Number and Place Value

In year 6, children learn about numbers uo to 10,000,000. They will be expected to find 10, 100, 1000, 10,000, 100,000 and 1,000,000 more or less than any number to 10,000,000, and to compare and order numbers to 10,000,000. Children will also learn to round to the nearest 10, 100, 1000, 10,000, 100,000 and 1,000,000. Additionally, children will become more confident with negative numbers.

Addition, Subtraction, Multiplication and Division

Children will recap adding and subtracting large numbers, multiplying up to 4 digit by 1 or 2 digits, and diving up to 4 digits by 1 digit. They will also learn how to divide up to four digits by 2 digits. They will use these skills to solve multi step problems. When dividing, children will interpret remainders as whole numbers, fractions, or by rounding as appropriate for the context. **Children must know all their multiplication and division facts up to 12x12.**

Children will learn to identify common factors, common multiples and prime numbers.

Fractions, Decimals and Percentages

Children will recap equivalent fractions, and learn how to simplify fractions, compare and order fractions, convert between mixed number and improper fractions, add and subtract fractions, and multiply and divide fractions.

Children will learn the value of decimal numbers to thousandths. They learn to convert between decimals, fractions and percentages. They learn to multiply and divide by 10, 100 and 1000, and to multiply and divide decimals. They also learn to find percentages of an amount and to calculate percentage increases and decreases.

Shape

Children learn about coordinates and how to translate and reflect shapes.

Algebra

Children will learn algebra such as finding the rule, solving equations and substituting.

Measure

Children will learn to convert between metric measurements (e.g. g-kg, mm-m) and between imperial measures (e.g miles to kilometres).

Children will recap area and perimeter, find the perimeter of triangles and parallelograms, and find the volume of cuboids. They will recap angles and how to measure them with a protractor. They will also learn how to calculate angles in triangles and other shapes.

Statistics

Children will learn to solve problems using line graphs and pie charts, including pie charts with percentages. They will also learn about the mean.