Seaford Primary School

Mathematics Policy



Address: Wilkinson Way, Seaford, BN25 2JF Phone: 01323 893450 Email: office@seafordprimary.e-sussex.sch.uk Website: www.seafordprimary.e-sussex.sch.uk

Level of Delegation	Headteacher	Adopted date	November 2024
Last reviewed on	September 2023	Next review due	November 2025
Review frequency	Annually		
Statutory	No		
Reference			
Publication	School intranet		
Additional notes			

Contents

- 1. Introduction
- 2. Aims and Objectives
- 3. Mathematics Curriculum Planning
- 4. Times tables
- 5. Assessment and recording
- 6. Development and Management of Policies

1. Introduction

<u>Mathematics</u>

At Seaford Primary School we aim to inspire all pupils to develop a love of maths. We seek to equip the children with the tools to build confidence, resilience and enthusiasm and the desire to explore, question and embrace the mathematical world around them.

2. Aims and Objectives

At Seaford Primary School we aim to:

- promote enjoyment and enthusiasm for learning through practical activities, exploration and discussion
- develop confidence and competence in mathematical knowledge, concepts and skills
- have high expectations and set high standards
- encourage children to understand the importance of mathematics in everyday life
- make links between their everyday lives and the mathematics that they learn about
- help all children to develop a positive attitude towards mathematics

Teaching and Learning style

The school uses a variety of teaching and learning styles. Approaches need to be related to the topic itself and to the abilities and experience of the pupils. Lessons are divided between wholeclass and group-direct teaching, during which the children are encouraged to ask as well as answer mathematical questions.

All pupils will be offered a curriculum appropriate to their needs, and suitable learning opportunities for all children are matched to the challenge of the task. Lessons are made accessible to all children and where available Teaching Assistants are used to support the relevant children. Children who are on the Special needs register with a school based or class-based plan are given appropriate work aimed at their level. We aim to identify and support all children following the guidance as laid out in the East Sussex Dyslexia Policy. Our specialist HLTA is Kate Steer.

3. Mathematics curriculum planning

- <u>Long Term Planning</u> used in the school is taken from the National Curriculum in England: Mathematics Programmes of Study. We are also using the Power Maths White Rose scheme of work
- <u>Medium Term Plans</u> We are using the Power Maths White Rose schemes of work and unit blocks of supporting resources.
- <u>Short term Planning</u> takes the form of weekly plans which are found on the flipcharts and powerpoints. These give specific learning objectives for each lesson and details of how the lessons are to be taught.

During Learning Adventures where cross-curricular links are found, mathematics will be embedded in purposeful activities, with the children immersed in real purposes for using and exploring maths. For example, in year 4 the children explore roman numerals, or in year 3 the children learn to interpret and scale a recipe during their 'Caribbean' learning adventure.

Contribution of mathematics to teaching in other curriculum areas

English

Mathematics contributes significantly to the teaching of English in our school by actively promoting the skills of reading, writing, speaking and listening. For example, we encourage children to read and interpret problems in order to identify the mathematics involved. The children explain and present their work to others and model to the class during plenary sessions. Where it is relevant, teachers are also encouraged to teach specific vocabulary during spelling lessons. For example, looking at the word origins of shape names (pentagon is so called because pen is the Ancient Greek word for five).

Younger children enjoy stories and rhymes that rely on counting and sequencing. Older children encounter mathematical vocabulary, graphs and charts when using non-fiction texts.

Science

During science lessons, children are able to use and apply their data handling skills when creating tables and graphs of scientific measurements. Whole class discussion of data also highlights the importance of clear recording of information. Children are also able to use a wide range of measuring devices in a real-life context. Children are

required to read the scales on Newton meters, measuring cylinders, weighing scales and a variety of other instruments.

