**Year 6 Maths scheme of Learning- Advent**

**2021-2022**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Week 1** |  **Week 2** |  **Week 3**  |  | **Week 4** | **Week 5** | **Week 6** | **Week 7** | **Week 8** | **Week 9** |
| **Check/re-visit****recap/****pre-learn** | * **Number: Place Value**
* Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.
* Round any whole number to a required degree of accuracy.
* Use negative numbers in context, and calculate intervals across zeroSolve number and practical problems that involve all of the above.
 | * **Number: Addition, Subtraction, Multiplication and division**
* Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
* .Multiply multi-digit numbers up to 4-digits by a 2-digit number using the formal written method of long multiplication.
* 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.
* Divide numbers up to 4 digits by a 2-digit number using the formal written method of short division, interpreting remainders according to the context.
* 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 four operations.
* Solve problems involving addition, subtraction, multiplication and division.
* Use estimation to check answers to calculations and determine in the context of a problem, an appropriate degree of accuracy.
 | **Check/re-visit****recap/****pre-learn** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Week 10** | **Week 11** | **Week 12** | **Week 13** | **Week 14** | **Week 15** |
| **Number: Fractions**1. Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.2.Compare and order fractions, including fractions >13.Generate and describe linear number sequences (with fractions)4. Add and subtraction fractions with different denominations and mixed numbers, using the concept of equivalent fractions. 5.Multiply simple pairs of proper fractions, writing the answer in its simplest form (for example ¼ x ½ = 1/8) 6.Divide proper fractions by whole numbers (for example 1/3 ÷ 2 = 1/6)7. Associate a fraction with division and calculate decimal fraction equivalents (for example 0.3375) for a simple fraction (for example 1/8).8. Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. | **Geometry: Position and Direction*** Describe positions on the full coordinate grid (all four quadrants)
* Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.
 | **Check/re-visit****recap/****pre-learn** |

\*\*\*As a school, we plan in many check/re-cap/pre-learn weeks in the Advent term so that children get a chance to consolidate previous learning and/or pre-learn ideas which will be covered in the next topic. This means that teachers can be sure that knowledge and skills are solid before they re-visit topics in the Lent and Pentecost terms.

**Year 6 Maths scheme of Learning- Lent**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Week 16** | **Week 17** | **Week 18** | **Week 19** | **Week 20** | **Week 21** | **Week 22** |
| **Number: Decimals**1. Identify the value of each digit in numbers given to 3 decimal places and multiply numbers by 10, 100 and 1,000 giving answers up to 3 decimal places.2. Multiply 1-digit numbers with up to 2 decimal places by whole numbers.3. Use written division methods in cases where the answer has up to 2 decimal places.4. Solve problems which require answers to be rounded to specified degrees of accuracy. | **Number: Percentages**1. Solve problems involving the calculation of percentages (for example, of measures and such as 15% of 360) and the use of percentages for comparison.2. Recall and use equivalences between simple fractions, decimals and percentages including in different contexts. | **Number Algebra**1. Use simple formulae.2. Generate and describe linear number sequences.3. Express missing number problems algebraically.4. Find pairs of numbers that satisfy an equation with two unknowns.5. Enumerate possibilities of combinations of two variables. | **Measurement: Converting Units**1. Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.2. Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to 3 dp.3. Convert between miles and kilometres. |

|  |  |  |  |
| --- | --- | --- | --- |
| **Week 23**  | **Week 24** | **Week 25** | **Week 26** |
| **Measurement: Perimeter, Area and volume**1. Recognise that shapes with the same areas can have different perimeters and vice versa.2. Recognise when it is possible to use formulae for area and volume of shapes.3. Calculate the area of parallelograms and triangles.4. Calculate, estimate and compare volume of cubes and cuboids using standard units, including cm3.m3 and extending to other units (mm3, km3). | **Number: Ratio**1. Solve problems involving the relative sizes of two quantities where missing values can be found by integer multiplication and division facts.2. Solve problems involving similar shapes where the scale factor is known or can be found.3. Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples. | **Assessment Week** | **Number: Addition, Subtraction, Multiplication and division*** Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
* .Multiply multi-digit numbers up to 4-digits by a 2-digit number using the formal written method of long multiplication.
* 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.
* Divide numbers up to 4 digits by a 2-digit number using the formal written method of short division, interpreting remainders according to the context.
* Perform mental calculations, including with mixed operations and large numbers.
 |



**Year 6 Maths scheme of Learning- Pentecost**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Week 27** | **Week 28** | **Week 29** | **Week 30** | **Week 31** | **Week 32** | **Week 33** |
| **Number: Fractions**1. Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.2.Compare and order fractions, including fractions >13.Generate and describe linear number sequences (with fractions)4. Add and subtraction fractions with different denominations and mixed numbers, using the concept of equivalent fractions. 5.Multiply simple pairs of proper fractions, writing the answer in its simplest form (for example ¼ x ½ = 1/8) 6.Divide proper fractions by whole numbers (for example 1/3 ÷ 2 = 1/6)7. Associate a fraction with division and calculate decimal fraction equivalents (for example 0.3375) for a simple fraction (for example 1/8).8. Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. | **Number: Percentages**1. Solve problems involving the calculation of percentages (for example, of measures and such as 15% of 360) and the use of percentages for comparison.2. Recall and use equivalences between simple fractions, decimals and percentages including in different contexts. | **Geometry: Properties of Shape**1. Draw 2-D shapes using given dimensions and angles.2. Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals and regular polygons.3. Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles. | **Statistics**1. Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.2. Interpret and construct pie charts and line graphs and use these to solve problems.3. Calculate the mean as an average. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Week 34** | **Week 35** | **Week 36** | **Week 37** | **Week 38** |
| **Recap/Pre-learn** | **SATs week** | **Investigations** |