

Required practical in science exams

Biology paper 1 - Using a light microscope and calculating magnification - Investigating osmosis in plant tissues at different concentrations - Food tests for carbohydrates, lipids, proteins and sugars - Investigating the effect of pH on the enzyme amylase - Investigating the effect of light intensity on the rate of photosynthesis Single science - Investigating the effects of antiseptics or antibiotics on bacteria using zones of inhibition	Chemistry paper 1 - Preparing a soluble salt from an insoluble oxide or carbonate - Aqueous electrolysis - Investigate variables that effect temperature changes e.g acid plus metal, carbonate, alkalis. Single science - Determination of reacting volume or concentration between an acid and an alkali using titration	Physics paper 1 - Determining the specific heat capacity of a solid or liquid - Using circuit diagrams to test for factors effecting resistance in circuits - IV characteristic for the filament lamp, diode and fixed resistor - Identifying density of regular and irregular solids and liquids - Investigating the relationship between force and extension of a spring - Investigating the effect of force and mass on acceleration (Newton's 2nd law) Single science - Investigate the effectiveness of different materials as thermal insulators
Biology paper 2 - Plan and carry out an investigation into human reaction time. - Measure population size in a habitat using sampling techniques- quadrats and transect lines Single science - Investigate the effect of light or gravity on newly germinated seedlings - Investigate the effect of temperature on the rate of decay for fresh milk by measuring pH change	Chemistry paper 2 - Investigate rate of reaction measuring volume of gas, mass lost, colour change or turbidity - Chromatography - Analysis of water using pH testing, dissolved solid testing and distillation Single science - Using chemical analysis to identify ions in a compound – flame tests, sodium hydroxide tests, sulphate tests, halide tests	Physics paper 2 - Using the ripple tank to measure frequency, wavelength and wave speed - Investigating how the infra-red absorbed or emitted depends on the surface of the object Single science - Investigating reflection and refraction