

MIP|W

Birmingham

GCSE Course Outlines

Biology, Chemistry, Physics, Science and Additional Science

These courses devote two half-day sessions to each of the following key topic areas, which are based on the AQA Science specifications. In addition, a further half-day is available which deals with 'How Science Works' and other cross-subject issues. Students with Edexcel or OCR may find these courses helpful but **MUST** check the lists carefully to be sure that the topics offered meet their personal needs. Please state clearly on your registration form the examining board and whether it is the new or outgoing specification.

B1 Biology Keeping Healthy, Nerves and Hormones, Use and Abuse of Drugs, Interdependence and adaption, Energy and Biomass in Food Chains, Waste Materials from Plants and Animals, Genetic Variation and its Control, Evolution	C1 Chemistry Fundamental Ideas in Chemistry, Limestone and Building Materials, Metals and their Uses, Crude Oil and Fuels, Other Useful Substances from Crude Oil, Plants Oils and their Uses, Changes in the Earth and its Atmosphere	P1 Physics The Transfer of Energy by Heating Processes and the Factors that Affect the Rate of Transfer, Energy and Efficiency, The Usefulness of Electrical Appliances, The Use of Waves for Communication and to Provide Evidence that the Universe is Expanding
B2 Biology Cells, Transport into Cells, Transport in Humans and Plants, Photosynthesis, Food Chains, Nutrient Cycling, Enzymes, Homeostasis, Inheritance and Genetics, Plant Growth	C2 Chemistry Atomic Structure, Bonding and Structure, Periodic Table, Reacting Quantities, Rates of Reaction, Chemical Reactions and Energy, Electrolysis, Acids and Bases, Haber Process	P2 Physics Distance Time Graphs, Force, Mass and Acceleration, Kinetic Energy, Momentum, Static Electricity, Electrical Circuits, Mains Electricity, Power, Radioactive Decay, Nuclear Fission and Fusion
B3 Biology Gas Exchange, Transport in Humans, Effects of Exercise, The Kidney, Microorganisms, Microorganisms and Food Production, Biogas and Biofuels	C3 Chemistry Acids and Alkalis, Drinking Water, Analysis of Substances, Titrations, Redox Reactions	P3 Physics Moments, Centripetal Force, Mirrors and Lenses, Sound, Ultrasound, Motor Effect, Generators, Transformers

NB

1. Year 10 Science work comprises B1, C1 and P1
2. Year 11 Science work comprises B2, C2 and P2
3. Single Subject Biology comprises B1, B2 and B3
4. Single Subject Chemistry comprises C1, C2 and C3
5. Single Subject Biology comprises P1, P2 and P3