Computing

Children use and apply mathematics in a variety of ways when solving problems using computers or technology. Younger children use technology to communicate results with appropriate mathematical symbols. Older children use it to produce graphs and tables when explaining their results or when creating repeating patterns, such as tessellations. When working on control, children use standard and non-standard measures for distance and angle. They use simulations to identify patterns and relationships.

The Foundation Stage

We relate the mathematical aspects of the children's work to the Educational Programmes set out in the Statutory Framework for the Early Years Foundation Stage, which underpin the curriculum planning for children aged three to five. We give all the children ample opportunity to develop a strong grounding in number, pattern, shape and space through varied activities that allow them to enjoy, explore, practice and talk confidently about mathematics. To support this we use the Mastering Number Programme.

4. Times Tables

Our aim at Seaford Primary is that all our children, by the end of year 4, develop fluency and accuracy in all their times tables as per the national curriculum.

Knowledge, fluency and accuracy of the times tables will mean that our children are more confident and efficient at grasping new learning throughout their time at our school such as area, algebra, long multiplication and ratio.

Explicit times table teaching, of approximately 5-10 minutes per day, will begin in year 2 (Spring term, when the children have been exposed to multiplication and division) and run throughout the rest of the children's time at Seaford Primary. Reception and year 1 will be counting in 1s, 2s, 5s and 10s without the expectation of being able to chant and recall times tables facts. The times tables will be taught in the following order:

- 1 x tables
- 2 x tables
- 5 x tables
- 10 x tables
- 3 x tables
- 4 x tables
- 8 x tables
- 6 x tables
- 9 x tables 7 x tables
- 11 x tables
- 12 x tables

Teachers should provide the children with visual representation of number facts so that the children can identify meaning behind the facts, like follows.



From this, the majority of the teaching of tables should be rote learning and chanting, with questions related to the multiplication and division facts asked.

The counting stick will be used for most of this, but teachers may want to use songs or rhymes that they already use alongside the counting stick to help the children retain the key facts.

Children should, eventually, be able to answer in full when asked a question, so if asked "what is 3 x 5" they should be saying "three times five is fifteen".

From year 3, children are assessed weekly on the times tables of that week. Times Tables Rockstar's 'Sound Check' mode can support this.

5. Assessment and Recording

- <u>Short-term assessment</u> is mostly informal during class or group work and will be used to adjust our daily plans closely matched to the teaching objectives. The use of mini-whiteboards is prevalent in all our lessons to aid assessment.
- <u>Medium-term assessment</u> is used to measure progress against the performance descriptors. White Rose end of unit assessments are used to ascertain levels of understanding. These take place at the end of every unit of work from year 1 onwards.
- Long-term assessment is used to identify if children have retained knowledge over time. We use Testbase 3 times a year for this.

Resources

Each class is self-sufficient with mathematical equipment, resources and supporting materials to aid planning. There is a range of resources to support the teaching of mathematics across the school. All classrooms have a wide range of small apparatus to support pupils and staff in the teaching and learning of mathematics, these include number lines, hundred squares, rulers and practical apparatus such as Numicon and base 10. Each class has a working wall dedicated to Mathematics.

All teachers planning has to reflect the mastery and CPA approach. This is supported by Power Maths.

Monitoring and Review

Monitoring of the standards of children's work and the quality of teaching in mathematics is the responsibility of the Maths subject leaders and the senior management team. The senior leadership team and the Maths subject leaders regularly carry out triangulation, moderation, lesson observations and blinks. These involve scrutiny of planning, children's work and discussions with children.

The work of the subject leader also involves supporting colleagues in the teaching and planning of mathematics. The head teacher allocates management time to allow the subject leaders to plan, evaluate and assess maths work across the school.

We will monitor and review our policy annually.

Equality statement

"The governors and staff are committed to providing the full range of opportunities for all pupils, regardless of gender, disability, ethnicity, social, cultural or religious background. All pupils have access to the curriculum, and the right to a learning environment, which dispels ignorance, prejudice or stereotyping."