

These formulas are **not** given on the exam and are required to be memorised.

This may change by the summer exam as currently ofqual are consulting in order to determine if they will provide the equations for the summer exam.

Paper 1 Physics

work done = force x distance	$W = F s$
kinetic energy = $0.5 \times \text{mass} \times (\text{speed})^2$	$E_k = \frac{1}{2} m v^2$
gravitational potential energy = mass x gravity x height	$E_p = m g h$
power = work done / time = energy / time	$P = W / t$
efficiency = useful output / input	$\text{Eff} = \text{Out} / \text{In}$
charge = current x time	$Q = I t$
potential difference = current x resistance	$V = I R$
power = potential difference x current	$P = V I$
power = (current) ² x resistance	$P = I^2 R$
energy transferred = charge flow x potential difference	$E = Q V$
density = mass / volume	$\rho = m / V$

Paper 1 Physics continued

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