

 Mathematics Policy

 Including EYFS

Compiled by: Shaheda Khanom Reviewed by: Rena Begum

Reviewed on: 01st March 2021 Date of next review: 01st March 2022

**Rationale**

Mathematics is a method of communication. It is a specific language through which ideas are explored explained, and developed, and one by which relationships can be described, patterns identified and hypothesis made and tested.

It is a way of organizing and managing information gathered practically in everyday situations; in the use of measures and spatial measurement.

Mathematics includes the development of numeracy skills; a proficiency that involves confidence and competence with numbers and measures. It requires an understanding of the number system, a repertoire of computational skills and an inclination and ability to solve number problems in a variety of contexts. Numeracy also demands practical understanding of the ways in which information is gathered by counting and measuring, and is presented in graphs, diagrams, charts and tables.

**Aims**

* To develop an enthusiasm for and fascination with mathematics.
* To equip pupils with a powerful mathematical tool that provides:

i) a precise means of communication using numbers, symbols and shapes;

ii) a universal language used to explain, predict and tackle problems.

* To increase the confidence of each pupil in mathematics to enable them to apply the knowledge and skills with assurance.

**Objectives**

* To enable all pupils to achieve their potential according to their ages and abilities.
* To provide training and support that will develop an expert staff that provides a balanced and broad curriculum suited to the development of appropriate knowledge and concepts.
* To ensure management systems and structures provide support for the aims and objectives for mathematics.
* To provide appropriate resources to ensure a rich and diverse curriculum.
* To ensure teaching and learning styles are varied and suited to the pupils being taught and the areas being studied.
* To ensure full coverage of the National Curriculum in mathematics in all year groups.

**Teaching Guidelines**

Mathematics in the first place is a practical subject, which develops the concepts of shape, space, number, pattern and problem solving. In the early Foundation years children have activities that develop these concepts and prepare the children for further mathematical studies when they are ready.

From Reception to Y6 the school follows the White Rose Scheme of work for mathematics through the principles and practice NCTEM programme of Mastery Mathematic which provides detailed guidance for the implementation of mathematics in the school, and targets to be achieved by each year group by the end of each school year.

Mathematics is taught as a discrete subject but is also integrated into the other subject areas. Mathematics is integrated into the planning of all subjects and applied across the whole curriculum. In this way pupils learn the place of mathematics in the world around them.

Teachers use a range of learning and teaching styles, incorporating individual, pair, class and group work into lessons. Children are taught through discussion, practical activity, games, investigations, problem solving, recording and practice, consolidation, and through the use of IT. The teaching style and methods are varied according to the subject matter and the pupils being taught.

Pupils develop mathematics through using a variety of methods: mental strategies, practical activity, written calculations, problem solving, discussion, and application of basic skills.

Pupils of different levels of ability are catered for through the differentiation of activities provided for them. The pupils work in ability groups that are flexible and allow for transition between the groups as pupils improve their skills.

Mathematics homework is given according to the school’s homework policy Upper key stage 2 use the Genius Math portal to access home learning to support class work.

**Planning and organisation**

Curriculum planning is managed in three phases: -

* **Long Term Planning**

This is based on the White Rose and Nctem which details what is to be taught over the year and provides teaching guidelines and overall objectives for each year group for the whole year.

* **Medium Term Planning**

This organises the teaching of mathematics into termly or half-termly sections. The planning is more detailed and the objectives are more specific in nature. This planning is developed by the teachers, who respond to the needs of their pupils. It also ensures a balanced distribution of work is undertaken across each term.

* **Short Term Planning**

This details the mathematics curriculum over the week. Lessons are planned in detail and specific class objectives are set, in through white Rose. Individual learning goals are also set for each pupil.

The teachers collaborate on the planning of mathematics to ensure parity in provision and to share expertise. Maths skills that can be embedded into other areas of the school curriculum. This will ensure Math skills are reinforced and embedded into everyday learning.

**Monitoring and Assessment**

Mathematics provision is monitored by the mathematics curriculum team who meet every fortnight to undertake this. They examine pupils’ work and monitors classroom practice. They also ensure all members of staff have appropriate training to enable them to deliver the curriculum to the expected standard of excellence. The team leader meets with the Head teacher every half term to review mathematics provision in the school.

Pupils are assessed externally in mathematics at the end of Y6, by means of National Curriculum assessment.

Teachers assess pupils continuously on a less formal basis; these assessments inform the teacher of the pupil’s current achievements and guide the teacher in planning the pupil’s future learning.

There is no legal requirement for pupils to be measured against the external National Curriculum levels until the end of a Key Stage. However, all pupils are assessed according to their curriculum level in mathematics at the end of each half term, in order for attainment and achievement to be monitored. Targets are set for each pupil for the end of each year and for pupils’ end of Key Stage attainment.

