

Westcott Church of England School High Street, Westcott, Aylesbury, Buckinghamshire HP18 0PH 01296 651360 office@westcott.bucks.sch.uk www.westcott.bucks.sch.uk Headteacher Mr Barry Grace

# Westcott C of E School

## MATHS POLICY 2021

Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment.

## ABOUT THE POLICY

This policy reflects the school's values and philosophy in relation to the teaching and learning of Mathematics. Children are encouraged to enjoy Mathematics and become enthusiastic mathematicians by developing their skills, knowledge and understanding through practical experiences which have relevance and purpose in everyday situations. It is important that children develop the skills of numeracy to become lifelong learners. They should be able to apply these skills in different situations across the curriculum and in daily living outside school.

### Mathematics:

### **Rationale:**

The National Curriculum (September 2014) is the basis for implementing the statutory requirements for Mathematics. The expectation is that the majority of pupils will move through the year group Learning Objectives. Decisions about when to progress should always be based on the security of children's understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly will be challenged through being offered mastery problems before being taught any new content. Those who are not sufficiently confident will consolidate their understanding through additional practice before moving on.

#### Purpose:

1.To become fluent in the fundamentals of Mathematics through varied and frequent practice of increasingly complex problems over time.

2.To develop the ability to recall and apply knowledge rapidly and accurately.

3. To develop the ability to solve problems through decision making and reasoning in a range of contexts.

4.To develop mathematical language through speaking and listening, practical activities and recording work.





#### **Guidelines:**

We aim to provide the pupils with a mathematics curriculum and high-quality teaching to produce individuals who are numerate, creative, independent, inquisitive, enquiring and confident. We also aim to provide a stimulating environment and adequate resources so that pupils can develop their mathematical skills to the full.

Our pupils should:

- have a well-developed sense of the size of a number and where it fits into the number system
- know by heart number facts such as number bonds, multiplication tables, doubles and halves
- use what they know by heart to when calculating mentally
- calculate accurately and efficiently, both mentally and in writing and paper,
- drawing on a range of calculation strategies
- recognise when it is appropriate to use a calculator and be able to do so effectively

• make sense of number problems, including non-routine/'real' problems and identify the operations needed to solve them

- explain their methods and reasoning, using correct mathematical terms
- judge whether their answers are reasonable and have strategies for checking them where necessary
- suggest suitable units for measuring and make sensible estimates of measurements
- explain and make predictions from the numbers in graphs, diagrams, charts and tables
- develop spatial awareness and an understanding of the properties of 2d and 3dshapes

We recognise the importance of establishing a secure foundation in mental calculation and recall of number facts before standard written methods are introduced. We use accurate mathematical vocabulary in our teaching and children are expected to use it in their verbal and written explanations.

#### **Conclusion:**

Mathematics contributes to many subjects and it is important the children are given opportunities to apply and use Mathematics in real contexts. It is important that time is found in other subjects for pupils to develop their Numeracy Skills, e.g. there should be regular, carefully



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planned opportunities for measuring in science and technology, for the consideration of properties of shape and geometric patterns in technology and art, and for the collection and presentation of data in history and geography. We endeavour at all times to set work that is challenging, motivating and encourages the pupils to think about how they learn and to talk about what they have been learning. Additional enrichment opportunities are provided for pupils to further develop mathematical thinking e.g. through cooking, music, and maths investigations and games.