



Curriculum Statement for Science



Igniting Curiosity and Discovery through Investigations and Practical Learning

At Red Oaks, we believe that science is a gateway to curiosity, creativity, and critical thinking. Our science curriculum is designed to nurture every child's natural inquisitiveness and transform it into confident, hands-on learning. We aim to show children that science is not just a subject—it's a thrilling adventure that helps them understand the world and their place within it..

Intent

Our intent is to:

- Inspire children to ask questions, explore, and investigate the world around them.
- Develop a strong foundation in the three main areas of science: **Biology, Chemistry, and Physics.**
- Encourage children to think deeply, work collaboratively, and celebrate their discoveries.
- Promote a lifelong love of learning through engaging, practical experiences.
- Provide opportunities for children to see science as a pathway to future careers in STEM fields.

We believe that every child can be a scientist at heart, and our curriculum is designed to help them realise that potential.

Implementation

Science at Red Oaks is taught through a wide range of exciting and purposeful topics. From investigating life cycles and growing plants in our garden, to building circuits and exploring forces that launch rockets into space, our lessons are packed with practical experiments, outdoor exploration, and real-world connections.

Children learn through:

- Hands-on investigations and experiments
- Collaborative learning and discussion
- Use of outdoor spaces and local environments
- Cross-curricular links to deepen understanding

We also enrich our science curriculum with special events and opportunities, including:

- The **Red Oaks Science Fair**, where pupils showcase their scientific creations
- A visit to the **Royal International Air Tattoo**, where selected pupils experience aviation and military operations, meet professionals, and explore interactive STEM exhibits like the RAF Experience

We regularly share **home experiment ideas and science-based reading** through our school newsletter to encourage learning beyond the classroom.

Impact

Through our science curriculum, children at Red Oaks:

- Develop a secure understanding of scientific concepts across Biology, Chemistry, and Physics.
- Build resilience and confidence through practical learning and problem-solving.
- Learn to work collaboratively and respectfully, sharing ideas and evaluating outcomes.
- See science as relevant, exciting, and full of possibilities for the future.
- Are inspired to consider careers in science, engineering, and technology.

Above all, our pupils leave Red Oaks with inquisitive minds, a strong foundation in scientific thinking, and a lifelong love of discovery.

"Each unit includes a dedicated scientist contact, giving children the opportunity to email questions and share their discoveries directly with a real expert."

 **Professor Bublebunce** professorbumblebunceou@yahoo.com

 **Professor Von Strudel-Hammer** professorvonstrudelhammeruov@yahoo.com

 **Professor Nobella Boomrocket** professornboomrocketicl@yahoo.com

Biology  **Chemistry**  **Physics** 

	<i>Autumn 1</i>	<i>Autumn 2</i>	<i>Spring 1</i>	<i>Spring 2</i>	<i>Summer 1</i>	<i>Summer 2</i>
Reception - Understanding the world	Aliens in Space – link to magnets	Observational drawings – link to the weather	Contrasting environments – link to states of matter	Understand some important processes and changes in the natural world	Observational drawings – understand the seasons and changing states of matter	Body parts. Floating and sinking. Understand changes in the natural world
Year 1	Everyday materials	Seasonal changes – revisited termly	Animals including humans		Plants	
Year 2	Uses of everyday materials	Animals including humans		Plants	Living things and their habitats	
Year 3	Animals including humans	Rocks	Forces	Plants		Light

Year 4	Animals including humans	Living things and their habitats	Sound		Electricity	States of matter
Year 5	Living things and their habitats Animals including humans	Earth and Space	Properties and changing materials		Forces	
Year 6	Living things and their habitats	Animals including humans	Evolution and inheritance	Electricity	Light	

Useful links

[STEM Learning – Home Learning Support](#)

- Offers **free, curriculum-linked resources** for all key stages.
- Includes **videos, experiments, and activities** created by subject experts.
- Features the **Discover STEM** collection with short videos and interactive ideas.
- Great for exploring **Biology, Chemistry, Physics**, and careers in STEM.

[Primary Science Teaching Trust – Science Fun at Home](#)

- Provides **simple, practical science activities** using everyday materials.
- Activities are **open-ended**, adaptable for ages 5–12, and linked to follow-up tasks.
- Covers topics like **plants, forces, light, materials, and space**.
- Ideal for families looking for **hands-on learning** and outdoor exploration.

[National Geographic Kids – Help with Homework](#)

- Packed with **fact files, quizzes, and videos** on science, nature, and geography.
- Offers **curriculum-aligned resources** and downloadable activities.
- Designed to be **fun and engaging**, making science feel like an adventure.
- Suitable for children aged **7–12**, with a focus on **real-world science**.