

# **Mathematics Policy**

Date of Review:	October 2022
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Date of Approval:	December 2022
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Next Review Date:	December 2023

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#### 1. Our Mission

### 'A safe, happy learning environment where everyone is valued'

- The staff at Weobley Primary School are committed to working together to contribute to the healthy growth and development of all our children.
- We aim to create an atmosphere of care, trust and respect in which children feel nurtured, encouraged and valued and staff feel supported by one another.
- Through a stimulating and broad curriculum, we embrace the diversity of cultures, race and social backgrounds.
- We aim for each child to reach their full potential, to be confident and to develop a positive attitude towards their own learning.
- We will provide a wide range of learning opportunities for the children; encourage them to value their own achievements and to celebrate the success of others.
- Our high expectations for achievement include good behaviour, tolerance, cooperation and fairness.
- We welcome active involvement of parents and carers in the life of the school and recognise their vital role in laying the foundation of their children's educational development.
- This partnership is extended to the wider community, where strong, mutually beneficial links are valued.

#### 2. Our Intent

A pupil of Weobley Primary School will:

- develop greater understanding of mathematics and problem solving;
- develop enjoyment of the challenges which mathematics can pose;
- understand the importance of many aspects of mathematics in daily life.

## 3. Implement of the Curriculum

#### What does our mathematics curriculum look like?

Pupils will be taught in line with the National Curriculum 2014 and opportunities for teaching mathematics as part of a cross curricular approach will be encouraged where possible.

As a school, our teaching of mathematics is based on the Pearson Abacus Scheme of Work. This provides a structure which ensures that the curriculum is delivered in a clearly progressive way, encompassing aspects of mastery and spiral learning. Teachers, however, are encouraged to not be bound by the scheme and should deviate from it to fully embed principles when necessary, moving on only when they deem it appropriate. Supplementation of the scheme by use of other resources is encouraged.

The teaching and learning of mathematics will be varied and will be the most appropriate method to address the learning outcome of the lesson.

Children will be taught and will work:

- As a whole class
- In groups (sometimes differentiated by ability)
- In pairs or individually

### Time Allocation

Mathematics should be taught for 182 hours over the course of a year. To ensure mathematics is taught in the best possible way, class teachers are given flexibility as to how they allocate this time throughout the school year. There is, however, an expectation that maths will be taught, learnt or practised for some time every day. In general, teachers teach maths in 1 hour lessons each day.

#### Cross-Curricular Opportunities

Mathematics is included in many other subjects across the curriculum, particularly science, ICT, design and technology and music. However, it could also be incorporated into any of the other subjects as the teachers see fit. This approach is to be encouraged, especially in 'maths for life' situations such as cookery and construction.

### Extra-Curricular Opportunities

As a valuable life skill, mathematics will be incorporated into a range of extra-curricular activities including, but not limited to:

- measuring skills when baking;
- money skills when carrying out charitable events;
- data handling and statistics when presenting sports news;
- time management.

#### *Inclusion and Equal Opportunities*

Activities are carefully planned by the class teacher and will be differentiated where appropriate for children with SEN and equally the more-able and Gifted and Talented children. All resources/materials have been reviewed with equal opportunities in mind, e.g. race, gender, ethnicity. Learning experiences in mathematics will be available to every child, regardless of race, gender, class or ability. Pupils will be encouraged to value social and cultural diversity through their experiences in the subject.

We recognise that in all classes, children have a wide range of ability, and so we seek to provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this in a variety of ways which include, but are not limited to:

- setting tasks which are open-ended and can have a variety of responses;
- setting tasks of increasing difficulty;
- grouping children by ability and setting different tasks for each group;
- grouping children in mixed ability groups;
- providing resources of different complexity, depending on the ability of the child;
- using classroom assistants to support the work of individuals or groups of children.

#### Resources

Planning resources will be provided by the Pearson Abacus Scheme of Work.

Additional online resources provided by the school include:

- Sumdog;
- TT Rockstars;
- Emile;
- My Maths.

All of these online platforms (including Abacus Active Learn) have student logins so that the children can access the resources at home as well as in school.

Practical resources will be stored in the maths cupboards and drawers in the library and will be maintained in a 'ready – to-use' state.

Some classes will have their own supply of resources which will be used frequently, including, but not limited to:

base 10 apparatus;

- Numicon;
- place value counters;
- number lines;
- counting resources such as counters or cubes;
- 2D and 3D shapes;
- place value cards and grids;
- rulers and protractors.

### **Health and Safety**

Risks associated with mathematics teaching are minimal if equipment is maintained in a good condition. Broken and damaged rulers and protractors will be disposed of appropriately and replaced.

Supervision over the use of pairs of compasses should be adequate, and children should be educated in their safe use.

### **Further Information**

Further detail of the mathematics curriculum can be found in the following three documents:

- National Curriculum for Mathematics 2014
- Subject Map Mathematics
- Year Group Subject Map Mathematics

#### 4. Impact

Our mathematics curriculum facilitates sequential learning and long-term progression of knowledge and skills. Teaching and learning methods provide regular opportunities to recap acquired knowledge through high quality questioning, discussion, modelling, and explaining to aid retrieval at the beginning and end of a lesson unit. This will enable all children to alter their long-term memory and know more, remember more and do more as mathematicians.

### Assessment

Each lesson in mathematics gives the children the opportunity to self-assess their confidence in the lesson's objective. Self-assessments are compared with the teacher assessments and a decision is made as to whether the whole class, a small group or individuals need further support in this area. This additional support is either delivered by the class teacher or teaching assistant.

In addition, half termly assessments are included in the Abacus Scheme of Work and grades are recorded using the online platform. This enables teachers and the leadership team to monitor progress at an individual level or as a whole class or school. These assessments are only to be used when the class teacher considers the children's to have completed the appropriate units, taking into consideration extra time needed to fully master a skill. They are used as evidence for a child's grade, but do not give a specific grade per se. They are valuable tools to inform future planning.

Years 2 and 6 will complete SATs assessments in the subject of mathematics.

Years 3, 4 and 5 will complete QCA tests in the summer term in the subject of mathematics, informing planning of future lessons.

Year 4 will complete the statutory Multiplication Tables Check.

## 5. Role of the Subject Leader

#### **Monitoring**

Monitoring is carried out by the Subject Leader, supported by the Head of School and Lead Teacher in the following ways:

Informal discussions with staff and pupils

- Work sampling
- Classroom observations
- Assessment folder observations
- Monitoring of the Abacus online assessment recording tool
- Monitoring of Testbase Assessments
- Monitoring of Number Club progress
- Monitoring of TT Rock Stars data

# <u>Training</u>

Any staff training needs identified through monitoring will be organised by the Subject Leader in conjunction with the Head of School and Lead teacher.

## **Evaluation and Review**

This policy along with the Subject Map and Year Group Subject Map are reviewed annually by the Subject Leader. A Subject Action Plan is also produced each Autumn term, at the same time, the previous year's action plan is reviewed.