

Science Curriculum Statement 2022

1. Curriculum intent

The Science curriculum at Gearies aims to promote learning that sparks children's curiosity and excitement.

When the children enter EYFS, Science takes place every day through one of the seven areas of learning: 'Chronology'. Children are encouraged to ask questions about where they live and how environments may vary from one another. Teachers in EYFS also encourage children to make observations, boosting curiosity and excitement for their learning.

The national curriculum states that the principal focus for children in KS1 is to 'explore and observe phenomena, looking more closely at the natural and humanly constructed world around them'. At Gearies, our children are taught to be curious and ask questions as part of their learning. Children are expected to use scientific vocabulary which is evident here at Gearies; whether this be in books or displays in classrooms.

The national curriculum focus for lower KS2 is 'children should broaden their scientific views of the world around them'. At Gearies this approach is embedded through working scientifically and teaching children types of scientific enquiry to help deepen their understanding. Furthermore, in upper KS2, the aim of the national curriculum is to 'develop a deeper understanding of a wide range of scientific ideas'. At Gearies, children are given more scope to become independent learners, and therefore solidly grasping key concepts.

Our local community is very ethnically diverse. This stresses the importance of ensuring our Science curriculum is accessible to all children irrespective of their background. Science at Gearies ensures children are exposed to key vocabulary as part of their learning, and also ensures learning is as hands on as possible.

Our core school values are realising the potential of every child; tolerance and respecting others and also providing an environment that will support effective learning. Through the teaching of Science, these core values are upheld and are part of weekly lessons.

Science at Gearies supports a broad and balanced curriculum that promotes excitement and wonder for children through opportunities arising in other subjects. For example, in year 3 children learn about plants, to link their learning children are also given the opportunity to write instructions as part of their English lessons. This is just one example of how Science is part of a broad and balanced curriculum.

The Science curriculum ensures it is grounded in the school values and the ethos of Gearies. We help the children acquire knowledge and skills, develop their enquiring minds and most importantly children understand the world in which they live.

2. Curriculum enhancement

To support Science learning in school and extend children's curiosity many trips are planned around the theme of Science. This may be to a local park, a museum or even the zoo.

3. The curriculum implementation

Science is taught once a week by class teachers, for an hour in both KS1 and KS2. In EYFS, Science is provided as ongoing provision.

4. Impact of curriculum on our children

The Science curriculum at Gearies, promotes Science as fun, practical and very hands on. This means children are very confident at carrying out investigations. The high profile of exhibitions and after school clubs generates further excitement for Science.

5. Programme of study

Each year group have specific topics they cover.

Year 1 - plants, animals including humans, everyday materials, seasonal changes

Year 2 - living things and habitats, plants, animals including humans, use of everyday materials

Year 3 - plants, animals including humans, rocks, light, forces and magnets

Year 4 - living things and habitats, animals including humans, states of matter, sound, electricity

Year 5 - living things and habitats, animals including humans, properties and changing materials, earth and space, forces

Year 6 - living things and habitats, animals including humans, evolution, light, electricity

6. Assessment arrangements

Assessments are carried out every half term, to ensure children are making the required progress. Teacher judgement is based upon several aspects, such as work in children's books, end of unit tests and also moderation of work within year groups. This ensures teacher judgement is evidence based and reliable. Summative assessments are carried out in February and July each year to allow the teachers to check attainment to ensure that the children are making good progress in this subject. This is conducted using our Threshold procedures. Teacher judgement is based on the children's learning over the term in lessons and performances.