

# Science

"The important thing is to never stop questioning."

Albert Einstein.

We are all part of God's vine and are rooted in His rich soil. We are nurtured and supported so that we may grow and spread out into the world to love and to serve.

## CURRICULUM STATEMENT

Our intention is to enable all pupils at Goring Church of England Primary School to:

- embed and truly grasp scientific knowledge through systematic and open ended scientific enquiry that is creatively and rigorously planned, executed and recorded
- understand and embed scientific concepts and vocabulary.

When children's curiosity is ignited, scientific concepts can truly be understood. Creative, knowledgeable and hands-on teaching provides children with the ability to rationally explain scientific concepts and opens children's minds to the world around them.





## SCIENCE CURRICULUM

At Goring Church of England Primary School, the science curriculum is taught through timetabled lessons across all key stages using Science Bug, which is a spiralled curriculum, meaning that children build on their learning as they move throughout the school.

During lessons the children develop:

- a passion for science and its application in past, present and future technologies
- confidence and competence while planning and carrying out scientific investigations
- excellent scientific knowledge and understanding, which is demonstrated in written and verbal explanations, solving challenging problems and reporting scientific findings
- the ability to undertake practical work in a variety of contexts
- the ability to think independently and raise questions about working scientifically and the knowledge and skills that it brings
- high levels of originality, imagination and innovation in the application of skills.

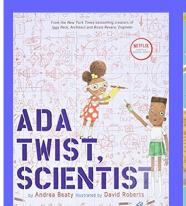




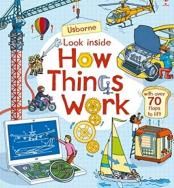
### USING LITERATURE IN THE CLASSROOM

A range of rich and varied texts are used to supplement the science curriculum. The school also has a reading spine that includes a range of carefully selected texts for each age-group which the children are encouraged to read for pleasure. These texts enable our children to consolidate and extend their scientific knowledge and understanding.

#### STORIES THAT SUPPLEMENT THE SCIENCE CURRICULUM









#### WHAT DOES SCIENCE LOOK LIKE IN THE CLASSROOM?

A range of teaching strategies are used within science lessons. Activities are planned according to the different levels of pupils' skills and previous knowledge. Activities and tasks may include:

- whole-class or small-group discussions
- imaginative writing
- practical experiments or fieldwork
- role-play and drama
- games and interpretation tasks
- watching relevant video-clips and using technology to do research
- having special visitors and workshops where appropriate.



Outside of science, other activities will consolidate and develop their learning further, for instance:

- representing their class in one of the school's pupil groups
- participating in school trips
- carrying out specific tasks for the school community
- participating in Collective Worship.

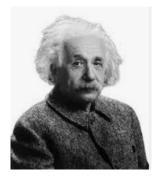
#### **ENRICHMENT OPPORTUNITIES**

Visits from carefully chosen speakers, charities and groups support and compliment aspects of the science curriculum. In addition, a range of trips and workshops take place across the year groups to help cement knowledge and put science into a real-world context.



#### CONTRIBUTING TO THE WIDER WORLD

Pupils learn of the contribution scientists have made in helping us to understand and shape the world we live in. Learning about scientists also inspires pupils to be the next generation of scientific thinkers through developing resilient and creative problem solvers.







## ASSESSMENT, MONITORING & MEASURING IMPACT

#### MARKING AND FEEDBACK

Pupils are given regular and meaningful written and verbal feedback. When written feedback is given, pupils are given time to respond so that they are clear about their next steps.

ASSESSMENT FOR LEARNING OPPORTUNITIES Teachers make use of differentiated questioning, mini- and end-of-lesson plenaries to provide informal assessment opportunities to gauge individual and whole class understanding.

BOOK MONITORING The science co-ordinator looks at science books regularly to ensure the curriculum is taught consistently across the school. Feedback is given to the teaching staff during staff meetings.

#### **DEEP DIVES**

The science co-ordinator completes regular deep dives. These provide an opportunity to observe lessons, talk to children, review planning and teaching and review strengths and areas for improvement across the school. After each deep dive, a report is written and shared with staff and governors. Any actions that are required are then implemented in a timely fashion.