

**Paper Reference 1SC0/1PF**  
**Pearson Edexcel Level 1/Level 2 GCSE (9–1)**

**Combined Science**  
**PAPER 3**  
**Foundation Tier**

**Formulae Booklet**

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

**(final velocity)<sup>2</sup> – (initial velocity)<sup>2</sup> = 2 × acceleration × distance**

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

**energy transferred = current × potential difference × time**

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

**potential difference across primary coil × current in primary coil = potential difference across secondary coil × current in secondary coil**

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

**change in thermal energy = mass × specific heat capacity × change in temperature**

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

**thermal energy for a change of state = mass × specific latent heat**

$$Q = m \times L$$

**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>**

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