Science Curriculum Palette

Alcester Academy
TO BE THE BEST THAT WE CAN BE

Year 9

Atomic Structure & The Periodic Table

- Atoms Elements & Compounds
- Separating Mixtures
- History Of The Atom
- Atomic Structure
- Development Of The Periodic Table
- Modern Periodic Table
- Practical Separation Techniques

Cell Biology

- Cell Structure
- Microscopy
- Cell Differentiation
- Culturing Micro-Organisms Practical (TRIPLE)
- Exchanging Materials
- Practical Using A Microscope
- Practical Osmosis
- Exchange Surfaces (TRIPLE)

Structures & Bonding

- Nano Particles (TRIPLE)
- States Of Matter & Changing State
- Metallic Bonding
- Covalent Compounds
- Covalent Bonding
- Ionic Compounds
- Ions & Ionic Bonding

Particle Model Of Matter

- Particle Motion In Gases (TRIPLE)
- Practical Density
- Internal Energy
- Changing State
- Particle Model

Energy Changes

- Endo & Exo Thermic Reactions
- Bond Energies
- Practical Energy Transfer

Infection & Response

- Communicable Diseases
- Plant Diseases (TRIPLE)
- Preventing Infection
- Fighting Disease-Drugs
- Vaccination
- Developing Drugs
- Monoclonal Antibodies (TRIPLE)

Nuclear Radiation

- Model Of The Atom
- Isotopes
- Nuclear Radiation & Decay
- Half Life
- Irradiation & Contamination
- Uses Of Radiation (TRIPLE)
- Fission & Fusion (TRIPLE)

Quantitative Chemistry

- Conservation Of Mass
- Mole
- Formula Mass

Bioenergetics

- Transpiration & Translocation (TRIPLE)
- Practical Photosynthesis Rate
- Practical Photosynthesis Rate
- Metabolism
- Anaerobic Respiration
- Aerobic Respiration
- Limiting Factors
- Photosynthesis
- Plant Cell Organisation

Energy

- Limiting Reactants
- Concentration
- Yield & Atomy Economy (TRIPLE)
- Energy Stores & Transfers
- Specific Heat Capacity
- Conservation Of Energy
- Efficiency
- Reducing Energy Transfer
- Non-Renewable Energy
- Renewable Energy
- Practical Specific Heat Capacity