Mathematics Policy	
Responsible Post	Maths Leader
Responsible Committee	C&S
Review Schedule	3 Years
Review Date	February 2025
Next Review Due	February 2028
Changed	Yes

1 Aims

1.1 Mathematics teaches children how to make sense of the world around them through developing their ability to calculate reason and solve problems. It enables children to understand relationships and patterns in both number and space in their everyday lives.

1.2 The aims of teaching mathematics are:

- to promote enjoyment of learning through practical activity, exploration and discussion;
- to promote confidence and competence with numbers and the number system;
- to develop fluency with number – oral counting, reading numbers, writing numerals, calculation (addition, subtraction, multiplication and division), place value, counting in steps, calculation;
- to develop the ability to solve problems through decision-making and reasoning in a range of contexts;
- to develop a practical understanding of the ways in which information is gathered and presented;
- to explore features of shape and space, and develop measuring skills in a range of contexts;
- to understand the importance of mathematics in everyday life.

2 Teaching and learning styles

2.1 The school uses a variety of teaching and learning styles in mathematics to deepen children's understanding.
Our principal aim is to develop children's knowledge, skills and understanding of maths and to apply their knowledge in a variety of situations. During our Maths lessons we encourage children to ask as well as answer mathematical questions. Wherever possible, we encourage the children to apply their learning to everyday situations.
Children are encouraged to use a wide range of resources, such as Numicon, dienes, number lines, number squares, digit cards and manipulatives to support their work.
Children are taught how to delve deeper into the mathematics and represent problems in different ways. STEM sentences are used to support reasoning and understanding in mathematics.

ICT is used in mathematics lessons for modelling ideas and methods and practising skills.

2.2 In all classes there are different levels of attainment. We recognise this fact and provide suitable learning opportunities for all children by matching the challenge of the task to the attainment of the child. We achieve this through a range of strategies including a cut-away approach - through differentiated group work. Teaching Assistants are used to support children's learning, and to ensure that work is matched to the needs of individuals.

3 Mathematics curriculum planning

3.1 Mathematics is a core subject in the National Curriculum, and we use the National / Local Authority curriculum guidance as the basis for implementing the statutory requirements of the programme of study for mathematics.

3.2 We carry out the curriculum planning in mathematics in three phases (long-term, medium-term and short-term).

3.3 Our medium-term mathematics plans, which are adapted from our number programme and national curriculum guidance gives details of the phased teaching objectives for each unit of work, define what we teach. They ensure an appropriate balance and distribution of work across each term. These plans are kept on the school network and are reviewed by the subject leader. These are saved on the school network.

3.4 It is the class teacher who completes the short term plans for the teaching of mathematics. These weekly plans identify the Learning Intention (WALT – We are learning to…) and Learning Outcome (WILF What I'm Looking For…), differentiated tasks, the role of adults as well as specific activities for SEN and G&T children and give details of how the lessons are to be taught. The teaching assistants receive copies of these weekly plans. The class teacher keeps these individual plans and they are discussed on an informal basis.

4 The Early Years Foundation Stage

4.1 We teach using objectives stated in the Early Years Foundation Stage Early Learning Goals. Teachers address these requirements in a flexible way and by the end of the Foundation Stage, as part of the smooth transition to Key Stage 1; they develop regular and sustained mathematics sessions. We give all the children ample opportunity to develop their understanding of number, measurement, pattern, shape and space, through varied activities that allow them to enjoy, explore, practise and talk confidently about mathematics.

5 Contribution of mathematics to teaching in other curriculum areas

5.1 Personal, social and health education (PSHCE) and citizenship

Mathematics contributes to the teaching of PSHCE and citizenship. Mathematical investigation sometimes encourages cooperation and teamwork and can support independent study helping children to become increasingly responsible for their own learning. The group activities that children do within the classroom encourage them to work together and respect each other's views. Where possible children are presented with real-life situations in their mathematics work. Children are also encouraged to persevere with a task and 'have another go' when finding the activity challenging.

5.3 Spiritual, moral, social and cultural development

The teaching of mathematics supports the social development of our children through the way we expect them to work with each other in lessons. We group children so they have opportunities to work together, and we give them the chance to discuss their ideas and results.

