

**Paper Reference(s)    1SC0 / 1PF**

**Pearson Edexcel Level 1/Level 2 GCSE (9–1)**

**Combined Science**

**Paper 3: Physics 1**

**Foundation Tier**

## **EQUATIONS BOOKLET**

**DO NOT RETURN THIS  
EQUATIONS BOOKLET WITH  
THE QUESTION PAPER.**

**$(\text{final velocity})^2 - (\text{initial velocity})^2 = 2 \times \text{acceleration} \times \text{distance}$**

$$v^2 - u^2 = 2 \times a \times x$$

**energy transferred = current  $\times$  potential difference  $\times$  time**

$$E = I \times V \times t$$

**potential difference across primary coil  $\times$  current in primary coil = potential difference across secondary coil  $\times$  current in secondary coil**

$$V_p \times I_p = V_s \times I_s$$

**change in thermal energy = mass  $\times$  specific heat capacity  $\times$  change in temperature**

$$\Delta Q = m \times c \times \Delta \theta$$

**thermal energy for a change of state = mass  $\times$  specific latent heat**

$$Q = m \times L$$

**(Turn over)**

**to calculate pressure or volume for gases of fixed mass at constant temperature**

$$P_1 V_1 = P_2 V_2$$

**energy transferred in stretching = 0.5 ×  
spring constant × (extension)<sup>2</sup>**

$$E = \frac{1}{2} \times k \times x^2$$