



Bramley Vale Primary School

MATHS POLICY

13th May 2019

Minute No F81 – 18/19

(To be reviewed every 2 years)

Bramley Vale Maths Policy

Together Everyone Achieves More

Vision Statement

‘to create an excellent and challenging learning environment for the future through the promotion of creativity, high aspirations and perseverance’

‘to create a supportive, caring atmosphere of mutual respect, extending to the wider community’

Aims

Safe	to provide a safe, secure environment with equality for all.
Healthy	to promote healthy hearts and healthy minds.
Achieve	to provide an enjoyable education where children achieve and meet their full potential.
Responsibility	to instil responsibility for themselves, others and the wider world.
Enterprising	to develop learners who understand their future wellbeing and aspire to be the best they can be.
Diversity	To develop learners who accept, embrace & celebrate diversity in our ever-changing world.

Rationale

Mathematics teaches children how to make sense of the world around them through developing their ability and enabling them to: calculate, reason, solve problems and understand and appreciate relationships and pattern in their everyday lives.

Aims and Objectives

We aim 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.

Maths Curriculum Planning and teaching

Mathematics is a core subject in the National Curriculum; we use the national curriculum to implement the statutory requirements of the programme of study for Mathematics. All staff follow the Bramley Vale **calculation policy** when planning and delivering lessons.

Note: This policy is **currently in the process of being revised** and rewritten to include:

- A whole school approach to using the **bar method**.
- A more progressive build-up of **concrete, pictorial and abstract representations** to support teaching and learning.

The revised calculation policy will be in full operation by the **start of the 2019/20 academic year**.

The Reception class is part of the Early Years Foundation Stage. The children follow the Early Years Foundation Stage Curriculum. The children's work is related to the mathematics objectives set out within this document; these include numbers and shape, space and measures.

Teaching allocation per week at Key Stage 1 and 2 is a daily lesson timetabled for up to 60 minutes each (in some cases the lesson is slightly shorter). In addition, there is time for pupils to develop and apply their Mathematical skills in cross-curricular activities during other subjects.

Each class from Y1 upwards teaches a mental calculation **fluency lesson** each week. This lesson (1 hour) is designed to improve the mental calculation speed and fluency of pupils. Each pupil works towards a tailored target/objective (e.g. recall multiplication/division facts for the 4 times table) for a number of weeks until they have mastered the skill. At this point, they are given a new target by the teacher.

Mastery approach

The 2014 national curriculum for mathematics has been designed to raise standards in maths, with the aim that the large majority of pupils will achieve mastery of the subject.

We apply key principles to enable a large majority of pupils to master the subject:

- All pupils should become fluent in the fundamentals of mathematics, including through varied and frequent practice, so that pupils develop conceptual understanding and are able to recall and apply their knowledge rapidly and accurately to problems.
- The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. 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 rich and sophisticated problems before any acceleration through new content. Those pupils who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on

Teachers use the White Rose resources to ensure the mastery principles are planned for.

Assessment

Two types of assessment take place throughout the academic year: formative and summative.

Formative: These ongoing assessments are made daily. Through marking and questioning in class, teachers assess which children have met daily objectives. Planning is adjusted to provide provision for children not meeting objectives. Pupils may receive catch up time (during assemblies) to ensure gaps in understanding do not develop. Objectives met are highlighted on target tracker to collect evidence of the progress made.

Summative: Each half term, pupils are assessed using target tracker. The formative assessments are collated to generate a judgement about the attainment of each pupil. The judgements made show which step the children are working at. Once judgements have been made, intervention groups are organised to provide extra support or challenge for specific pupils. SATS are carried out by all children at the end of key stages 1 and 2.

Resources

Smaller resources are kept in each classroom. Other resources are kept on the shelves in the resources room. Jamie Grafton, the maths co-ordinator, is available to offer support to any staff that require it.

Homework

To develop and extend their techniques and strategies, children are asked to practice their maths skills at home. At Key Stage 1, children will be sent home occasional extra work, which is linked to what they have been learning in class. At Key Stage 2, children will be sent home maths homework at least once a fortnight.

How we cater for pupils who are more able

- Reasoning activities
- Problem solving challenges
- Challenging homework
- Friday morning optional revision sessions (Y6) where pupils can spend time working with the teacher on questions of their choice
- Intervention groups
- Daily planning identifies challenge for more able pupils

How we cater for pupils who have Special Educational Needs

- Differentiation of activities.
- One to one catch up interventions (children carry out work to fill gaps in their understanding outside of the allocated maths lesson time).
- Some SEN pupils have a support plan which lists particular maths targets. The children follow a special programme of activities to enable them to reach their support plan targets.

- Our statemented pupils are supported by SSEN staff who devise special learning programmes for these pupils.