

YEAR 12

Unit 1 - Biology

- Students will study the structure and workings of cells.
- They build on this knowledge to understand how the body stays healthy as well as the symptoms and causes of some diseases.
- Students will study bacterial prokaryotic cells and how this gives an understanding of how some other diseases are caused and can be treated.

Unit 1 Chemistry

- Students will develop an understanding of atoms and electronic structure.
- They will then use this to predict how chemical substances will react in the production of a wide range of products – anything from fertilisers in the farming industry to fragrances in the perfume industry.
- Students will develop an understanding the chemical and physical properties of metals is essential when selecting appropriate building materials.

Unit 1 – Physics

- Students will build upon knowledge of waves from KS4 in a wide range of industries and organisations.
- They will gain an understanding of how waves are used in the communication industry.
- They will see how scientists and technicians apply their knowledge of the electromagnetic spectrum when designing mobile phone and satellite communication, and fibre optics are used to transmit telephone and television signals.

Unit 1 Exams

Year 13

Unit 3

- Advancement in science and technology has produced great benefits for society. This advancement depends on research and investigative approaches in science and technology.
- Students will develop their skills across a wide range of practical applications and across science.

Unit 3 Exams

Unit 2D

- Students will identify the key practical and personal competencies they have shown whilst developing and using these skills.
- They will evaluate your own performance, interpersonal skills and professional practice.

Unit 2A

- Students will be making and testing standard solutions using colorimetry and titration.
- Students will evidence practical skills, along with your results, calculations, evaluation of the techniques and possible improvements in a report.

Unit 2C

- Students will demonstrate how to carry out different chromatographic techniques to separate and identify components in mixtures.
- Students will then write a report of the techniques used, explaining the techniques, analyse and evaluate your results and suggest improvements.

Unit 2B

- Students will demonstrate their ability to use a calorimeter and associated equipment to obtain data to determine, analyse and evaluate the rate of cooling of substances.
- They will then present evidence of their practical skills analysis and evaluation in a report.

Unit 8B

- Students will study the structure and function of the lymphatic system.
- They will then go into depth about a disorder and the potential treatment for the system.

Unit 8A

- Students will study the structure and function of the musculoskeletal system
- They will then go into depth about a disorder and the potential treatment for the system.

Unit 8C

- Students will study the structure and function of the digestive system.
- They will then go into depth about a disorder and the potential treatment for the system.