6 Mathematics and ICT

6.1 Information and communication technology enhances the teaching of mathematics significantly. It offers ways of impacting on learning which are not possible with conventional methods. Teachers can use software to present information visually, dynamically and interactively, so that children understand concepts more quickly. Younger children use ICT to communicate results with appropriate mathematical symbols and play games linking to concepts in mathematics. Older children use it to produce graphs and tables when explaining their results, or when creating repeating patterns.

7 Mathematics and inclusion

7.1 At our school we teach mathematics to all children, whatever their ability and individual needs in a practical way to ensure they understand the concepts. Mathematics forms part of the school curriculum policy to provide a broad and balanced education to all children. Through our mathematics teaching we provide learning opportunities that enable all pupils to make good progress and achieve their potential. We strive hard to meet the needs of those pupils with special educational needs, those with disabilities, those with special gifts and talents and those learning English as an additional language, and we take all reasonable steps to achieve this. For further details see separate policies: Special Educational Needs; Disability Non-Discrimination; Gifted and Talented; English as an Additional Language (EAL).

7.2 When progress falls significantly outside the expected range, the child may have special educational needs. Our assessment process looks at a range of factors – classroom organisation, teaching materials, teaching style, and differentiation – so that we can take some additional or different action to enable the child to learn more effectively. Assessment against the National Curriculum allows us to consider each child's attainment and progress against expected levels. This ensures that our teaching is matched to the child's needs.

7.3 Intervention through SEN Support will lead to the creation of an Individual Education Plan (IEP) for children with special educational needs. The IEP may include, as appropriate, specific targets relating to mathematics.

7.4 We enable all pupils to have access to the full range of activities involved in learning mathematics. Where children are to participate in activities outside the classroom (a 'maths trail', for example) we carry out a risk assessment prior to the activity, to ensure that the activity is safe and appropriate for all pupils.

8 Assessment for learning

8.1 Teachers will assess children's work in mathematics from three aspects (long-term, medium-term and short-term). We use short-term assessments to help us adjust our daily plans. These short-term assessments are closely matched to the teaching objectives. Children may receive a different level of support/challenge in the next lesson and be re-grouped to ensure they are able to flourish and achieve.

8.2 We make medium-term assessments to measure progress against the key objectives, and to help us plan the next unit of work. We use pupil records of the level descriptions as the recording format for this, scrutiny of independent work and record individual attainment in class tracking files stored on the network.

8.3 We make long-term assessments towards the end of the school year, and we use these to assess progress against school and national targets. We can then set targets for the next school year and make a summary of each child's progress before discussing it with parents. We pass this information on to the next teacher at the end of the year. We use the national tests for children in Year 2. We also make annual assessments of children's progress measured against the National Curriculum expectations.

8.4 The teachers and subject leaders use pupil work books to assess individual progress. Assessments are made against expected level of achievement in mathematics in each year of the school. Teachers meet regularly to moderate individual work samples.

9 Resources

9.1 All classrooms have number lines, Numicon and a wide range of appropriate manipulatives. Calculators and a variety of equipment are available from the central storage area. The library contains a number of books to support children's individual research. A range of software is available to support work with the computers.

9.2 There should be a Maths display in every classroom. A number line / number track and Numicon should be displayed in every classroom.

10 Monitoring and review

10.1 Monitoring of the standards of children's work and the quality of teaching in mathematics is the responsibility of all teachers.
The work of the subject leader involves supporting colleagues in their teaching, being informed about current developments in the subject, and providing a strategic lead and direction for mathematics in the school. The subject leader tracks pupil progress through scrutinising class records, pupils books and pupil interviews, evaluating strengths and weaknesses in the subject annually, thus indicating areas for further improvement. The head teacher allocates PPA time to the subject leader so that s/he can review samples of children's work, conduct pupil interviews and undertake lesson observations of mathematics teaching across the school. A named member of the school's governing body is briefed to oversee the teaching of Maths. This governor meets regularly with the subject leader to review progress.

11 Training

- Teachers attend courses when appropriate.
- The Subject Leader attends the local Maths Managers Meetings on a termly basis.
- Moderation training for all teachers annually during SATs moderation.
- Information concerning planning, delivery and assessment of maths teaching within school is gained through regular monitoring and planned training opportunities for teachers and teaching assistants through observation / pupil interviews / peer evaluation / courses and working with mathematicians in other schools / local authority.
- The Subject Leader works with Solent Maths Hub to develop teaching and learning in mathematics and further enhance children's understanding.

This policy will be reviewed at least every three years.