Richmond Avenue Primary and Nursery School
Subject Rationale

Maths

Ethos

Our aim is to create a rich learning environment, enabling every pupil to fulfil their potential. We are committed to the highest possible educational standards, with a matching concern for the personal growth and development of each pupil.

Intent

At Richmond, we teach maths with the fundamental aim that children will develop a sense of enjoyment and curiosity about the subject, as well as gain the understanding that being able to reason mathematically is going to be a life-long skill that they will use as a foundation to understanding the world.

Implementation

Through our curriculum in maths, we aim to maximise the potential for all learners to succeed by teaching using a kinaesthetic approach, working through using the concrete, pictorial and abstract method of teaching. From reception through to year six, the teachers use the White Rose Hub scheme of work to inform their planning, utilising the resources to suit the needs of the children. As a school we have worked together to write curriculum overviews that the teachers use to plan their lessons. These have allowed staff to outline the maths taught across each year group as well as plan how maths can be taught cross-curricular and incorporated into other subjects within the curriculum, such as exploring the use of maps in geography and using timelines to understand a significant period of time within history. Teaching using this cross-curricular method allows children to develop their application of higher order thinking skills and apply and recall their knowledge within real-life situations.

As a school we also use our calculation policy to adapt our planning, to ensure that pupils who grasp concepts rapidly are challenged through being offered sophisticated problems that deepen their understanding before moving onto new content. Teachers will use the calculation policy to identify the expectation for the end of the year group as well as identify how the concept is taught within the next year group. Not only this but our calculation policy also supports teachers to adapt planning for those who are not sufficiently fluent with earlier material, showing ways in which teachers can plan to consolidate children's learning further through additional practice.

At Richmond, from Key stage One through to Key stage Two in the autumn term, teachers focus on delivering lessons centred around children learning the basic concepts within place value, with the philosophy that children need to have developed a secure knowledge of this within this first term before being introduced to additional concepts. As we move into the spring term, teachers use their professional judgement to assess whether children are ready to progress onto applying their knowledge of basic skills to a variety of routine and non-routine problems with increasing sophistication.

As a school the approaches to teaching and learning have been altered between year groups to suit the age of the children and is outlined below.

- **Nursery-** Maths is taught within a combination of adult support within child-initiated play as well as through planned adult-led activities.

- **Reception**- Maths is taught daily during a whole class input, followed by an adult-led activity completed over two days. Children have the opportunity to further explore the new concepts introduced to them through the activities set out during self-select time.
- In EYFS the staff plan activities utilising the new early years curriculum, using a combination of both development matters and birth to five statements.

- **Key Stage One**- Maths is taught on a daily basis, with each lesson expected to last one hour. In addition to this, there is also a sixth lesson within the week, that lasts for a total of thirty minutes to reinforce rapid recall of the addition and subtraction facts.

- **Key Stage Two-** Maths is taught on a daily basis, with each lesson also expected to last one hour. In addition to this, there is also a sixth lesson that takes place at any point in the week that lasts a total of thirty minutes to practice mental arithmetic.

Within each lesson, there is an expectation that all children should have documented their understanding of the lesson through either written work in their books or by using concrete materials that have been photographed and stored as media evidence on the school server.

Impact:

Pupils across the school are taught skills and knowledge to enable them to develop progressively in maths and build an understanding that allows them to apply these skills in their future lives. The progressive sequence of learning ensures that a;; children, whatever their stage of learning, are supported to enable them to succeed in their future education and their wider lives.