

SCIENCE CURRICULUM GUIDE 2016

Year 8 Autumn

The course is delivered by two teachers who deliver two separate units alongside each other. All the units are assessed at a mid-point and at the end of the unit so that students can get a measure of how they are progressing against the National Curriculum levels.

The units are as follows:

Biology 3 Life and living processes

Smoking and Drugs Senses Inheritance Behaviour Variation DNA Natural Selection Artificial Selection

Physics 3 Energy

Sound
Sound waves
Sound in solids, liquids and gases
Ultrasonic sound
Hearing
Light
Mirrors
Refraction
Total internal reflection
Colour

Homework

Students can expect to be set one piece of homework per week by each of their science teachers. The quantity & style of the homework is likely to suit the ability of the science set that they are in. Activities might include

- a set of questions to improve or check understanding of work covered in class
- an extended research activity on a topic covered in class.
- writing up on an experiment performed in the laboratory
- learning key definitions for a short test

Year 8 Spring

The course is delivered by two teachers who deliver two separate units alongside each other. All the units are assessed at a mid-point and at the end of the unit so that students can get a measure of how they are progressing against the National Curriculum levels.

The units are as follows:

Biology 4 Interdependance

Global Warming
Resources
Acid Rain
The atmosphere
Conservation
Rubbish
Disease
Biological Warfare
Vaccination
Useful microbes

Chemistry Materials and particles

Compounds
Equations
Reactions
Alkali Metals
Metals and Acids
Displacement reactions
Corrosion
Acids and bases
Salts

Homework

Students can expect to be set one piece of homework per week by each of their science teachers. The quantity & style of the homework is likely to suit the ability of the science set that they are in. Activities might include

- a set of questions to improve or check understanding of work covered in class
- an extended research activity on a topic covered in class.
- writing up on an experiment performed in the laboratory
- learning key definitions for a short test

Year 8 Summer

The course is delivered by two teachers who deliver two separate units alongside each other. The Physics unit is assessed at a mid-point and at the end of the unit so that students can get a measure of how they are progressing against the National Curriculum levels. The investigations will both be assessed when they are completed against the National Curriculum levels for Science investigations.

The units are as follows:

Physics 4 Pressure

Pressure Turning forces and moments Body Machine Speed Distance time graphs Acceleration Gravity Satellites and Space

Chemistry 4 Science investigations

Students will complete two extended investigations. They will start by researching an issue then designing an experiment to collate data that can be used to find answers to the problem set. They will carry out the experiments collate and present the data and then analyse and explain their findings. Thus at the end of each of the tasks they will have completed from start to finish a full Scientific report.

Homework

Students can expect to be set one piece of homework per week by each of their science teachers. The quantity & style of the homework is likely to suit the ability of the science set that they are in. Activities might include

- a set of questions to improve or check understanding of work covered in class
- an extended research activity on a topic covered in class.
- writing up on an experiment performed in the laboratory
- learning key definitions for a short test