We Only Reach for The Highest

Calculation Policy at Worthington Primary School

Aims

To ensure consistency and progression in our approach to calculation and enable a smooth transition between year groups and phases.

To ensure that children develop an efficient, reliable, formal written method of calculation for all operations.

To ensure that children can use these methods accurately with confidence and understanding.

To ensure pupils understand important concepts and make connections within mathematics.

To ensure pupils show high levels of fluency in performing written and mental calculations.

To ensure that pupils are ready for the next stage of learning and have been given strong foundations in mental methods, the use of practical equipment, allowed to explore jottings in a range of forms and then to move on to more formal recording using a strong knowledge of place value, number lines - labelled or blank, partitioning before eventually using compact written methods.

To ensure that pupils are competent in fluency, reasoning and problem solving and can make informed and appropriate choices about the methods they wish to use (mental or written) to solve mathematical problems efficiently and effectively.

To ensure the development of mathematical language related to the four operations.

Introduction

The policy is set out to show progression within each operation. Developing calculation must build on concrete experience, visual/pictorial models and lead to abstract calculation and so the policy reflects this.

Although this policy shows the progression for the written methods of calculation, mental methods and the recall of facts will be taught in partnership and according to the National Curriculum 2014 and Early Years Development Matters. Appendix 1 shows the progression of these statements and the requirements for the written methods. We believe that mental and written methods are integral to each other and should not be seen as taking separate paths but developed in conjunction with each other.

Although the policy is set out by each operation it is important to always show the links between operations and not teach them in isolation or without showing, in practical ways and across all mathematical topics, how these operations can be applied.

The development and use of the correct mathematical language is vital in the teaching of the four calculations and is part of the policy.

Alongside the teaching of the four operations will be the pre-requisites to develop the children's understanding of a specific concept for example for a child to understand counting on in addition they must have cardinality of number. For a child to solve addition by partitioning they must understand place value.

Some of the methods may be revisited when different numbers are introduced.