

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.**

(final velocity)² – (initial velocity)² = 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)²

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