

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)²**

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