

## 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

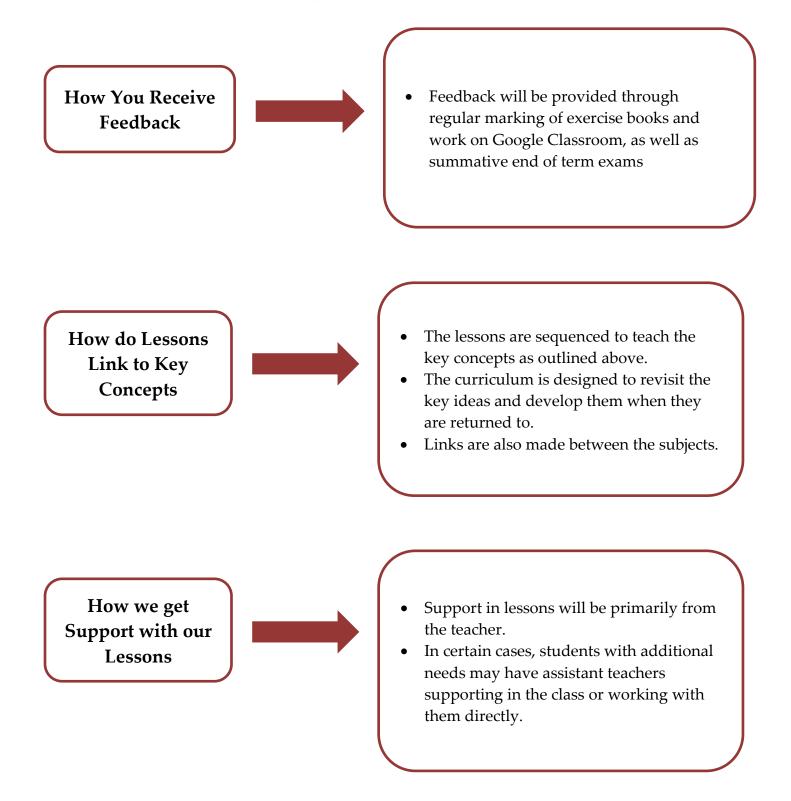
- Atomic Structure
- Bonding
- Chemical Changes
- Chemical Quantities
- Energy Changes
- Rates of Reaction
- Hydrocarbons
- Chemical Analysis
- The Atmosphere
- Sustainable Development

## Physics

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



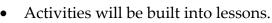








Retrieval Practice Opportunities / Supporting Ways to Help us Remember



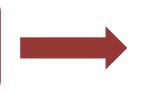
 It will also be explained how the lesson being taught fits into the wider curriculum.

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.

