Pearson Edexcel International GCSE (9–1)

May–June 2024 Assessment Window

Syllabus reference **4SS0**

International GCSE Science (Single Award) – Physics

Equation List

You are not permitted to take this notice into the examination.
A version of this equation list will be included with the May–June 2024 question papers. This document is valid if downloaded from the Pearson Qualifications website.

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1. Forces and Motion	
average speed = $\frac{\text{distance moved}}{\text{time taken}}$	
acceleration = $\frac{\text{change in velocity}}{\text{time taken}}$	$a = \frac{(v-u)}{t}$
force = mass × acceleration	$F = m \times a$
weight = mass × gravitational field strength	$W = m \times g$
2. Electricity	
power = current × voltage	$P = I \times V$
voltage = current × resistance	$V = I \times R$
3. Waves	
wave speed = frequency × wavelength	$v = f \times \lambda$
4. Energy resources and energy transfers	
efficiency = $\frac{\text{useful energy output}}{\text{total energy output}} \times 100\%$	
work done = force × distance moved	$W = F \times d$
gravitational potential energy = mass × gravitational field strength × height	$GPE = m \times g \times h$
kinetic energy = $\frac{1}{2} \times$ mass × speed^2	$KE = \frac{1}{2} \times m \times v^2$
power = $\frac{\text{work done}}{\text{time taken}}$	$P = \frac{W}{t}$
5. Solids, liquids and gases	
pressure = $\frac{\text{force}}{\text{area}}$	$p = \frac{F}{A}$

END OF EQUATION LIST