



# Maths Policy

November 2017

COTTERIDGE PRIMARY SCHOOL

Cotteridge Primary School is committed to safeguarding and promoting the welfare of children and young people and expects all staff and volunteers to share this commitment.

The policy has been written with regards to the UNICEF convention on the rights of the child: Article 28 and Article 29. Article 28: Children have the right to a good quality education. They should be encouraged to go to school to the highest level they can. Article 29 A child's education should help them use and develop their talents and abilities. It should also help them learn to live peacefully, protect the environment and respect other people.

#### **Aims of teaching Maths as described in Primary Curriculum 2014**

The national curriculum for mathematics aims to ensure that all pupils:

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programmes of study are, by necessity, organised into apparently distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to science and other subjects. The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.

Mathematics at Cotteridge Primary School embeds the three aims of the National Curriculum into daily practice. Children are encouraged to be fluent through daily counting, number fact activities, number relationship tasks and the practice of inverse operations. A wide range of opportunities to then apply these skills are offered, across a range of problems and puzzles, which ensures the knowledge and understandings of children are of depth. Maths is made real, with scenarios children can relate to. We encourage children to reason within mathematics, using mathematical language to discuss learning, explain thoughts and determine conclusions. Children follow the Concrete-Pictorial-Abstract model in order to make links and build on concepts. Concepts are explored in a variety of ways to ensure structures and relationships are understood. We encourage cross-curricular maths within our topics, which enable children to practise mathematical skills across the variety of topics they study.

#### **Programme of Maths study at Cotteridge Primary**

We follow the Bright-Pi programme of study, which maps out the complete coverage of the mathematics objectives. Our written and mental calculation policy is robust and ensures calculations are taught consistently so that children can build on prior learning and extend methods as they progress through the school. The mental and written calculation programmes of study for each year group is shown in detail on each Class Page of the school website.

At Cotteridge Primary School our standards and expectations are high. We strive for all pupils to perform at their best and to achieve their mathematical potential under our specific, creative, supportive and challenging curriculum.

Date policy adopted by Governing Body: 6.11.17

Date of review: Autumn 2019