

GCSE AQA Science Trilogy

Required Practical Investigations

Biology Paper 1

Unit 1 – Cell Biology

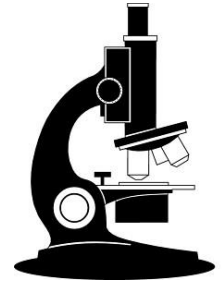
Required Practical – Using a microscope

YouTube links: [Using a light microscope](#)

[Preparing a microscope slide \(Onion cell\)](#)

BBC Bitesize links: [Calculating magnification](#)

Revision guide:p13



Required Practical – Osmosis (potato practical)

YouTube links: [Investigating Osmosis](#)

BBC Bitesize links: [Osmosis overview](#) [Osmosis in cells](#)

Revision guide:p18

Unit 2 – Organisation

Required Practical – Testing for carbohydrates, lipids and proteins

YouTube links: [Food test](#)

BBC Bitesize links: [Food testing](#)

Revision guide:p29

Required Practical – Investigate the effect of pH on Amylase enzyme

YouTube links: [Effect of pH](#)

BBC Bitesize links: [Enzymes](#) [Effect of pH on enzymes](#) [Digestive Enzymes](#)

Revision guide:p26

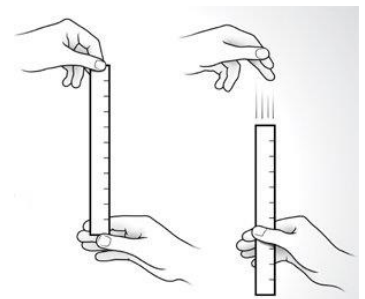
Unit 4 – Bioenergetics

Required Practical – Investigating effect of light intensity on photosynthesis

YouTube links: [Light intensity with pond weed](#)

BBC Bitesize links: [Factors effecting photosynthesis](#) [Light intensity investigation](#)

Revision guide: p52



Biology Paper 2

Unit 5 – Homeostasis and response

Required Practical – Investigating a factor on the effect of reaction times

YouTube links: [Reaction times](#)

BBC Bitesize links: [Reflexes](#)

Revision guide: p61

Unit 7 – Ecology

Required Practical – Measure population size using sampling techniques

YouTube links: [Sampling along a transect](#)

BBC Bitesize links: [Sampling overview](#) [Transects and Quadrats](#)

Revision guide: p87



Chemistry Paper 1

Unit 4 – Chemical changes

Required Practical – Creating a soluble salt

YouTube links: [Making salts](#)

[Visual method](#)

BBC Bitesize links: [Making salts](#)

[Copper sulphate production](#)

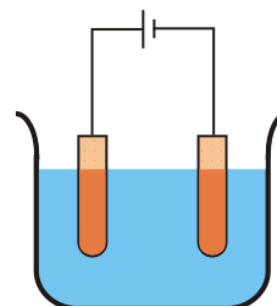
Revision guide: p131

Required Practical – Electrolysis

YouTube links: [Electrolysis](#)

BBC Bitesize links: [Electrolysis](#)

Revision guide:p136 +236



Unit 5 – Energy changes

Required Practical – Temperature changes

YouTube links: [Temperature changes practical](#)

BBC Bitesize links: [Exothermic and Endothermic reactions](#)

Revision guide:p139

Chemistry Paper 2

Unit 6 – Rate and extent of chemical change

Required Practical – Rates of reaction

YouTube links: [Rates of reaction practical](#)

BBC Bitesize links: [Collision Theory](#)

[Changing the rate of reaction](#)

Revision guide:p144+237

Unit 8 – Chemical Analysis

Required Practical – Chromatography

YouTube links: [Chromatography practical](#)

BBC Bitesize links: [Chromatography](#)

Revision guide:p154

Unit 10 – Using Resources

Required Practical – Water purification

YouTube links: [Water purification](#)

BBC Bitesize links: Water Purification

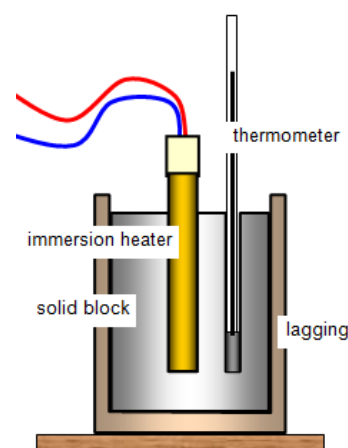
Revision guide:p164

Physics Paper 1

Unit 1 – Energy

Required practical – Specific heat capacity

YouTube links: [Specific heat capacity](#)



Revision guide:p169

Unit 2 – Electricity

Required practical – Resistance of a wire

YouTube links: [Resistance of the wire](#)

BBC Bitesize links: [Resistance \(general\)](#) [Current, voltage, resistance](#)

Revision guide:p180

Required practical – Generating I-V graphs

YouTube links: [Practical method](#) [Graph characteristics in detail](#)

BBC Bitesize links: [Current-Voltage graphs](#)

Revision guide:p181

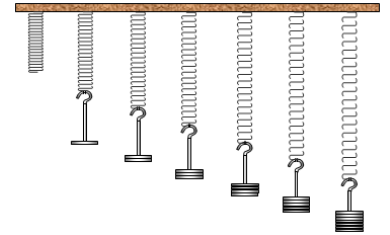
Unit 3 – Particle model of matter

Required practical – Calculating density

YouTube links: [Density of regular objects](#) [Density of irregular objects](#)

BBC Bitesize links: [Density](#) [Density equation](#)

Revision guide:p192



Physics Paper 2

Unit 5 – Forces

Required practical – Acceleration

YouTube links: [Acceleration](#)

BBC Bitesize links: [Force, mass, acceleration](#) [Calculations](#)

Revision guide:p213

Required practical – Force and extension (Hooke's law)

YouTube links: [Force and extension practical](#)

BBC Bitesize links: [Hooke's law](#)

Revision guide:p206

Unit 6 - Waves

Required practical – Generating and observing waves

YouTube links: [Generating water waves](#) [Generating waves on a string](#)

BBC Bitesize links: [Waves](#) [Features of waves](#)

Revision guide:p219

Required practical – Radiation and absorption

YouTube links: [Radiation and Absorption](#)

BBC Bitesize links: [Radiation](#) [Kinetic theory](#)

Revision guide:p225

