



TRIPLE SCIENCE- BIOLOGY REVISION CHECKLIST

Paper 1 Topics	RAG Rating			To Improve I Can...
*Plant and Animal Cells				
*Types of Cell				
*Microscopes/ Magnification				
*Enzymes/ Factors Affecting Enzymes/ Uses				
*Practical methods to identify nutrients in foods				
*Using a calorimeter to measure energy in food				
*Diffusion in/ out of cells				
*Osmosis				
Mitosis				
Growth/ Differentiation				
Stem Cells				
Scanning and treating brain tumours				
Neurones/ eye structure and defects				
Meiosis				
DNA Structure/coding for amino acids/protein synthesis				
Inheritance/Mendel/ inheritance of sex linked disorders/ ABO blood groups				
Variation/ Mutations/ Human Genome Project				
Classification/ Evolution/ Darwin/ Wallace				

All Marked with an * appear in both papers



Paper 1 Topics	RAG Rating			To Improve I Can...
Selective Breeding				
Tissue culture				
Genetic Engineering				
Adv/Disadvantages of farming methods				
Health and Disease/ Pathogens				
Lifecycle of a virus				
Spread of Disease				
Plant defences against pests/ disease				
Human Defences/ Immunity				
Production of monoclonal antibodies/ uses in medicine				
Immunisation				
Medicines/ Treating Disease				
Aseptic techniques growing microbes in the lab/ analysing effect of antiseptics				
Non-Communicable Diseases				
Alcohol/ Smoking				
Malnutrition/ Obesity				
Cardiovascular Disease				

All Marked with an * appear in both papers



TRIPLE SCIENCE- BIOLOGY REVISION CHECKLIST

Paper 2 Topics	RAG Rating			To Improve I Can...
*Plant and Animal Cells				
*Types of Cell				
*Microscopes/ Magnification				
*Enzymes/ Factors Affecting Enzymes/ Uses				
*Practical methods to identify nutrients in foods				
*Using a calorimeter to measure energy in food				
*Diffusion in/ out of cells				
*Osmosis				
Photosynthesis/ adaptations of the leaf				
Specialised Plant Cells				
Adaptations of plants to extreme conditions				
Transpiration				
Translocation				
Plant hormones/ commercial uses				
Water Uptake in Roots				
Hormones				
Adrenalin/ Thyroxine				
Sex Hormones/ Menstrual Cycle/ IVF				
Blood Sugar Control/ Diabetes				
Homeostasis/ Thermoregulation				
Structure of kidneys/ ADH				
Exchanging Materials				
Rate of Diffusion				
Gaseous Exchange/ Alveoli				
Blood/ Blood Vessels				

All Marked with an * appear in both papers



Paper 2 Topics	RAG Rating			To Improve I Can...
The Heart				
Aerobic/ Anaerobic Respiration				
Ecosystems				
Biotic/ Abiotic Factors				
Parasites/ Mutualism				
Sampling Techniques				
Energy loss at trophic levels/ efficiency of energy transfer				
Human effect on Ecosystems				
Biological factors on food security				
Use of Indicator species				
Decomposition				
Biodiversity				
The Carbon Cycle				
The Nitrogen Cycle				
The Water Cycle				

All Marked with an * appear in both papers



TRIPLE SCIENCE- CHEMISTRY REVISION CHECKLIST

Paper 1 Topics	RAG Rating			To Improve I Can...
*Formulae/ Equations				
*Hazards and Risks				
*Atomic Structure/ Isotopes				
*Periodic Table/ Mendeleev's Table				
*Electron Configuration				
*Ions/ Ionic compounds				
*Covalent bonding/ Covalent substances				
*Metallic bonding/ other structures				
*Limitations of models				
*Relative Formula mass/ Empirical Formulae				
*Conservation of Mass/ Reacting Mass Calculations				
*Concentration of Solutions/ Avogadro Constant				
States of Matter				
Pure Substances/ Mixtures				
Filtration/ Distillation/ Crystallisation				
Chromatography				
Drinking Water				
Acids/ Alkalis				
Neutralisation/ Making Salts				
Electrolysis				
Metal Reactivity Series/ Displacement Reactions				
Metal Ores/ Iron/Aluminium				
Biological Metal Extraction				
Recycling Metals/ Life Cycle Assessment				
The Haber Process				

All Marked with an * appear in both papers



Paper 1 Topics	RAG Rating			To Improve I Can...
Equilibria				
Properties/ Uses of Transition Metals				
Oxidisation of metals/ Rusting				
Electroplating				
Properties of Alloys				
Calculating Concentration of Solutions				
Carrying out Titrations				
Percentage Yield/ Actual Yield				
Atom Economy				
Evaluating/ Choosing Pathways to Create a Product				
Molar Volume of Gases/ Avogadro's Law				
Haber Process				
Conditions required in Industrial Processes				
Making Fertilisers				
Chemical Cells				
Fuel Cells				

