



Maharishi School

CONSCIOUSNESS-BASED EDUCATION

Primary Phase Maths Policy

2024 – 2025

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Signed by:

Headteacher

Lisa Edwards

Date Sept 24

Chair of Governors

Ian Birnbaum

Date Sept 24

Intent

“The innermost value of life is deep silence. From it arise the various areas of activity, tiny to tremendous activity. All these areas of life are integrated and perfectly coherent when the inner depth of consciousness, which is pure consciousness, shakes hands with the outer dynamism of great activity. This is brought about by Transcendental Meditation.” Maharishi Mahesh Yogi

“The reservoir of energy and intelligence is at the source of thought. It’s obvious that whatever energy and intelligence is displayed through our action, it all comes through our thinking - thinking is the basis of action - and whatever energy and intelligence is displayed in thinking originates from the source of thought. The secret of success is in handling the source of all energy.” Maharishi Mahesh Yogi

At Maharishi School we strive for each child to reach the full potential of their creativity and their intelligence. We do this by practising Transcendental Meditation and Word of Wisdom and by following the path of Consciousness-based Education, applying Maharishi’s principles of teaching.

- **Intelligence** can be enlivened and applied through these principles: -
 - link inner values with outer values in the pursuit of knowledge for a purpose.
 - develop each student’s ability to discern finer and finer parts in the context of bigger and bigger wholes.
 - help pupils to look for and recognise universal patterns.
 - adapt teaching to take account of the individual character of each pupil’s own intelligence.

- **Knowledge** can be enlivened, structured and organised through these principles: -
 - teach knowledge in the context of human purpose
 - develop knowledge holistically by connecting everything that is taught to the Self of each pupil

- **Experience** can be enlivened, extended and deepened through these principles: -

- o integrate knowledge with experience in the development of Complete Knowledge
- o extend each pupil's own experience in relation to knowledge taught and in conformity with their own nature through appropriate applications and practical work
- o involve all the senses and organs of action in constructing learning experiences – where it is safe and practical.

- **Expression** can be enlivened and enhanced through these principles:-

- o encourage pupil expression at the start of each learning cycle to stimulate the desire for growth
- o consolidate learning through the expression of knowledge and skill encourage the expression of fullness of life, through a wide range of expressive modes.

All areas of mathematics have their ultimate basis in the unified field and sequentially unfold from there. Transcendental Meditation, the Maharishi Technology of the Unified Field, provides the direct experience of this field of pure intelligence, which brings fulfilment to mathematics and to all areas of life. The Maharishi Technology of the Unified Field: Mathematics and Transcendental Meditation, p. 62–63

Mathematics is a creative and highly interconnected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject. (National Curriculum 2014)

Aims

At the Maharishi School, we follow a Mastery approach with mathematics and White Rose Maths scheme of work. The intent of our mathematics curriculum is to provide children with a foundation for understanding number, reasoning, thinking logically and problem solving with resilience so that they are fully prepared for the future. It is essential that these keystones of mathematics are embedded throughout all strands of the National Curriculum.

By adopting a Mastery approach, it is also intended that all children, regardless of their starting point, will maximise their academic achievement and leave Maharishi School with an appreciation and enthusiasm for maths, resulting in a lifelong positive relationship with number.

The National Curriculum for mathematics aims to ensure that all pupils:

- become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

We aim to deliver a high quality maths curriculum that is both challenging and enjoyable, while accessible to all. We want children to make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. We intend for our pupils to be able to link and apply their mathematical knowledge to science and other subjects across the curriculum. We aim to develop mathematical minds with the knowledge that maths is essential in everyday life, and for the children to be confident in applying their skills to tackle problems. We aim to

fully develop independent learners with inquisitive minds who have secure mathematical foundations and an interest in self-improvement.

Implementation

1. Deepening understanding of mathematical concepts through the use of a Concrete-Pictorial-Abstract approach (CPA).

At Maharishi School, our implementation is developed through secure understanding of the curriculum and subject area. In regards to long term planning, we follow the National Curriculum (2014). For short term and weekly planning, we follow the White Rose Maths Scheme of Work, which is supported by our school's mathematics calculation policy. Lessons are engaging and follow a cycle of planning, to ensure that we can evidence progress over short and long periods of time. Maths lessons are designed with a concrete, pictorial and abstract (CPA) approach, providing our pupils with the scaffolding required to access the learning at all levels.

Concrete is the "doing" stage. During this stage, students use concrete objects to model problems.

Pictorial is the "seeing" stage. Here, visual representations of concrete objects are used to model problems. This stage encourages children to make a mental connection between the physical objects and the abstract pictures, diagrams or models that represent the objects from the problem.

