



Science (Combined Science: Trilogy)

Core

Exam board: AQA	Course Code: 8464
Outline of course: <p>The Combined Science course will allow all students to learn essential aspects of the knowledge, methods, processes and uses of science. This course will allow them to see how the natural world can be described through scientific detail.</p> <p>Students who wish to select separate Sciences ('Triple Science') should see p.11.</p> <p>During the course, students will be able to develop an understanding of a number of key ideas which include:</p> <ul style="list-style-type: none">- the use of conceptual models and theories to make sense of the observed diversity of natural phenomena- the assumption that every effect has one or more cause- that change is driven by differences between different objects and systems when they interact- that many such interactions occur over a distance and over time without direct contact- that science progresses through a cycle of hypothesis, practical experimentation, observation, theory development and review- that data analysis is a central element of many theories and of scientific methods of inquiry. <p>Paper 1: Biology 1: Cell Biology; Organisation; Infection and response; Bioenergetics.</p> <p>Paper 2: Biology 2: Homeostasis and response; Inheritance; Variation and evolution; Ecology.</p> <p>Paper 3: Chemistry 1: Atomic structure and the periodic table; Bonding, structure, and the properties of matter; Quantitative chemistry; Chemical changes; Energy changes.</p> <p>Paper 4: Chemistry 2: The rate and extent of chemical change; Organic chemistry; Chemical analysis; Chemistry of the atmosphere; Using resources.</p> <p>Paper 5: Physics 1: Energy; Electricity; Particle model of matter; Atomic structure.</p> <p>Paper 6: Physics 2: Forces; Waves; Magnetism and electromagnetism.</p>	
Assessment: <p>All papers are assessed through a written exam, lasting 1 hour and 15 minutes. Each exam is worth 70 marks.</p>	
Who to contact for more information: Mr Menghis	