

CHEMISTRY PRACTICALS

DATE &
TEACHER

OC2 separate mixtures using a variety of techniques: filtration, evaporation, distillation and paper chromatography (p 105-109)	
OC17 grow crystals using alum or copper sulfate (p182)	
OC19 investigate the pH of a variety of materials using the pH scale (p 150)	
OC22 show that approximately one fifth of the air is oxygen; show that there is CO ₂ and water vapour in air (p161)	
OC24 prepare a sample of oxygen by decomposing H ₂ O ₂ using MnO ₂ as a catalyst (word equation and chemical equation) (p 163)	
OC27 prepare carbon dioxide (word equation and chemical equation), and show that it does not support combustion (p 165)	
OC30 conduct a qualitative experiment to detect the presence of dissolved solids in water samples, and test water for hardness (soap test) (p 189)	
OC38 titrate HCl against NaOH, and prepare a sample of NaCl (p 152)	
OC46 carry out an experiment to demonstrate that oxygen and water are necessary for rusting (p 135)	
OC51 investigate the reaction between zinc and HCl, and test for hydrogen (word equation and chemical equation) (p 153)	

PHYSICS PRACTICALS

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OP2 measure mass and volume of a variety of solids and liquids and hence determine their densities (p 12)	
OP6 investigate the relationship between the extension of a spring and the applied force (p 27)	
OP20 identify different forms of energy and carry out simple experiments to show the following energy conversions: a. chemical energy to electrical energy to heat energy b. electrical energy to magnetic energy to kinetic energy c. light energy to electrical energy to kinetic energy (p 50-51)	
OP23 investigate and describe the expansion of solids, liquids and gases when heated, and contraction when cooled (p 54-56)	
OP31 carry out simple experiments to show the transfer of heat energy by conduction, convection and radiation; investigate conduction and convection in water (p 59-61)	
OP34 show that light travels in straight lines explain how shadows are formed (p 64)	
OP38 investigate the reflection of light by plane mirrors, and illustrate this using ray diagrams; demonstrate and explain the operation of a simple periscope (p 66-67)	
OP46 plot the magnetic field of a bar magnet (p 80)	
OP49 test electrical conduction in a variety of insulator materials, and classify each material as conductor or insulator (p 85)	
OP50 set up a simple electric circuit, use appropriate instruments to measure current, potential difference (voltage) and resistance, and establish the relationship between them (p 86)	

BIOLOGY PRACTICALS

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OB3 carry out qualitative food tests for starch, reducing sugar, protein and fat (p 209-210)	
OB5 investigate the conversion of chemical energy in food to heat energy (p 211)	
OB8 investigate the action of amylase on starch; identify the substrate, product and enzyme (p 215)	
OB11 carry out qualitative tests to compare the carbon dioxide levels of inhaled and exhaled air (p 224)	
OB39 investigate the variety of living things by direct observation of animals and plants in their environment; classify living organisms as plants or animals, and animals as vertebrates or invertebrates (p 311)	
OB44 prepare a slide from plant tissue and sketch the cells under magnification (p 76)	
OB49 show that starch is produced by a photosynthesising plant (p 288)	
OB58 investigate the conditions necessary for germination (p 299)	
OB59 study a local habitat, using appropriate instruments and simple keys to show the variety and distribution of named organisms (p 311-312)	
OB65 investigate the presence of micro-organisms in air and soil (p 322)	