'Spurring each other on with love'

Intent

At Bickleigh Down Church of England Primary, we believe that mathematics is an important part of children's development from an early age. We provide a curriculum that inspires, supports and motivates them to achieve and exceed their potential.

We intend on delivering a curriculum that enables children to:

➢ Have a conceptual understanding of mathematics and recognise that maths underpins much of our daily life.
➢ Build upon their learning and understanding from Foundation to Year Six and facilitate a love for learning.
➢ Become fluent in the fundamental skills of maths; we believe that rapid fluency and arithmetic skills underpin the whole learning process and this depth of fluency is the prerequisite to allow reasoning and problem solving.
➢ Develop a resilience through their strong fluency and arithmetic skills to enable them to reason and problem solve with increased skill.
➢ Build on their mathematical language so they can explain and reason their understanding.
➢ Be challenged in greater depth to allow them the opportunity to apply their skills and articulate their thinking.

At Bickleigh, our learning intent is taken from the National Curriculum Programmes of study. We follow the National Curriculum through White Rose Maths to ensure continuity and progression. In addition to White Rose, we use a system formulated by teachers in our school which creates individualised fluency and arithmetic learning activities. This allows our children to make strong progress in these fundamental areas and build progressively on these key skills. Foundation Stage also use White Rose Maths alongside NCETM Numberblocks.

Our intended learning outcomes for all pupils are as follows:

Early Years Foundation Stage
- Have a deep understanding of number to 10, including composition of each number.
- Subitise up to 5.
- Automatically recall (without reference to rhyme, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.
- Verbally count beyond 20, recognising patterns on the counting system.
- Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
- Explore the represented patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

Key Stage One
- Develop confidence and mental fluency with whole numbers, counting and place value.
- Know the number bonds to 20 and be precise in using and understanding place value.
- Be able to recognise, describe, draw, compare and sort different shapes and use the related vocabulary.
- Use a range of measures to describe and compare different quantities such as length, mass, capacity/volume, time and money.

Lower Key Stage Two

- Become increasingly fluent with whole numbers and the four operations, including number facts and the concept of place value.
- Develop efficient written and mental methods and perform calculations accurately with increasingly large whole numbers.
- Have the ability to solve a range of problems, including with simple fractions and decimal place value.
- Draw with increasing accuracy and develop mathematical reasoning so they can analyse shapes and their properties, and confidently describe the relationships between them.
- Use measuring instruments with accuracy and make connections between measure and number.
- Read and spell mathematical vocabulary correctly and confidently, using their growing word reading knowledge and their knowledge of spelling.
- By the end of year they should have memorised multiplication tables up to and including 12 x 12

Upper Key Stage Two

- Extend their understanding of the number system and place value to include larger integers.
- Develop the connections between multiplication and division with fractions, decimals, percentages and ratio.
- Solve a wider range of problems, including increasingly complex properties of numbers and arithmetic, and problems demanding efficient written and mental methods of calculation.
- Be introduced to the language of algebra as a means for solving a variety of problems.
- Consolidate and extend knowledge developed in number through geometry and measures.
- Classify shapes with increasingly complex geometric properties and learn the vocabulary need to describe them.
- Read, spell and pronounce mathematical vocabulary correctly.
- By the end of Year Six, be fluent in written methods for all four operations, including long multiplication and division, and in working with fractions, decimals and percentages.