

# Science at Grasvenor Avenue Infant School



## Science

A high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena.

*National curriculum 2014*

### During Foundation Stage

Understanding the world involves guiding children to make sense of their physical world and their community through opportunities to explore, question, observe and find out about the world around them. They develop scientific knowledge through daily play based activities.

Our science curriculum in the foundation stage is taught through the main area of 'Understanding of the world' and the strands 'Technology, The World and People and Communities'.

### During Key Stage 1

Our curriculum in KS1 provides pupils with hands on engaging lessons, covering both knowledge objectives and developing a range of 'working scientifically' skills.

Every lesson has learning objectives; a knowledge and a skill. The skills developed over the key stage are;

- observing changes over a period of time
- pattern seeking
- grouping and classifying
- carrying out simple tests
- asking and answering questions

### Planning

- The school's curriculum map shows the units to be covered each term
- There is a medium term plan for each unit of work and an assessment resource.
- Plans are annotated and adapted to show how less able and those new to English will access the content.
- More able children are planned for so that they can deepen knowledge and skills.

### Teaching

- Flexible groupings are used during lessons e.g. ability and mixed ability groups, paired work, guided and independent work and whole class work.
- Opportunities to develop core literacy skills are exploited throughout lessons as well as the learning of new vocabulary
- A range of resources are used to enhance learning such as pictures, watching videos and reading information texts.

<p><b>Marking and feedback</b></p> <p>Work should be marked according to the school marking policy by using</p> <ul style="list-style-type: none"> <li>• Peer and self-assessment</li> <li>• Oral feedback</li> <li>• Written feedback</li> </ul>	<ul style="list-style-type: none"> <li>• Relevant vocabulary is explicitly taught, evident in the classroom and used in discussion and reasoning.</li> <li>• Children receive science lesson every week and have a Science book to record work. Evernote is also used to record evidence.</li> </ul>
<p><b>Assessment</b></p> <p><b>Formative:</b></p> <ul style="list-style-type: none"> <li>• AFL is used within each lesson to establish next steps for pupils.</li> <li>• Mini ‘quizzes’ take place regularly to ensure content is being learnt</li> </ul> <p><b>Summative:</b></p> <ul style="list-style-type: none"> <li>• Completed termly against year group objectives</li> </ul> <p><b>EYFS:</b></p> <ul style="list-style-type: none"> <li>• Teachers and key workers make observations regarding the pupils’ development in this subject.</li> </ul>	<p><b>Resourcing and display</b></p> <p><b>Working wall:</b></p> <ul style="list-style-type: none"> <li>• Display is kept up to date and relevant to class themes, displaying key vocabulary and concepts that are being taught in Science.</li> </ul> <p><b>Resources:</b></p> <ul style="list-style-type: none"> <li>• Resources are stored in topic boxes, the science box in the sharing cupboards.</li> <li>• Teachers are encouraged to add any new resources and display materials that they have created to the topic box</li> </ul>
<p><b>Monitoring</b></p> <p>Monitoring is undertaken by subject leader and SLT during the school year. This will include</p> <ul style="list-style-type: none"> <li>• learning walks during Science lessons</li> <li>• scrutiny of Science books</li> <li>• discussions with pupils about what they have learnt</li> </ul>	