**Term by Term Objectives Year 6**

**Yearly Overview**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Week 1 | Week 2 | Week 3 | Week 4 | | Week 5 | Week 6 | | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
| Autumn | Place Value | | | Number  Addition, subtraction, multiplication and division | | | | | | | | | | |
| Spring | Fractions | | | | | | | | Decimals | | | Percentages | | Algebra |
| Summer | Algebra | Ratio | Measure | | Geometry | | | Post SATs secondary transition week | | | | | | |

Autumn

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
| Place Value  **I can read, write, order and**  **compare numbers up to**  **10 000 000 and**  **determine the value of**  **each digit.**  Determine the value of digits to tens of millions  Read and write numbers to 10,000,00  Order and compare numbers to 10,000,000  **I can round a whole number**  Round to the nearest 10  Round to powers of 10  **I can calculate intervals**  Calculate with rising and falling  Finding the difference between two values  Real life problems with negative numbers | | | Addition, Subtraction, Multiplication and Division  **Solve addition and subtraction multi step problems in contexts, deciding which operations and methods to use and why.**  Deeper thinking about the algorithm for addition  Deeper thinking about the algorithm for subtraction  Solve multi-step problems involving additive reasoning.  **Multiply multi-digit number up to 4 digits by a 2 digit number using the formal written method of long multiplication.**  Accurately use the efficient method of long multiplication.  Understand and explain why long multiplication is an efficient method.  Apply understanding of multiplicative reasoning.  **Divide numbers up to 4 digits by a 2 digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions or by rounding as appropriate for the context.**  Use long division with whole number remainders.  Use long division with fraction and decimal remainders  Interpreting remainders after division.  **Divide numbers up to 4 digits by a 2 digit number using the formal written method of short division, interpreting remainders according to context.**  Compare long and short methods of division.  Deeper thinking to explore division.  **Identify common factors, common multiples and prime numbers.**  Identify common factors and multiples.  Use knowledge of factors and multiples to find prime numbers.  **Perform mental calculations, including with mixed operations and large numbers.**  Use multiplication facts to support mental multiplication.  Use factors of divisors to perform mental division.  **Use their knowledge of the order of operations to carry out calculations involving the four operations.**  Understand what BODMAS is and apply it.  Understand what BODMAS is and apply it.  **Solve problems involving addition, subtraction, multiplication and division.** | | | | | | | | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
| Fractions  **Generate and describe linear number sequences (with fractions)**  Understanding what a fraction is.  Use double number lines to examine Counting in fractions.  Use number sequences to double and half unit fractions.  **Use common factors to simplify fractions; use common multiples to express fractions in the same denomination**  Identifying the lowest common multiple and the highest common factor.  Explain equivalent fractions.  Determine when numerators and denominators are co-prime.  **Compare and order fractions, including fractions > 1**  Compare and order fractions using denominators.  Compare and order fractions using numerators.  Compare and order fractions using common denominators.  Compare and order fractions using common numerators.  **Add and subtract fractions with different denominations and mixed numbers, using the concept of equivalent fractions.**  Adding proper fractions using common denominators.  Adding mixed number fractions  Subtracting proper fractions using common denominators.  Subtracting mixed number fractions.  Application of understanding of adding and subtracting fractions.  **Multiply simple pairs of proper fractions, writing the answer in its simplest form**  Use arrays to examine multiplication of numbers less than one.  Multiplying pairs of proper fractions.  Investigating equivalence when multiplying with fractions.  **Divide proper fractions by whole numbers**  Use arrays to examine division  Divide proper fractions by whole numbers.  Investigating equivalence when dividing with fractions.  Investigating equivalence with fraction division and multiplication. | | | | | | | Decimals  **Identify the value of each digit in numbers given to three decimal places and multiply**  **numbers by 10, 100 and 1000 giving answers up to 3 decimal places (dp).**  Investigating the place value of decimals to thousandths, relating thousandths to hundredths and tenths.  Multiply and divide numbers up to 3 decimal places by 10, 100 and 1000  **Solve problems which require answers to be rounded to specified degrees of accuracy**  Rounding to 1 and 2 decimal places.  **Multiply one digit numbers with up to 2dp by whole numbers.**  Multiply a number with up to 2 decimal places by a whole number using formal written methods.  Application of understanding of multiplying decimals.  **Use written division methods in cases where the answer has up to two decimal places**  Dividing numbers up to 2 decimal places by a whole number using formal written methods.  Investigating the link between fractions and decimals. | | | Percentages  **Solve problems involving the calculation of percentages [for example, of measures such as 15% of 360] and the use of percentages for comparison.**  Finding percentages using multiples of 10%.  Calculating percentage discounts and using percentages to compare.  Calculating percentage increases.  **Recall and use equivalences between simple FDP including in different contexts.**  Investigating equivalence between simple fractions, decimals and percentages.  Application of understanding of percentages. | | Algebra  **Generate and describe linear number sequences.**  Using simple formulae  Generate and describe number sequences |

Spring

Summer

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week 1 | Week 2 | | Week 3 | Week 4 | | Week 5 | Week 6 | | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
| Algebra  Find pairs of numbers that satisfy an equation with two unknowns.  **Enumerate possibilities of combinations of two variables.**  Investigate possible combinations of variables. | | Ratio  **Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.**  Investigating the relationship between ratios and fractions.  Using ratios to calculate missing values. Using ratios to share and group a total. Application of understanding of ratio in a real life context. | Measure  **Use, read, write and convert between standard units, converting measurements**  Converting between cm and mm  Converting between m and cm  Converting between km and m including miles.  Converting between kg and g. Converting units of capacity. Converting units of time.  **Recognise when it is possible to use formulae for area and volume of shapes.**  **Calculate the area of parallelograms and triangles**  Finding the area of parallelograms.  Finding the area of triangles.  **Recognise that shapes with the same areas can have different perimeters**  **Calculate, estimate and compare volume of cubes and cuboids using standard units**  Finding the volume of cubes and cuboids.  Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals and regular polygons.    Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles. | | Geometry  **Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.**  Illustrate and name parts of a circle including radius, diameter and circumference, understanding that the diameter is twice the radius.  **Interpret and construct pie charts and line graphs and use these to solve problems.**  Interpret and construct pie charts and line graphs.  **Calculate the mean as an average.** | | | Post SATs secondary transition work | | | | | | |