree of accuracy.

Number: Addition, Subtraction, Multiplication and Division

I can multiply multi-digit numbers up to 4 digits by a one-digit whole number using the formal written method of long multiplication.

I can divide numbers up to 4 digits by a one-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders.

I can perform mental calculations, including calculations with mixed operations and large numbers.

I can identify common factors, common multiples and prime numbers.

I can use my knowledge of the order of operations to carry out calculations involving the four operations.

Fractions, Decimals and Percentages

I can use common factors to simplify fractions and use common multiples to express fractions in the same denomination.

I can compare and order fractions, including fractions > 1.

I can add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.

I can multiply simple pairs of proper fractions.

I can divide proper fractions by whole numbers. (e.g., $1/3 \div 2 = 1/6$)

Geometry

I can describe positions on the full coordinate grid (all four quadrants).

I can draw and translate simple shapes on the coordinate plane.

I can reflect simple shapes in the axes.



Maths Year 6 Framework

End of Assessment Framework Maths

Working at the Expected Standard Dates Achieved		
1.	Demonstrate an understanding of place value, including large numbers and decimals (e.g. what is the value of the '7' in 276,541?)	
2.	Calculate mentally, using efficient strategies such as manipulating expressions using commutative and distributive properties to simplify the calculation (e.g. $53 - 82 + 47 = 53 + 47 - 82 = 100 - 82 = 18$; $20 \times 7 \times 5 = 20 \times 5 \times 7 = 100 \times 7 = 700$)	
3.	Use formal methods to solve multi-step problems (e.g. find the change from £20 for three items that cost £1.24, £7.92 and £2.55)	
4.	Recognise the relationship between fractions, 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)	
5.	Calculate using fractions, decimals or percentages (e.g. knowing that 7 divided by 21 is the same as 7 21 and that this is equal to 1 3; 15% of 60; 11 $2+34$; 7 9 of 108; 0.8 x 70)	
6.	Substitute values into a simple formula to solve problems (e.g. perimeter of a rectangle or area of a triangle)	
7.	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)	
8.	Use mathematical reasoning to find missing angles (e.g. the missing angle in an isosceles triangle when one of the angles is given)	