

AS/A Level Physics

Candidate Name

Topic	Specified practical work	Date completed	Teacher / Student comments
Basic physics	Measurement of the density of solids		
	Determination of unknown masses by using the principle of moments		
Kinematics	Measurement of g by freefall		
Dynamics	Investigation of Newton's 2nd Law		
Solids under stress	Determination of Young modulus of a metal in the form of a wire		
	Investigation of the force-extension relationship for rubber		
Resistance	Investigation of the I-V characteristics of the filament of a lamp and a metal wire at constant temperature		
	Determination of resistivity of a metal		
	Investigation of the variation of resistance with temperature for a metal wire		
D.C. circuits	Determination of the internal resistance of a cell		
The nature of waves	Measurement of the intensity variations for polarisation		
Wave properties	Determination of wavelength using Young's double slits		
	Determination of wavelength using a diffraction grating		

	Determination of the speed of sound using stationary waves		
Refraction of light	Measurement of the refractive index of a material		
Photons	Determination of h using LEDs		
Vibrations	Measurement of g with a pendulum		
	Investigation of the damping of a spring		
Thermal physics	Estimation of absolute zero by use of the gas laws		
	Measurement of the specific heat capacity for a solid		
Nuclear decay	Investigation of radioactive decay – a dice analogy		
	Investigation of the variation of intensity of gamma radiation with distance		
Capacitance	Investigation of the charging and discharging of a capacitor to determine the time constant		
	Investigation of the energy stored in a capacitor		
Magnetic fields	Investigation of the force on a current in a magnetic field		
	Investigation of magnetic flux density using a Hall probe		