**Special Educational Needs (SEN) and Additional Educational Needs (AEN)**

All classes consist of pupils of varying abilities and with varying needs, and our classroom practice ensures that most of these needs can be met within the classroom organisation.

Pupils with Special Educational Needs are placed upon the Special Educational Needs register, which records the support given, and provides each child with an individual education plan (IEP). More details about this can be found in the school’s Special Educational Needs policy.

We aim to provide for all children so that they achieve as highly as they can in Maths according to their individual abilities. We will identify which pupils or groups of pupils are under-achieving and take steps to improve their attainment. Gifted children will be identified and suitable learning challenges provided.

Under the Equality Act 2010 we have a duty not to discriminate against people on the basis of their age, disability, gender, gender identity, pregnancy or maternity, race, religion or belief and sexual orientation.

This policy has been equality impact assessed and we believe that it is in line with the Equality Act 2010 as it is fair, it does not prioritise or disadvantage any pupil and it helps to promote equality at this school.

**Monitoring the Effectiveness of the Policy**

Annually (or when the need arises) the effectiveness of this policy will be reviewed by the mathematics curriculum team, the Head teacher and the Deputy.

**Mathematics Policy - Initial Equality Impact Assessment**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Policy Title** | **The aim(s) of this policy** | **Existing policy (✓)** | **New/Proposed Policy (✓)** | **Updated Policy (✓)** |
| Mathematics | To outline the rationale, principles, content, and delivery of the Mathematics Curriculum which is used throughout the whole school. |  |  | ✓ |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **This policy affects or is likely to affect the following members of the school community (✓)** | **Pupils** | **School Personnel** | **Parents/carers** | **Governors** | **School Volunteers** | **School Visitors** | **Wider School Community** |
| **✓** |  |  |  |  |  |  |
| **Question** | **Equality Groups** | **Conclusion** |
| **Does or could this policy have a negative impact on any of the following?** | **Age** | **Disability** | **Gender** | **Gender identity** | **Pregnancy or maternity** | **Race** | **Religion or belief** | **Sexual orientation** | **Undertake a full EIA if the answer is ‘yes’ or ‘not sure’** |
| **Y** | **N** | **NS** | **Y** | **N** | **NS** | **Y** | **N** | **NS** | **Y** | **N** | **NS** | **Y** | **N** | **NS** | **Y** | **N** | **NS** | **Y** | **N** | **NS** | **Y** | **N** | **NS** | **Yes** | **No** |
|  | **✓** |  |  | **✓** |  |  | **✓** |  |  | **✓** |  |  | **✓** |  |  | **✓** |  |  | **✓** |  |  | **✓** |  |  | **✓** |
| **Does or could this policy help promote equality for any of the following?** | **Age** | **Disability** | **Gender** | **Gender identity** | **Pregnancy or maternity** | **Race** | **Religion or belief** | **Sexual orientation** | **Undertake a full EIA if the answer is ‘no’ or ‘not sure’** |
| **Y** | **N** | **NS** | **Y** | **N** | **NS** | **Y** | **N** | **NS** | **Y** | **N** | **NS** | **Y** | **N** | **NS** | **Y** | **N** | **NS** | **Y** | **N** | **NS** | **Y** | **N** | **NS** | **Yes** | **No** |
| **✓** |  |  | **✓** |  |  | **✓** |  |  | **✓** |  |  | **✓** |  |  | **✓** |  |  | **✓** |  |  | **✓** |  |  | **✓** |  |
| **Does data collected from the equality groups have a positive impact on this policy?** | **Age** | **Disability** | **Gender** | **Gender identity** | **Pregnancy or maternity** | **Race** | **Religion or belief** | **Sexual orientation** | **Undertake a full EIA if the answer is ‘no’ or ‘not sure’** |
| **Y** | **N** | **NS** | **Y** | **N** | **NS** | **Y** | **N** | **NS** | **Y** | **N** | **NS** | **Y** | **N** | **NS** | **Y** | **N** | **NS** | **Y** | **N** | **NS** | **Y** | **N** | **NS** | **Yes** | **No** |
| **✓** |  |  | **✓** |  |  | **✓** |  |  | **✓** |  |  | **✓** |  |  | **✓** |  |  | **✓** |  |  | **✓** |  |  | **✓** |  |
| **Conclusion** | **We have come to the conclusion that after undertaking an initial equality impact assessment that a full assessment is not required.** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Preliminary EIA completed by** | **Date** | **Preliminary EIA approved by**  | **Date** |
| **Rena Begum** | **01st August 2021** | **Rena Begum** | **01st August 2022** |