



Elston Hall Primary School



# Elston Hall Primary School Calculation Policy



March 2017





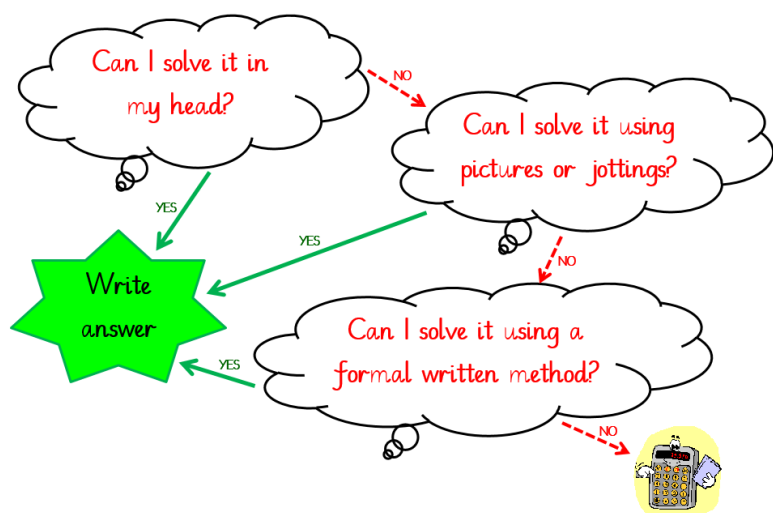
# Our Calculation Policy



Our whole school calculation policy has been designed to ensure continuity and progression across the whole school for all pupils in line with the new mathematics curriculum. It is paramount that children gain a complete understanding of number and the four operations, as well as being given ample opportunity to **use and apply** these strategies in a range of **problem solving** scenarios:

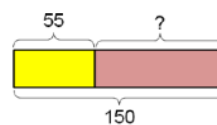
*'The national curriculum for mathematics aims to ensure that all pupils ...become fluent...reason mathematically... and can solve problems.'*

Pupils should be encouraged to consider if a mental calculation would be appropriate before using written methods. In each stage (Year Group) an example of the method has been included for easy reference. Teachers should follow each stage carefully using the methods stated. Certain methods may run concurrently over more than one year group; if this is the case, work must be pitched at the appropriate level. It is salient that children have the opportunity to consolidate their learning in the key areas of maths before progressing to the next stage. With this in mind, children who have not quite grasped a concept should remain at that stage, regardless of their year group, to ensure complete understanding. On the other hand, children who display exceptional ability, as well as a full understanding, can be allowed to move to the next stage.



**Concrete** – students should have the opportunity to use concrete objects and manipulatives to help them understand what they are doing.

**Pictorial** – students should then build on this concrete approach by using pictorial representations. These representations can then be used to reason and solve problems.



An example of a bar modelling diagram used to solve problems.

**Abstract** – with the foundations firmly laid, students should be able to move to an abstract approach using numbers and key concepts with confidence.