

Curriculum Implementation – Science

Key Stage 4

Key Concepts
Taught



Biology

- Cell Biology
- Photosynthesis
- Moving and Changing Materials
- Health
- Coordination and Control
- Genetics
- Variation and Evolution
- Ecology

Chemistry

- Atomic Structure
- Bonding
- Chemical Changes
- Chemical Quantities
- Energy Changes
- Rates of Reaction
- Hydrocarbons
- Chemical Analysis
- The Atmosphere
- Sustainable Development

Physics

- Particles
- Energy
- Electricity
- Atomic Structure
- Forces
- Waves
- Electromagnetism
- Space





How You Receive Feedback



- Feedback will be provided through regular marking of exercise books and work on Google Classroom, as well as summative end of term exams

How do Lessons Link to Key Concepts



- The lessons are sequenced to teach the key concepts as outlined above.
- The curriculum is designed to revisit the key ideas and develop them when they are returned to.
- Links are also made between the subjects.

How we get Support with our Lessons



- Support in lessons will be primarily from the teacher.
- In certain cases, students with additional needs may have assistant teachers supporting in the class or working with them directly.





**Retrieval Practice
Opportunities /
Supporting Ways
to Help us
Remember**



- Activities will be built into lessons.
- It will also be explained how the lesson being taught fits into the wider curriculum.

**Opportunities for
Literacy**



- There are many opportunities in Science lessons for literacy including reading, summarising texts, using different media and the introduction and reinforcement of key words.

**Opportunities for
Numeracy**



- Students will analyse and present data in graph and tables.
- As examples they will also calculate means, percentage change, make conversions of units and use standard form.

**Opportunities for
Oracy**



- Students will be encouraged to develop explanations to scientific questions.
- There will be opportunities provided for students to debate science issues.





**Opportunities for
Character
Education**



- Throughout the course students will be asked to consider ethical and moral questions for example relating to health and sustainability.

**Opportunities for
SMSC**



- Students will have opportunities to learn about healthy living and the influence science has on the world.

**Opportunities for
Assessing
Learning**



- Ongoing through questioning and formative and summative assessment.

