## Long term plan Key Stage 4 Science

Science	Topics, in order
Year 10	1. Atomic structure and the Periodic table - trends and reactions 2. Bonding - ionic, covalent and metallic 3. Chemical changes 4. Rate and equilibrium 5. Electrolysis 6. Crude oil and fuels 7. Chemical analysis 8. Treating water 9. Energy stores and transfers - Gap identified due to covid lockdowns 10. Energy conservation 11. Forces and motion 12. Molecules and matter 12. Density 13. Electricity in the home 14. Radioactivity 15. Cells 16. OrgansSystems 17. Plant science - tissues and organs in plants and photosynthesis 18. Communicable and noncommunicable diseases
Year 10 Triple Science	1. Atoms and elements 2. Chemical reactions 3. Hydrocarbons 4. Forces and pressure, 5. Static Electricity and charge 6. Radiation 7. Homeostasis in action 8. Health

Year 11
Combined
Science

- 1. Acids and Alkalis
- 2. Chemistry Calculations -
- 3. The Earth's Resources Extracting metal
- 4. Earth's atmosphere
- 5. LCA
- 6. Properties of waves *including* Electromagnetic spectrum 7. Magnets and Magnetism
- 8. Forces doing work
- 9. Photosynthesis
- 10. Organ Systems Nervous system, Reproduction
- 11. Variation (genetics) and evolution
- 12. Biodiversity
- 13. Ecosystems
- 14. Recycling materials
- 15. Classification

## **Revise Paper 1 content**

Work through the revision list developed from areas that require development in assessments - Use GCSE questions as focus so that students are able to see how to apply knowledge to the questions set.

## Year11 Triple Science

- 1. Chemical reactions
- 2. Required practicals
  - 3 .Using our resources
  - 4. Polymers
  - 5. Waves
  - 6. Electromagnetic spectrum
  - 7. Induced potential
- 8.Space
- 9. Homeostasis In action
- 10. Theories Of Evolution And Genetics
- 11. Ecology
- 12. Sustainable Food