Curriculum Implementation

Key Stage 2

Pupils should; develop scientific knowledge and conceptual understanding, develop understanding of the nature, processes and methods of science through different types of science enquiries, be equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.

Pupils should be able to describe processes and key characteristics in common language, but they should also use technical terminology. They should also apply their mathematical knowledge to their understanding of science.

'Working scientifically' specifies the understanding of the nature, processes and methods of science for each year group. These types of scientific enquiry should include: observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing (controlled investigations); and researching using secondary sources.

Year 7

Term 1

- Cells
- Particles
- Forces
- Reproduction

Cultural Exposure: STEM Challenges

Term 2

- Atoms, elements and compounds
- Space
- Interdependence

Cultural Exposure: Science Week 2024: Time!

Term 3

- Mixtures
- Energy Transfers
- Electric Circuits

Cultural Exposure: A series of careers based STEM challenges.

Assessment

Formative: Students are given a wide range of tasks in lessons that enable students and their teachers to check their understanding.

Summative: End of topic tests, termly interleaving tests.

Year 8

Term 1

- Tissues and organs
- Acids and alkalis
- Movement and pressure
- Respiration and photosynthesis

Cultural Exposure: STEM Challenges

Term 2

- Changing substances
- Magnetism
- Life diversity
- Earth Systems

Cultural Exposure: Science Week 2024: Time!

Term 3

- Electric Circuits
- Nutrition
- Light

Cultural Exposure: A series of careers based STEM challenges.

Assessment

Formative: Students are given a wide range of tasks in lessons that enable students and their teachers to check their understanding.

Summative: End of topic tests, termly interleaving tests.

Year 9

Term 1

- Growth and differentiation
- The periodic table
- Acceleration
- Human interaction

Cultural Exposure: STEM Challenges

Term 2

- Introduction to quantitative chemistry
- Heating
- Genetics

Cultural Exposure: Science Week 2024: Time!

Term 3

- Using resources
- Sound and waves
- Home electricity

Cultural Exposure: A series of careers based STEM challenges.

Assessment

Formative: Students are given a wide range of tasks in lessons that enable students and their teachers to check their understanding.

Summative: End of topic tests, termly interleaving tests.

Year 10

Term 1

- The digestive system
- Structure and bonding
- Matter
- Circulation and respiration

Cultural Exposure: STEM Challenges

Term 2

- Extraction of metals
- Energy conservation
- Plants and material cycling
- Quantitative Chemistry
- Movement

Cultural Exposure: Science Week 2024: Time!

Term 3

- Health and disease
- Energy Changes
- Electric circuits and energy
- Radioactivity
- Ecology

Cultural Exposure: A series of careers based STEM challenges.

Assessment

Formative: Students are given a wide range of tasks in lessons that enable students and their teachers to check their understanding.

Summative: End of topic tests, termly interleaving tests. Mocks Exams

Year 11

Term 1

- Feedback and control
- Carbon chemistry
- Electromagnetic radiation
- Controlling reproduction
- Controlling reactions

Cultural Exposure: STEM Challenges

Term 2

Force fields

Controlling nature

Our atmosphere

Cultural Exposure: Science Week 2020: Time!

Term 3

Cultural Exposure:

Assessment

Formative: Students are given a wide range of tasks in lessons that enable students and their teachers to check their understanding.

Summative: End of topic tests, full Paper 1 at Xmas and Paper 1&2 Easter.