Abstract is the "symbolic" stage, where children use abstract symbols to model problems. The abstract stage involves the teacher introducing abstract concepts (for example, mathematical symbols). Children are introduced to the concept using numbers, notation, and mathematical symbols (for example, $+$, $-$, \times , \div) to indicate addition, multiplication or division.

In each classroom, there is a range of resources readily available for all pupils to access each maths lesson. To implement our intent, we ensure that our children

are invested in their learning and are making a positive contribution to their lessons.

2. Fluency, reasoning and problem solving

The basics of mathematical fluency – as defined by the KS1/KS2 National Curriculum for maths – involve knowing key mathematical facts and being able to recall them quickly and accurately. Mathematical fluency means being able to apply the same skill to multiple contexts, and being able to choose the most appropriate method for a particular task. At Maharishi School, fluency in maths lessons means we teach the content using a range of representations, to ensure that all pupils understand and have sufficient time to practise what is taught. These various representations are shown in our calculation policies.

Mathematical reasoning is the process of using logical thinking to solve problems and then be able to explain and describe the solution. It is the bridge between fluency and problem solving.

Problem solving in maths is finding a way to apply the knowledge and skills you have to answer unfamiliar types of problems. At Maharishi School, we aim to provide children with various problems, challenges and puzzles that will test their mathematical knowledge and their ability to reason and apply their skills.

3. Typical lesson structure

Lessons are engaging and follow a cycle of planning, as laid out by the White Rose Maths Scheme, to ensure that we can evidence progress over short and long periods of time. Maths lessons are designed with a concrete, pictorial and abstract (CPA) approach, as described above, providing our pupils with the scaffolding required to access the learning at all levels. We place a large emphasis on pupil engagement and design lessons which involve all pupils using questioning and modelling at the centre of every lesson.

EYFS

In the reception year, the teaching of mathematics is done through small steps with adult led activities and continuous provision. The focus is building up numbers slowly so children gain a deeper understanding of them and how they are composed – these are the building blocks to excel mathematically. Children are supported in gaining an understanding of the counting principles; The one to one principle, The stable-order principle, The cardinal principle, The abstraction principle and The order-irrelevance principle. By providing frequent and varied opportunities to apply this understanding, children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. In addition, the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. At Maharishi School it is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes. This enables them to have a firm foundation as they progress into key stage one.

Inclusion and Equal Opportunities

At Maharishi School we are committed to providing all children with an equal entitlement to our history lessons, activities and opportunities regardless of race, gender, culture or class. See Equality Information & Objectives Statement <https://maharishischool.com/about-us/policies-and-procedures>

Maths is for all abilities

At Maharishi School we recognise that in all classes, children have a wide range of abilities. The study of maths is planned and adapted to provide pupils with a suitable range of activities, challenge and support which is appropriate to their individual abilities and needs. Curriculum planning ensures that all pupils have an equal opportunity to take part in every aspect of the maths curriculum. In the planning and organisation of enrichment activities, specific needs of individuals are taken into consideration to ensure that all pupils can benefit.

Health and Safety

It is the responsibility of the class teacher to ensure that risks are assessed prior to, and during, maths lessons. The class teacher is to inform any additional support staff of any potential risks or hazards to be aware of during a maths lesson. Pupils are also to be made aware of potential risks and hazards.

Impact

A child will have mastered a mathematical skill when he or she can easily transfer their knowledge and understanding of various representations to choose the most efficient method of solving a problem whilst being able to explain and describe their reasoning; they can independently apply the concept to new problems and situations.

Children will demonstrate quick recall of facts and procedures. This includes the recollection of the times tables. They will also show the flexibility and fluidity to move between different contexts and representations of mathematics. The ability to recognise relationships and make connections in mathematics mirrors an important concept in Consciousness-based Interdisciplinary Studies.

Assessment

Assessment at the Maharishi School is an invaluable part of the teaching and learning sequence. Formative assessment within every lesson helps teachers to identify the children who need more support to achieve the intended outcome and who are ready for greater stretch and challenge through further questioning or additional activities. Children who are not making the required progress are identified on class action plans, and are given extra support through booster sessions and support in class in order to meet our INTENT of developing all pupils academically. In order to support teacher judgments, children are assessed at the end of each block, as well as the end of each half term using White Rose Maths assessments.

Monitoring and review

The coordination and planning of the maths curriculum are the responsibility of the subject leader, who also:

- provides leadership in maths to secure high quality teaching and learning,
- undertakes monitoring of standards in maths and uses this to inform the Maths Subject Action Plan,
- plays a key role in motivation, supporting and modelling good practice for all staff, including the organisation and presentation of staff meetings,
- takes a lead in policy development and review,
- liaises with outside agencies and attends subject specific courses and,
- reports to the Senior Leadership team on maths achievement and provision.