Date:	Jan 2024
Edited By:	Jane Davies
Sections Edited:	Introduction added. Update on Maths hub and Mastering Number. Alteration to marking section
Next review date:	Jan 2025

Rowdown Primary School Maths Policy

Introduction:

Throughout the maths curriculum at Rowdown our main aim is for children to experience the enjoyment maths can bring and understand how a knowledge of maths can help them in many areas of their life. Through in-depth teaching we want children to adopt a 'can do' attitude with maths and foster a positive attitude to the challenges they face in mathematics. We want children to be able to recognise that maths is a life skill and is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment, therefore showing the children that maths provides a foundation for understanding the world

Legal Requirements:

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.

(New National Curriculum July 2014)

Teaching and Learning:

We understand that children learn in different ways and so we use a variety of teaching styles in mathematics, adapting to the needs of the children as necessary and appropriate.

We are using a mastery approach, based on the principle of keeping all the children together on the same learning concepts but also challenging those children who grasp concepts quicker and supporting those who need more time. We ensure that the children experience the presentation of concepts in different ways and that they learn to make links between different areas of maths more securely. We are aiming to embed a deeper understanding of maths by utilising a concrete, pictorial, abstract approach to learning

We are part of the Thames Maths Hub Sustaining Mastery programme in which we are supported by a Mastery Specialist to develop our implementation of the key elements of mastery - fluency, mathematical thinking, structure and representations, variation and coherence. We are able to work with colleagues, observe and reflect on lessons as well as share good practice. Our maths lessons are planned using the White Rose scheme throughout the school as well as the NCETM mastery materials.

Across each Key Stage we aim to develop the following:

- An understanding of number and the number system and competence in basic mathematical skills.
- Mathematical fluency including quick recall of basic facts.
- Enjoyment and curiosity of learning through practical activity, investigation and discussion.
- Knowledge and understanding of how mathematics is used in the wider world and its importance in our everyday lives.
- Ability to select and use a range of mathematical tools effectively.
- Use of appropriate mathematical language.
- Ability to work independently and collaboratively.
- Knowledge of shape and space and development of measuring skills in a range of contexts.
- A practical understanding of the ways in which information is gathered and presented.

Using and Applying

Children are specifically taught problem solving skills such as working systematically, trial and improvement, visualising and reasoning logically. They have opportunities to work independently and collaboratively to solve a range of problems. Although problem solving activities and challenges are integrated into the daily maths lessons, longer investigations which allow children to develop their mathematical reasoning through explaining, convincing, justifying and explaining regularly take place.

Mental Maths

Mental maths skills are practised and tested regularly in daily lessons. Children use TTRockstars from Year 2 upwards to support their learning of times tables while the sister program Numbots helps develop early number facts. We are also part of the NCETM Mastering Number Program for developing number fluency in KS1 and for improving multiplication and division facts in Years 4 and 5. In addition, in our daily maths lessons we devote specific time for recall of both number facts and prior learning.

Cross Curricular Links/Events

At Rowdown we hold a Maths Week every November which each year has a specific theme. Children have the chance to take part in a range of engaging activities and competitions aimed at developing their love of maths. We also take part in a London wide Maths Challenge every April where children practise the relevant skills in a Maths Club and tournament prior to the event. Teachers also seek to make cross curricular links within topic areas particularly science, ICT and geography.

Calculation

There is a specific calculation policy outlining the methods used and taught for all four operations across the school. This ensures progression and continuity across year groups and the school when teaching calculation and embeds the knowledge of the four operations. For further information see our calculation policy.

Inclusion

We adapt our teaching to pupils' diverse learning needs, including those with English as an additional language, those with learning difficulties and able, gifted and talented pupils.

Children identified as having particular learning difficulties will be supported through work with a teaching assistant, either individually or within a small, focused group. This may include a particular intervention programme.

Teachers will plan for able, gifted and talented children by providing appropriate challenge at greater depth. Able children also have the opportunity to take part in cross trust mathematics events

Marking, Assessment and Reporting:

In the Foundation Stage, children are assessed on the seven areas of learning using the EYFS profile.

At Key Stage 1 and 2, children are assessed against the National Curriculum 2014. Assessment is predominately through assessment for learning (AFL) which enables children to see themselves as learners and take responsibility and control of their own development.

Teachers use AFL to inform their planning, evaluate lessons and to give next steps to children through verbal feedback. Live marking is carried out during the lesson with children given the opportunity to correct errors on the spot using purple pens.

Summative assessment takes place each term. Children complete both arithmetic and reasoning assessments based on that term's learning. Children will also be assessed on their mental maths.

At the end of KS2, children will be entered in statutory tests in line with government policy. For further details, see the assessment policy.

January 2024