Revised February 2021 Berrycoombe School Maths Policy

Introduction

The purpose of this document is to state the aims, principles, strategies and organisation of the teaching of maths through Reception, Key Stage 1 and Key Stage 2.

The National Curriculum (2014) states:

- Become fluent in the fundamentals of mathematics through varied and frequent practice with complexity increasing over time.
- Develop conceptual understanding and ability to recall and apply knowledge rapidly and accurately.
- Reason mathematically; follow a line of enquiry, conjecture relationships and generalisations.
- Develop an argument, justification and proof by using mathematical language.
- Problem solve by applying knowledge to a variety of routine and non-routine problems. Breaking down problems into simpler steps and persevering in answering.

The National Curriculum sets out year-by-year programmes of study for key stages 1 and 2. This ensures continuity and progression in the teaching of mathematics. The EYFS Statutory Framework 2014 sets standards for the learning, development and care of children from birth to five years old and supports an integrated approach to early learning. This is supported by the 'Development matters' non statutory guidance. The EYFS Framework in relation to mathematics aims for our pupils to:

- develop and improve their skills in counting
- understand and use numbers
- calculate simple addition and subtraction problems
- describe shapes, spaces, and measures

Purpose

The purpose of mathematics in our school is to develop:

- positive attitudes towards mathematics and an awareness of the relevance of mathematics in the real world.
- capability and confidence in using and applying mathematical knowledge, concepts and skills.
- an ability to solve problems, to reason, to think logically and to work systematically and accurately.
- creativity and motivation to work both independently and in collaboration with others.



• confidence in talking about mathematics whereby the children can discuss different strategies, share their ideas and learn from mistakes.

Teaching and Learning

How we have designed our mathematics curriculum at Berrycoombe:

- We plan a mathematics lesson every day.
- The White Rose Blocks are used to map out our teaching of maths across the year.
- We plan using small steps to ensure progression and coverage to ensure progression and coverage of knowledge and skills.
- All teachers use a variety of resources to plan each lesson. We have a subscription to Third Space Learning, Sumdog, TTRS, White Rose, Classroom Secrets and Testbase to ensure that teachers are able to pick and choose, at their own discretion, from a range of good quality resources to support pupils learning.
- Each lesson is planned and structured using a four tiered approach. These tiers consist of 'build' (use of manipulatives), 'draw' (use of visuals), 'write' (use of the abstract) and 'discuss' (use of consistent mathematical vocabulary). A variety of teaching strategies are used to ensure all pupils are able to achieve the learning objective.
- Each lesson begins with a 5 minute Times Table recall (Counting Recall in Year R-1) followed by a 5-minute arithmetic Fluency Recall (Year 1-6).
- Each lesson contains a 'guided practice' where pupils are guided through the work by the teacher. They approach this 'guided practice' collaboratively with a partner.
- We use consistent 'discussion' vocabulary, imagery and mathematical stem sentences which can be found in our 'Vocabulary and Imagery 2020' document to ensure that a model of consistent mathematical language is used and practiced.
- Pupils are able to choose from a developing, expected or greater depth level of learning during their independent activity in order to model, practice and improve the skills of reflectiveness and resilience.
- Maths resources are readily modelled with, used to support teaching and pupils are able to access resources during lessons in order to model, practice and improve the skill of resourcefulness

Special educational needs & disabilities (SEND)

Daily mathematics lessons are inclusive to pupils with special educational needs and disabilities. Where required, children's IEP's incorporate suitable objectives from the National Curriculum for Mathematics or Development Matters and teachers keep these in mind when planning work. These targets may be worked upon within the lesson as well as on a 1:1 basis outside the mathematics lesson. Within the daily mathematics lesson teachers have a responsibility to not only provide scaffolded activities to support children with SEND but also activities that provide sufficient challenge for



children who are high achievers. It is the teachers' responsibility to ensure that all children are challenged at a level appropriate to their ability.

Marking

- All work should be marked correct with a tick or incorrect with an arrow (during live marking).
- Pupils are to reattempt a question in a green pen to clearly show the impact that teacher/TA marking has had.
- Pupils may mark their own work in Green pen.
- Live marking is highly recommended for teachers and class TAs to ensure highest levels of progression throughout lesson.
- Learning objective to be ticked as to whether or not the objective was met.
- Learning objective Build/Draw/Write to be ticked and level of support to be circled.

Assessment

- Target Tracker is used in all year groups from the Early Years up to Year 6. Data is collected every half-term. Early Years Outcomes and learning objectives from the National Curriculum are highlighted based on a child: 'Working Towards', 'Mostly Achieved', 'Achieved' and 'Working at Greater Depth'.
- Using Target Tracker, children who are significantly behind in terms of attainment and/or progress will be highlighted for staff to diminish the difference.
- Marking See section
- SAT's These take place in Years 2 and 6 and should be analysed to inform planning.
- Fortnightly Rising Stars Arithmetic Tests in Year 1-6
- Termly Rising Stars Optional SATS in Year 1-6.

Maths Displays

This is Berrycoombe School's learning wall which appears in every class and used alongside the teaching of individual lessons.

Every classroom from Y2-6 will contain a times table display where an up to date assessment of individual times table knowledge is shown.

