

# Science

## INTENT

At Acre Heads, our vision is to ignite pupils' curiosity and encourage them to explore and discover the world around them. We engage pupils with practical, purposeful, and challenging science activities so they develop a deeper understanding of the world we live in.

We want our pupils to:

- build on their natural curiosity and enable them to understand and care for the world in which they live;
- ask questions and develop the scientific skills to help them to answer questions about the world around them;
- work in an investigative way and communicate their findings in a variety of ways;
- use equipment safely and sensibly;
- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics;
- be equipped with the scientific knowledge and vocabulary required to understand the uses and implications of science, today and for the future.

## SCIENCE LONG TERM PLAN:

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	The Natural World		Different Environments		Staying Healthy	
Year 1	Everyday Materials	Seasons	Plants	Seasons	Animals, including Humans	Seasons
Year 2	How Plants Grow	Animals & Their Habitats	Use of Different Materials	Animals - Habitats & Food.	Lifecycles & Staying Healthy	Lifecycles: Humans
Year 3	Plants	Light	Magnets and Forces	Friction	Rocks and Soils	The Human Body
Year 4	Electrical Circuits		Sound	Changing materials	Human Digestion	Animals, including humans
Year 5	Materials		Life Cycles	Growth & Reproduction	The Solar System	Forces
Year 6	Electrical Circuits	Light & Vision	Classifying Animals	Evolution	SATS	Human Body

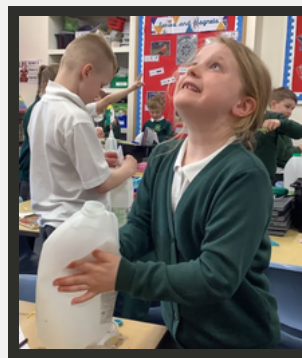
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## IMPLEMENTATION: WHAT DOES SCIENCE LOOK LIKE AT ACRE HEADS?

- Lesson 1** Each new science unit begins with an introduction and an assessment of the knowledge and understanding the children already have of the new topic. This may be in the form of a Kahoot quiz or group discussion. The class will then consider the next steps in their learning and ask questions about the new topic.
- Unit lessons** Science lessons will vary from unit to unit but will always be as hands on as possible; whether the children are working with materials, electrical circuits or investigating plants and animals. During each unit of work, the children will design and conduct at least one experiment to answer a scientific question and develop their skills in working scientifically.
- Summary** Each unit of work will encourage the children to ask and answer questions about science and the world around them. They will develop their scientific knowledge and vocabulary as well as their practical scientific skills.

### SCIENCE WEEK

During the spring term, all of our children get the chance to participate in special science workshops, designed to enthuse them about all areas of science and inspire them to consider STEM careers. Parents and volunteers from local companies are invited to work with the children. In 2022, our successful Science Week saw children working with fantastic visitors from local companies such as Arco, British Aerospace and Smith & Nephew.



### CLASSROOM ENVIRONMENT

Our classroom displays are designed to be working walls, which build as the unit progresses. Key vocabulary is displayed alongside engaging images. Whenever possible and appropriate, scientific learning takes place outside. We also have a wide range of science resources that are brought into the classroom so that the children can engage with science in a practical way.

### PARENTAL LINKS

The knowledge organiser for each theme is available on our school website under the relevant year group curriculum page. The implementation of Seesaw across the school means that parents are able to engage directly with their child's learning journey.

**Crest Home Learning :** <https://collectionslibrary.crestawards.org/superstar-home-learning/63241423>  
Packed with ideas for practical science activities to do at home on this website.

### ASSESSMENT AND IMPACT

Throughout the unit, teachers make formative assessment judgements as pupils learn new concepts and ideas. Quizzes are used to help embed substantive knowledge within the long-term memory.