

# Mathematics Policy

## January 2023

### Rationale

To function in society we need to communicate mathematically.

**'Mathematics, a universal language that enables understanding of the world, is an integral part of the curriculum. Beyond the study of numbers, shapes and patterns, it also provides important tools for work in fields such as engineering, physics, architecture, medicine and business. It nurtures the development of a logical and methodical mindset, as well helping to inculcate focus and the ability to solve all manner of problems. Attainment in the subject is also the key to opening new doors to further study and employment.'**

**DFE: May 2021**

### Aims

Children should:

- acquire the knowledge, skills and understanding to have a mastery of mathematics as identified in the National Curriculum
- develop essential elements of enjoyment, enthusiasm, confidence and competence
- use this mastery knowledge to apply, discuss and reason their understanding of Maths
- achieve their full potential

### Curriculum

- Pupils follow the requirements of the National Curriculum.
- The key objectives for each year group are clearly defined in the Medium Term plan adapted from the National Curriculum
- Within the broad and balanced school curriculum Maths is included in other subject areas wherever possible or appropriate.
- In the Foundation Stage the curriculum is guided by the Early Years Foundations Stage Profile.

### Lessons

Years 1-6 have a daily Maths lesson, which can consist of a 3-part structure

- 1) oral and mental starter
- 2) Fluency/Skills Application
- 3) Reasoning

Daily lessons last for:            in Key Stage 1 – approximately 45 minutes  
   in Key Stage 2 – approximately 1 hour

Following baseline assessment in Foundation Stage each class may spend time looking at key skills before moving onto 'Number of the Week. This encompasses a daily lesson which looks at individual numbers and related mathematical facts including shapes. Lessons could be taught through practical experience, songs and stories.

## **Organisation**

Pupils have opportunities to work independently, in pairs and in large and small groups.

## **Teaching Methods**

These methods are used at all levels-

- discussion between teacher and pupil(s) and pupils themselves
- teachers direct, instruct, demonstrate, explain, illustrate, question discuss, and consolidate
- teachers work with small groups/individuals

## **Activities**

These include:

- consolidation and practice of fundamental skills and routines
- problem-solving, including the application of Maths to every- day situations
- daily mental tasks
- practical and investigational tasks

Tasks are differentiated according to ability.

## **Whole School Approach**

A structured whole-school approach ensures progression in practical, mental and written tasks. Please refer to the School Calculation Policy.

## **Planning Cycle**

Planning is carried out in 3 stages-

- *Long term planning* is based on the yearly teaching programmes set out in the National Curriculum
- *Medium term planning* is created for each half term based on the long term plan. Teachers can use 'White Rose' to inform these decisions and create a sequence of progressive and challenging lessons. Each objective as found in the National Curriculum is covered at least once by the end of the year.
- *Short term planning* is carried out weekly. These plans include learning objectives for the mental starter, fluency activity and reasoning session, resources, differentiation, key vocabulary and questions. Plans are monitored by the SLT and the Maths co-ordinator.

## **Equal Opportunities and Inclusion**

The school's Equal Opportunities policy applies to the teaching of Maths. Children are given learning opportunities that are matched to their needs and abilities. All children are taught Maths as part of a broad and balanced curriculum and they are given the opportunity to experience success and achieve as high a standard as possible.

## **Resources**

Resources are stored in classrooms

- every class has some basic equipment appropriate to the age and ability range of the pupils
- some equipment is shared within key stages
- some equipment is stored in each class and a list is given to each teacher
- Equipment is regularly updated.
- The Internet can also be used to provide ideas on resources, planning and ICT activities.

## **Assessment**

### ***Informal:***

Individual pupil achievements are monitored continuously through teachers' discussion with children, marking and observations. These can be recorded on Balance and Evidence Me, which allows teachers to make judgements as to whether a child fully understands a concept.

### ***Formal:***

- Foundation Stage – continuous use of Evidence Me
- Each term children from Year 1 to 6 will complete an assessment task from NFER on their learning, which will enable a comparison to be made to national expectations
- Years 2 and 6 – Statutory National Tests.
- Year 4 – Multiplication Assessments

Analysis of attainment and progress (using data collected using both methods mentioned) will be used by staff to enhance learning.

## **Reporting**

Information about performance and progress are reported to parents at parent's evenings and in the annual written report. At the end of Key Stages 1 and 2 each pupil's level of attainment is also reported to parents.

## **Marking**

Refer to the school Marking Policy.

## **Home Learning**

Home learning is based on what is appropriate for the age and ability of the children. A variety of online platforms are used including My Maths, TT Rockstars and Century.

## **Information for Parents**

The Mathematics Long Term Plan is available on the school website. Each stage of the school also provides additional ideas of how parents can support learning, again these can be found on the school website.

## **Role of Co-ordinator**

- to report developments in Maths teaching
- to prepare policy document
- to inform staff of in-service training
- to obtain equipment and maintain resources
- to liaise with key stages
- to observe teaching and monitor plans

## **Health and Safety**

Health and safety regulations apply in Maths lessons as in all other subjects. Pupils are taught to use materials and equipment in a way that ensures the health and safety of themselves and others. Cheshire LEA Health and Safety documentation is adopted by this school.