Shrewsbury Academy

Trilogy Biology KS4 overview

What is my learning journey for GCSE Combined Biology?

Marches Academy Trust

Assessment & exams
- ➔ End of unit tests
- ➔ Exam practice for each unit
- ➔ Required practical activities in lesson
- ➔ 2 x 1hr 15 min exams

Note: there is no coursework element

Revision tasks may include (but is not limited to):
- ★ Past paper practice
- ★ Exam question analysis
- ★ Knowledge organisers & knowledge retrievers
- ★ Mock papers

GCSE Exams

BIOLOGY REVISION

Applications

Appreciate how scientific understanding can lead to the development of cures and treatments for diseases to save lives
Understand how to minimise our impact on the organisms in the world around us
Consider whether just because science allows us to manipulate organisms, should we be allowed to?
Understand the importance of science to a wide variety of careers

Content – Reproduction, DNA, inheritance, inherited disorders, variation, evolution, selective breeding, genetic engineering, fossils, extinction and classification
Bigger Picture Focus – To understand how we can use our knowledge of genetics to enhance crops, develop more valuable livestock as well as appreciating how our actions have caused the loss of species

B6 Inheritance

B5 Homeostasis

Independent learning
Tasks may include:
- ➔ Consolidation work
- ➔ Educake quizzes
- ➔ 6 mark exam questions
- ➔ Past paper practice
- ➔ Interleaved tasks

Home Learning

Content – Homeostasis, the nervous system, hormonal coordination, blood glucose control, menstrual cycle, infertility and contraception
Bigger Picture Focus – To understand how we can manipulate the hormonal system to prevent pregnancy or help people have children who normally would not be able to.

Content – Pathogens and the diseases they cause, human defences and the immune response, vaccination, antibiotics, drug discovery and development.
Bigger Picture Focus – To examine the different types of diseases and ways we can prevent their spread and treat them to save lives around the world.

Year 11

B7 Ecology

B3 Infection & Response

Useful websites
- ➔ BBC Bitesize
- ➔ mrrscience.com
- ➔ GCSEPod
- ➔ Oak Academy
- ➔ Educake

Content – Interdependence, adaptation, ecosystems, recycling materials, biodiversity and human impacts.
Bigger Picture Focus – To consider the impacts our actions have on other organisms and ways we can make positive changes.

Content – Levels of organisation, food, digestion, enzymes, heart and blood, cardiovascular disease, cancer, plant organs and plant transport
Bigger Picture Focus – To link how understanding how our bodies work enable scientists to develop a variety of ways of treating diseases.

B2 Organisation

Content – Cells, specialised cells, microscopy, cell division, stem cells and transport in cells.
Bigger Picture Focus – To understand how knowledge of the fundamental building blocks that make up living organisms and can lead to the development of therapies to cure diseases.

B1 Cells

B4 Bioenergetics

Year 10

Year 9

Enquiry skills

This unit covers some of the key skills that you will use in Science:
- The maths skills that are used in science
- How to draw and analyse graphs
- Identifying variables
- How to carry out an investigation
- How to evaluate your work

Content – Photosynthesis, rates of photosynthesis, aerobic and anaerobic respiration, responses to exercise and metabolism.
Bigger Picture Focus – To understand the role of plants in our ecosystems and how, without them, we would not be here.

Pathway to be followed from September '22