



Topic Themes for Y10 Assessments - Combined Science

Biology

Foundation

Photosynthesis
Diffusion, Osmosis, Active Transport
Microscopy & Magnification
Transpiration
Pathogens
Structure of the heart
Enzymes, examples & how they function

Higher

Enzymes, examples & how the function
Transpiration
Pathogens, examples & reducing transmission
Structure of the Heart
Magnification & Using a microscope
Diffusion & Active Transport

Chemistry

Foundation

Bonding – Types/Structure & properties
Electrolysis

Periodic Table inc. halogens
Chemical Reactions
Acids & Bases
Making a Salt
Mixtures

Higher

Electrolysis
Calculations – Concentrations of solution, RAM, volumes of gases
Periodic table inc. halogens
Bonding – Types/Structure & properties
Reaction Profiles
Making a Salt
pH Scale & reactions of acids
Reduction & Oxidation

Physics

Foundation

Circuitry
Resistance
Efficiency of energy resources
History/Development of the Atom
Half life
Mains Electricity & Wiring a plug
Energy Stores
Latent heat & states of matter changes

Higher

Circuitry
Latent heat & states of matter changes
Energy resources
Component characteristics (circuits)
Specific Heat Capacity
Radioactivity



Topic Themes for Y10 Assessments - Triple Science

Biology

Foundation

Cell Transport
Structure of blood & heart
Structure of Leaves & Transpiration
Respiration
Pathogens & Antibiotics
Cell Structure
Magnification & types of microscope
Human Defence mechanisms inc Immune system
Photosynthesis

Higher

Adaptations for efficient diffusion
Magnification & types of microscope
Cell Transport
Structure of the Heart & valve replacements
Monoclonal antibodies
Transpiration
Photosynthesis
Structure & Role of Enzymes
Structure of Cells
Types of Pathogen & Human defence mechanisms

Chemistry

Foundation

Mixtures
Periodic Table inc. Halogens, Group 1 & 7
Electrolysis
Making a salt
Metals & their reactions
Acids, bases & salts
Calculations - % yield, RAM, isotopes, size of atom, atom economy
Bonding

Higher

Making a salt
Metal & metal compounds – bonding & structure
Development of structure of atom
Isotopes
Displacement reactions
Extracting metals
Calculations – limiting reactants, % yield, pH strong & weak acids, titration calculations, mole calcs.
Halogens
Bonding – types/structure & properties
Group 1

Physics

Foundation

Density
Radioactivity & Radioactive decay
Properties of radiation
Gravitational Potential Energy
Development of structure of atom
Energy resources
Power
Circuitry
Specific Heat Capacity
Investigating insulating materials

Higher

Power
Investigating insulating materials
Energy & power
Density
Energy resources
Half life & decay equations
Mains electricity & circuitry
Thermal conductivity
Static electricity
Internal energy