

Primary Science Policy



Approved by:

Mr. Naveed Iqbal

Date of review:

October 2023

Next review date:

October 2024

GEMS Metropole Science Policy

Statement of Intent

Discover curiosity. Discover change. Discover confidence. #discoverleadership

At Metropole, we provide a purposeful curriculum which ignites curiosity and a passion for learning. Students develop their social conscience through gaining a greater understanding of how they can impact change in the wider world. Through this we develop world class learners and leaders to prepare them for opportunities beyond GEMS Metropole.

Aims:

Our curriculum aims to ensure all pupils:

- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future

Legislation and guidance

This policy reflects the requirements of the [National Curriculum programmes of study](#)

Teaching and Learning

At GEMS Metropole School our science lessons are of a practical, investigative nature. Children are allowed time to explore which further develops the children's natural inquisitive nature. Exploring leads to open ended discussions about science in real life contexts and helps the children to understand the world they are living in. Within their lessons, children learn to ask scientific questions and discover how science affects their future. This forms part of Enquiry Based Learning approach. In our Science lessons, our children follow the EBL approach where they progress through the different stages on enquiry; ask, explore, create, share and reflect. Alongside this the children will use technology, specifically merge edu, to enhance their learning experience and bring aspects of Science to life in the classroom.

Our lessons are based upon the National Curriculum of England and have been amended to suit the needs of the UAE, ensuring where possible learning is linked to real life examples from both the UAE and the UK. Within their science lessons, children cover both knowledge and working scientifically skills. 'Working scientifically' specifies the understanding of the nature, processes and methods of science.

Science is not a stand-alone lesson but forms part of 'Discovery time' alongside Topic. This allows teachers the flexibility to deliver the curriculum as they deem best fit, ensuring that the relevant objectives are covered in a timely manner. As Science lends itself to being practical subject, not all lessons require written work. However, evidence of such lessons needs to be shown in the books, in the form photographs, reflections from the children or a QR code to the evidence.

The subject has a long-term plan which is used to inform the medium-term plan which details the objectives that will be covered within each topic of work. On a weekly basis, teachers are expected to create a weekly plan to explain in more detail what each lesson will look like.

See our EYFS policy for information on how our early years curriculum is delivered.

Assessment

Assessment for Science will both formative and summative. Class teachers will use Go 4 Schools to report and track students' attainment and progress throughout the year as well as identifying areas for development. This will also show the coverage of the Science Curriculum across the year. At the end of every academic year children from Year 3 to 6 will sit a Science Progress Test which is an electronic assessment to assess the children on their knowledge and scientific enquiry skills. The test will cover the units they have been taught throughout the year and may also cover learning from previous academic years.

Inclusion

Teachers set high expectations for all pupils. They will use appropriate assessment to set ambitious targets and plan challenging work for all groups, including:

- More able pupils
- Identified Gifted and Talented students

- Pupils with low prior attainment
- Pupils from disadvantaged backgrounds
- Pupils with SEN
- Pupils with English as an additional language (EAL)

Teachers will plan lessons so that pupils with a special education need or people of determination can study every National Curriculum subject, wherever possible, and ensure that there are no barriers to every pupil achieving.

Teachers will also take account of the needs of pupils whose first language is not English. Lessons will be planned so that teaching opportunities help pupils to develop their English, and to support pupils to take part in all subjects.

Further information can be found in our statement of equality information and objectives, and in our SEN policy and information report.

Roles and Responsibilities

Role of the Science Leaders:

- Have overall responsibility for Science across the primary school
- Ensure that the Science outcomes are mapped across the school curriculum
- Monitor and evaluate the impact of Science
- Provide some guidance on resources and planning for Science

Role of Class Teachers:

- Plan and deliver high quality, engaging Science lessons to all pupils
- Measure the impact of Science through observation and questioning of students
- Report outcome to parents in the end of year report
- Assess understanding of Science through AfL
- Engage students with Science through purposeful and relevant topics
- Use of Phoenix Tracker to assess the progress of students
- Ensure all scientific objectives are covered and science is taught regularly. Discovery time allows teachers to use their judgement on the weekly structure of their lessons

Monitoring arrangements

Senior Leaders and the Local Authority Board monitor coverage of National Curriculum subjects through:

- Termly meetings
- A planned two-year review cycle
- Planning scrutiny

Heads of Primary Science monitor the way their subject is taught throughout the school by:

- Completing learning walks
- Monitoring planning
- Reviewing medium term plans
- Book looks

Heads of Primary Science also have responsibility for monitoring the way in which resources are stored and managed.

This policy will be reviewed every year by the deputy head of primary and the heads of primary science. At every review, the policy will be shared with the full governing board.