

Subject: Science

Year group: 8

Curriculum Map

Autumn Term (Sep-Dec)

Three topic areas are then taught in rotation with different groups being taught in different order.

- 1) Photosynthesis, Respiration, and Circulation (Biology) – students will study photosynthesis in plants, aerobic and anaerobic respiration in organisms, breathing and circulation systems, and the effects of exercise, asthma, and smoking
- 2) Acids and Alkalis (Chemistry) – students will study how to work safely with acids and alkalis, reactions of acids and alkalis, and how to work with indicators to determine the pH of acids and alkalis
- 3) Energy (Physics) – students will study types of energy, energy transfers, energy in food and fuels, and how to calculate energy in fuel use

Spring Term (Jan-Mar)

Three topics will be taught in rotation with different groups being taught in different order.

- 1) Reproduction and Growth (Biology) – students will study asexual and sexual reproduction in organisms, menstruation, gestation, pregnancy, and birth
- 2) Material and Everyday Chemistry (Chemistry) – students will study every chemical reactions, chemistry at home, hydrocarbons and fuels, polymers and composite materials, ceramics, waste and sustainability
- 3) Waves (Physics) – students will study light waves, refraction, dispersion, and sound waves

Summer (Apr-July)

Three topic will be taught in rotation with different groups being taught in different order.

- 1) Ecosystems (Biology) – students will study the interdependence of ecosystems, food chains, food webs, and populations
- 2) The Earth and Atmosphere (Chemistry) – students will study the structure of earth, the rock cycle, the carbon cycle, the atmosphere, and human impact on climate change
- 3) Space (Physics) – students will study the sun, stars, the solar system, gravity, orbits, seasons, the moon, galaxies, and space exploration

Useful Websites and Resources:

BBC Bitesize Key stage 3 Science - <http://www.bbc.co.uk/education/subjects/zng4d2p>

Member of Staff: M Sison