All Marked with an * appear in both papers



TRIPLE SCIENCE- CHEMISTRY REVISION CHECKLIST

Paper 2 Topics	RAG Rating			To Improve I Can...
*Formulae/ Equations				
*Hazards and Risks				
*Atomic Structure/ Isotopes				
*Periodic Table/ Mendeleev's Table				
*Electron Configuration				
*Ions/ Ionic compounds				
*Covalent bonding/ Covalent substances				
*Metallic bonding/ other structures				
*Limitations of models				
*Relative Formula mass/ Empirical Formulae				
*Conservation of Mass/ Reacting Mass Calculations				
*Concentration of Solutions/ Avogadro Constant				
Alkali Metals				
Halogens + their Reactions				
Noble Gases				
Rates of Reaction				
Heat Energy Changes/ Reaction Profiles				
Calculating Energy Changes				
Crude Oil				
Fractional Distillation				
Alkanes				
Incomplete Combustion				
Acid rain/Pollution				
Choosing Fuels				
Cracking				
Early Atmosphere				
Greenhouse Effect/ Climate Change				
Flame Test to Identify Ions				

All Marked with an * appear in both papers



Paper 2 Topics	RAG Rating			To Improve I Can...
Sodium Hydroxide Tests for Ions				
Test for Ammonia				
Tests for Carbonate/ Sulphate/ Chloride Ions				
Identifying Ions in Salts				
Describing Methods to Increase Accuracy/ Speed of Tests				
Evaluating Data from a Flame Photometer				
Recall Formulae for Alkanes/ Alkenes				
Difference between Saturated and Unsaturated Hydrocarbons				
The Bromine Test				
Complete combustion of Hydrocarbons				
Polymers/ Polymerisation				
Polyesters/ Condensation Polymers				
Disposing of Polymers				
Alcohols				
Carboxylic Acids				
Fermentation/ Distillation				
Nanoparticles				
Properties of Glass/ Ceramics/ Polymers/ Composites/ Metals				

All Marked with an * appear in both papers



TRIPLE SCIENCE- PHYSICS REVISION CHECKLIST

Paper 1 Topics	RAG Rating			To Improve I Can...
*SI Units				
*Multiples/ Standard Form				
Scalars and Vectors				
Speed/Distance/Time				
Equations of Motion				
Velocity/ Time Graphs				
Using Light Gates				
Newton's 1 st and 2 nd Laws				
Weight + Mass				
Force + Acceleration				
Circular Motion				
Momentum				
Newton's 3 rd Law				
Human Reaction Times				
Stopping Distances				
Energy Stores/ Transfers/ Efficient Transfers				
Energy Resources/ Patterns of Energy Use				
Potential/ Kinetic Energy				
Waves/ Measurements/ Calculations				
Waves at Boundaries				
Wave Disturbances/ Human Ear				
Ultrasound/ Infrasound				
Effect of Sound Waves Passing into a Different Medium				
Reflection/ Refraction/ Total Internal Reflection				
Light Colour				
Effects of Different Types of Lens on Light				
EM Spectrum				
Emitting EM Radiation/ EM Radiation & Temperature				

All Marked with an * appear in both papers



Paper 1 Topics	RAG Rating			To Improve I Can...
Body/ Earth Temperature				
Uses/ Dangers of EM Waves				
Atomic Structure/ Models/ Isotopes				
Electrons/ Ions/ Ionising Radiation				
Background Radiation/ Measuring Radioactivity				
Beta Decay				
Radioactive Decay/ Half Life				
Uses of Radioactivity				
Contamination/ Irradiation				
Diagnosis/ Treatment of Tumours Using Radiation				
Nuclear Power				
Fission/ Fusion				
Gravity/ Weight				
Solar System Structure				
Orbits of Planets				
Steady State/ Big Bang Theory				
Red Shift/ Evidence for Expanding Universe				
Evolution of Stars				
Methods of Observing the Universe				

All Marked with an * appear in both papers



TRIPLE SCIENCE- PHYSICS REVISION CHECKLIST

Paper 2 Topics	RAG Rating			To Improve I Can...
*SI Units				
*Multiples/ Standard Form				
Work/ Energy/ Power				
Interacting Forces/ Force Diagrams/ Resultant Forces				
Moments of a Force/ Levers & Gears				
Circuit Symbols				
Series/ Parallel Circuits				
Current + Charge				
Energy + Charge				
Ohms Law/ Resistors/ Thermistors				
Current Heating Effect				
Energy + Power				
A.C. and D.C. Circuits				
Mains Electricity/ Plugs				
Static Electricity				
Uses of Electrostatic Charges				
Earthing/ Dangers of Sparking				
Electric Fields				
Magnets/ Magnetic Fields				
Magnetism + Current				
Magnetic Forces/ Motor Effect				
Electromagnetic Induction/ Production of AC & DC Current				
Microphones/ Loudspeakers				
Transformers/ Turn Ratio Calculation				
Transmitting Electricity/ Advantages of High Voltage Cables				

All Marked with an * appear in both papers



Paper 2 Topics	RAG Rating			To Improve I Can...
Energy/ Specific Heat Capacity				
Changes of State/ Specific Latent Heat				
Density				
Pressure + Temperature				
Compression/ Expansion of Gases				
Explaining/ Calculating Pressure				
Elastic/ Inelastic Materials				
Springs/ Forces on Springs				
Atmospheric Pressure				
Pressure in Fluids/ Calculating Pressure				
Upthrust in Liquids/ Floating & Sinking				

All Marked with an * appear in both papers