

## Mathematics Policy

Date	Review Date	Maths Curriculum Team Leader
Sept 2019	Sept 2020	Shaheda Khanom

### 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 National Curriculum for mathematics through the principles and practice of the National Numeracy Strategy (NNS) and a new programme of Mastery Mathematics 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.

## Planning and organisation

Curriculum planning is managed in three phases:-

- **Long Term Planning**

This is based on the NNS 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 accordance with the NNS. 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.

## **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 Y2 and the end of Y6, by means of National Curriculum assessment. These are the summative "snapshot" assessments of their attainment at a specific time required by law.

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.

## Equality Impact Assessment

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.

<b>Head teacher:</b>	Rena Begum	<b>Date:</b>	01/09/2019
<b>Proprietor:</b>	Nadeem Rehman	<b>Date:</b>	01/09/2019

## 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												
<b>Does or could this policy have a negative impact on any of the following?</b>	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		
		✓			✓				✓				✓				✓				✓				✓			
<b>Does or could this policy help promote equality for any of the following?</b>	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		
	✓			✓			✓			✓			✓			✓			✓			✓			✓			✓
<b>Does data collected from the equality groups have a positive impact on this policy?</b>	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		
	✓			✓			✓			✓			✓			✓			✓			✓			✓			✓
<b>Conclusion</b>	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	Sept 19	Nadeem Rehman	Sept 2019