



## Curriculum Aims



### Subject – Maths

#### **Aims & content of the Maths curriculum at Mount Primary**

At Mount Primary School we follow the National Curriculum objectives for maths.

Over the last few years, all staff have received training on developing a Mastery approach for maths. As a school we have worked to develop a curriculum that will give children a deep, long-term and adaptable understanding of maths. Within all maths lessons 'The Five Big Ideas in Teaching for Mastery' will be evident.

#### **Coherence:**

At Mount Primary, all maths lessons are broken down into small steps. These steps are connected and will gradually build up to children making generalisations and starting to apply the maths to other concepts.

#### **Representation & Structure:**

All children will have access to concrete resources within the lessons. Representations within the lesson allow children to see the mathematical structure and lessons will build up to children doing the maths without the resources.

#### **Mathematical Thinking:**

At Mount we believe talk is a huge part of maths lessons and it allows children to talk and discuss their ideas. It allows the children to think about the maths, reason with others and discuss their thinking.

#### **Variation:**

Variation is a key part of maths lessons. Children are often encouraged to look for and discuss what is the same and what is different between problems. This also allows children to make connections between mathematical concepts.

#### **Fluency:**

At Mount, we build time within lessons for children to develop fluency. This allows children to recall facts and move between different contexts.

As a school we all start with teaching place value in the autumn term, we have made this decision as we feel these skills are a building block for maths.

These skills can then be transferred into the teaching of the four operations. Staff will then build upon these skills and link these to other national curriculum objectives. For example, measure.

We have clear progression across the curriculum as all year groups follow the national curriculum objectives.

Children are given numerous opportunities to revisit aspects of learning through jotter time activities. These sessions are used to consolidate learning, revisit objectives from the main maths lessons and challenge children further. These activities are often linked to other areas of maths and we encourage children to transfer their skills. Within EYFS, teachers follow a similar structure to Years 1-6 Maths lessons. The children look at a number of a week and this is linked to a 'hook' for the children to investigate.

Progression is demonstrated across the curriculum by the use of the CPA approach to maths. All maths lessons (years 1-6) follow a similar structure.

As part of the maths curriculum we offer at Mount Primary, children have regular fluency sessions. These sessions allow children to develop their recall and develop fluency skills. These lessons may follow on from the main maths lesson or they may be used for revisiting previous concepts. Recall of facts are taught by making connections, for example  $6 \times 6$  is the same as  $5 \times 6$  and  $1 \times 6$ . Children are also encouraged to use the facts that they know to help to solve problems. Children are then encouraged to use these facts within the main maths lesson to help them to solve more complex problems. Children in EYFS and Key Stage 1 regularly revisit number bonds for all numbers to 10 and 20. Children see these in a range of pictorial ways including whole part part, tens frame and equations. All children at Mount Primary will have the opportunity to use concrete resources to develop basic number skills and to help in recalling facts.

#### **How do you know children have learned that knowledge?**

Children in Years 1-6 complete regular arithmetic and reasoning assessment papers. This data is then used to support teacher assessment.

As part of the main maths lesson, children are encouraged to journal their own ideas independently. This helps the class teacher to assess what the children have learnt in the lessons.

A lot of time is spent talking and there is in depth discussion of ideas within the maths lessons. This gives the teacher the opportunity to question ideas and ask open-ended questions to encourage the children to think deeper. Children complete workbooks independently - this reinforces what children have been doing within the lesson and sometimes allows the children to apply this learning to a different context. For example, addition worded problems.

### **How the maths curriculum caters for all learners**

Differentiation within maths lessons can vary. Differentiation can be through the instruction, task, outcome or the process. All children access the same age related 'In Focus' problem from EYFS-Y6.

Class teachers may differentiate the lessons through the resources which have been given to children.

The maths lead regularly analyses the internal data. This includes looking at disadvantaged pupils and SEND children. Class teachers attend regular pupil progress reviews, where children are all tracked.

As part of maths lessons at Mount, staff are encouraged to facilitate 'low floor, high ceiling' opportunities. This allows all children to access the curriculum. SEND children are supported in a number of ways. These include scaffolding within journaling, use of concrete resources and teacher/additional adult support.

SEND children are getting a broad curriculum diet as they are exposed to the same curriculum as their peers. The support and outcomes of the lesson may be different but they will be accessing the same 'In Focus' question.

### **How does your content selection develop pupils' cultural capital? (knowledge they need to become educated citizens – introducing them to the best that has been thought and said and to appreciate human creativity and achievement).**

Within maths lessons, there are lots of opportunities for talk and discussion. We encourage children to build resilience by working with others. Children are also taught to be tolerant of others' ideas and developing mutual respect by working together, sharing resources and listening to other ideas.

During lessons, teachers make links to how maths/concepts can be used within real-life and children are encouraged to think of other ways when they are journaling.

The 'In-Focus' questions can be adapted to link to current issues in the local area or on a global level. This allows for discussions around current issues.

During maths lessons, teachers can make links to STEM activities and discuss the maths that children are using in different subjects.