Millthorpe School

"The important thing is not to stop questioning. Curiosity has its own reason for existence."

Albert Einstein

SCIENCE

KS3 SUBJECTS ON A PAGE

OUR AIMS AND INTENTIONS

Our curriculum aims to enable all students to understand the science they see in the world around them; from understanding their own bodies to being able to understand the science behind some of the major global issues. We encourage students to be curious, to question and to make links between the scientific concepts that they are taught.

CURRICULUM KNOWLEDGE

The KS3 Curriculum in Science allows students full access to the National Curriculum. Students will study:

BIOLOGY Cells, Human Body, Nutrition and Health, Gas Exchange, Reproduction, Photosynthesis, Respiration, Ecosystems & Inheritance.

CHEMISTRY Particle Model, Atoms Elements and Compounds, Chemical Reactions, Periodic Table, Materials, Earth & Atmosphere.

PHYSICS Energy, Motion, Forces, Pressure, Waves, Electricity, Electromagnetism, Matter, and Space.

SUBJECT SPECIFIC SKILLS

All National Curriculum skills (working scientifically) are covered throughout our KS3 topics. Pupils plan, carry out and evaluate their practical work on a regular basis.

IMPLEMENTATION

- The Science KS3 unit overviews are written and regularly reviewed by subject staff.
- Lesson resources are shared on the M drive and are added to and amended by staff in faculty meeting time.
- The KS3 curriculum is carefully constructed to build on the knowledge and skills built in the KS2 Science curriculum.
- Half termly assessments provide updates on progress and skills and are used by staff to fill in any gaps in learning.
- Formal feedback is given at least once per half term and identifies strengths and areas for development and includes a comment on progress after each KAP.

INTENDED IMPACT

- The KS3 Curriculum in Science allows students access to the full National Curriculum.
- Content is interleaved to ensure it is embedded in pupils' long-term memory. Topics are linked from year to year so that pupils see the build of knowledge and increasing complexity throughout KS3.
- Pupils will be comfortable discussing scientific concepts using accurate scientific terminology.

SCIENCE IMPLEMENTATION OF THE WIDER MILLTHORPE CURRICULUM:

RESPECTFUL	RESPONSIBLE	READY
■ Engage positively with problem solving activities. ■ Completing practical work safely – using trial and error. ■ Providing well planned peer assessment to support the learning of others.	■ Aiming high in Science ATL. ■ Aspiring to the 'gold/ thinking harder challenges' in lessons. ■ Engaging positively with assessments to identify next steps, using R for reflection time for personal improvement.	■ Exposure to new careers and language. ■ Links to famous scientists and scientific works (Origin of Species, PrincipiaMathematica). ■ Employability skills – problem solving, application, etc.