Cedar Mount Academy
BRIGHT FUTURES EDUCATIONAL TRUST

Science

Subject leader: Miss. L Handley

Curriculum Intent:

"Science knows no country, because knowledge belongs to humanity, and is the torch which illuminates the world." Louis Pasteur

At Cedar Mount Academy, our science curriculum is built on the foundation of powerful knowledge. We aim to give all students access to the core ideas and disciplinary thinking that underpin how scientists understand the world. Our goal is to help every pupil build a deep, durable schema of scientific knowledge that they can apply with confidence and precision.

We believe that science is not just about curiosity - it is about equipping students with the intellectual tools to make sense of the world. Through clear, explicit instruction and carefully sequenced content, we ensure that pupils are not left to discover ideas unaided but are guided through well-designed instructional journeys.

Our curriculum values knowledge and evidence. Students learn to ask meaningful scientific questions, interpret data, identify misconceptions, and use models and explanations rooted in scientific principles. We encourage them to think hard, practise deliberately, and retrieve and apply knowledge over time.

While scientific attainment and engagement are important, we also focus on building scientific literacy, self-belief, and a sense of purpose. By the time they leave Cedar Mount, our students should not only have mastered key concepts but also recognise the value of science in society and their own lives - whatever their future path.

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What resources can my child access for additional support?

- **BBC Bitesize** – www.bbcbitesize.com
- **Seneca Learning** – www.senecalearning.com
- **Microsoft Teams** – where teachers upload revision resources and lesson materials
- **BromCom** – for homework and enrichment links shared by the department
- **Knowledge organisers and Revision Guides** – provided for each unit of work

What enrichment opportunities are available and how do they support learning?

We offer a variety of science enrichment experiences to broaden students' horizons and connect classroom learning to real-world science.

- **Science Week** and themed STEM challenges
- **Educational visits** to science museums and workplaces
- **Guest speakers** from STEM industries and academia
- **Practical investigations** beyond the core curriculum
- **Virtual experiences** and digital STEM resources

These activities help students see the relevance of science to society, develop wider awareness of careers, and build cultural capital.

What careers can Science lead to?

Studying science can open the door to a wide range of careers, including but not limited to:

- Doctor / Nurse / Midwife / Surgeon

- Engineer (civil, electrical, mechanical, software)
- Electrician / Technician / Laboratory Assistant
- Radiologist / Physiotherapist / Sports Scientist
- Teacher / Science Communicator / Researcher
- Software Developer / Web Developer
- Veterinary Medicine / Food Technologist

Science is a gateway subject, and a strong foundation in science can support any career where analytical thinking, problem-solving, or technical understanding is valued.

Year 7 Curriculum Plan

Term	Topic
Term	C1 Safety & Skills C2 React & Rearrange B1 Living Organisms P1 Forces
Term 2	B2 Reproduction in Plants & Animals P2 Energy C3 Substances & Solutions

Term 3	C3 Substances & Solutions P3 Motion B3 Essential Ecology

Year 8 Curriculum Plan

Term	**Topic**
Term 1	B1 Organisation C1 The Periodic Table P1 Electricity & Magnetism
Term 2	C2 Earth Science B2 Hormones P2 Light & Sound
Term 3	B3 Genetics & Evolution P3 Waves C3 Carbon Chemistry

Year 9 Curriculum Plan

Term	**Topic**
Term	C1.1-C1.2 Elements & The Periodic Table P1.1-P1.2 Energy & Motion B1 Botany
Term 2	P2 Nuclear Radiation C2.1 Chemistry of the Earth's Resources P3 Electromagnetism

Term 3	C2.2 Chemistry of the Earth's Resources B3 Organ Systems C3 Chemical Reactions B3 Fighting Disease

Year 10 Curriculum Plan

Term	**Topic**
Term 1	Cell Biology Atomic Structure & The Periodic Table Energy Organisation
Term 2	Structure & Bonding Electricity Infection & Response Quantitative Chemistry
Term 3	Atomic Structure Bioenergetics Chemical Changes Energy Changes Particle Model

Year 11 Curriculum Plan

Term	**Topic**
Term 1	Forces Part 1 Homeostasis & Response Rates & Extents of Chemical Reactions Forces Part 2 Ecology Organic & Chemical Analysis

Term 2	Waves Inheritance, Genetics & Evolution Atmosphere Using Resources Electricity & Magnetism