Flax Bourton Church of England Primary School



**“Aiming High, Respecting Others, Having Fun”**

**Maths Medium Term Plan Year 5**

|  | **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** | **Number and Place Value**   * Roman numerals to 1,000 * Numbers to 10,000 * Numbers to 100,000 * Numbers to 1,000,000 * Read and write numbers to 1,000,000 * Powers of 10 * 10/100/1,000/10,000/100,000 more or less * Partition numbers to 1,000,000 * Number lines to 1,000,000 * Compare and order numbers to 100,000 * Compare and order numbers to 1,000,000 * Round to the nearest 10, 100 or 1,000 * Round within 100,000 * Round within 1,000,000 | | | **Addition and Subtraction**  ♣ Mental strategies  ♣ Add whole numbers with more than four digits  ♣ Subtract whole numbers with more than four digits  ♣ Round to check answers  ♣ Inverse operations (addition and subtraction)  ♣ Multi-step addition and subtraction problems  ♣ Compare calculations  ♣ Find missing numbers | | | | **Multiplication and Division**  ♣solve comparison, sum and difference problems using information presented in a line graph  ♣ complete, read and interpret information in tables, including timetables | | **Number: Multiplication and Division A**  ♣ Multiples  ♣Common multiples  ♣Factors  ♣ Common factors  ♣ Prime numbers  ♣ Square numbers  ♣ Cube numbers  ♣ Multiply and divide by 10, 100 and 1,000  ♣ Multiples by 10, 100 and 1,000 | | | | **Fractions A**  ♣ Find fractions equivalent to a unit fraction  ♣ Find fractions equivalent to a non-unit fraction  ♣ Recognise Equivalent fractions  ♣ Convert improper fractions to mixed numbers  ♣ Convert mixed numbers to improper fractions  ♣ Compare fractions less than one  ♣ Order fractions less than one  ♣ Compare and order fractions greater than one  Add and subtract fractions with the same denominator  Add fractions within 1  Add fractions with total greater than 1  Add to a mixed number  Add two mixed numbers  Subtract fractions  Subtract from a mixed number  Subtract from a mixed number – breaking the whole  Subtract two mixed numbers | | |
| **Spring** | **Number: Multiplication and Division B**  ♣ multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers  ♣ multiply and divide numbers mentally drawing upon known facts  ♣ divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context  ♣ solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign | | | **Number: Fractions B**  ♣compare and order fractions whose denominators are all multiples of the same number  ♣ identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths ♣ recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, 2/5 + 4/5 = 6/5 = 1 1/5]  ♣ add and subtract fractions with the same denominator and denominators that are multiples of the same number  ♣ multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams  ♣ read and write decimal numbers as fractions [for example, 0.71 = 71/100]  ♣ solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. | | **Number: Decimals and percentages**  ♣ read, write, order and compare numbers with up to three decimal places  ♣ recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents  ♣ round decimals with two decimal places to the nearest whole number and to one decimal place  ♣ solve problems involving number up to three decimal places  ♣ recognise the per cent symbol (%) and understand that per cent relates to ‘number of parts per hundred’, and write percentages as a fraction with denominator 100, and as a decimal  ♣ solve problems which require knowing percentage and decimal equivalents of ½, ¼, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25 | | | | | **Number: Perimeter and Area** | | | | **Statistics** | |
| **Summer** | **Geometry: Properties of Shape**  ♣identify 3-D shapes, including cubes and other cuboids, from 2-D representations  ♣ know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles  ♣ draw given angles, and measure them in degrees (°)  ♣ identify: angles at a point and one whole turn (total 360°) angles at a point on a straight line and ½ a turn (total 180°), other multiples of 90°  ♣ use the properties of rectangles to deduce related facts and find missing lengths and angles  ♣ distinguish between regular and irregular polygons based on reasoning about equal sides and angles | | | **Geometry: Position and Direction**  ♣identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed  **Geometry: Properties of Shape**  ♣identify 3-D shapes, including cubes and other cuboids, from 2-D representations  ♣ know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles  ♣ draw given angles, and measure them in degrees (°)  ♣ identify: angles at a point and one whole turn (total 360°) angles at a point on a straight line and ½ a turn (total 180°), other multiples of 90°  ♣ use the properties of rectangles to deduce related facts and find missing lengths and angles  ♣ distinguish between regular and irregular polygons based on reasoning about equal sides and angles | | | **Number: Decimals**  ♣Recognise and write decimal equivalents of any number of tenths or hundredths  ♣Find the effect of dividing a one or two-digit number to 10 or 100, identify the value of the digits in the answer as ones, tenths and hundredths  ♣Solve simple measure and money problems involving fractions and decimals to two decimal places  ♣convert between different units of measure (for example km to m) | | | | | **Number: Negative Numbers** | **Measurement: Converting Units**  ♣convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)  ♣ solve problems involving converting between units of time  ♣ understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints | | | **Measurement: Volume**  ♣ estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water]  ♣use all four operations to solve problems involving measure |