Equation sheet drill:

The area under a force-time graph is this

This is the force between two charged particles

This equation expresses how the dimensions of a resistor determine its resistance

$R = \frac{\rho l}{A}$

The gravitational field $g = \frac{F_g}{m}$

A pendulum is swinging

Shows the graph of an object undergoing simple harmonic motion

The amount of energy a moving body has

How hard something is turned

Angular momentum L

L

Length $L = r$

Energy stored in a spring U_s

Gravitational potential energy near the surface of a planet $U_g = mgh$ $U_g = -\frac{GMm}{r}$

Current as seen as a rate of flow $I = \frac{\Delta q}{\Delta t}$

The acceleration to stay in a circle $a_c = \frac{v^2}{r}$ $\Sigma F = ma_c$

How angular speed changes over time ω $\frac{\Delta\omega}{\Delta t} = \alpha$ $a = \frac{\Delta v}{\Delta t}$

Newton's second law for rotation $a = \frac{\Sigma F}{m}$ $\alpha = \frac{\Sigma \tau}{I}$ $\omega = \omega_0 + \alpha t$ $\Delta\omega = \alpha t$

How to find resistance when there are multiple branches $\frac{\Delta\omega}{t} = \alpha$ $\frac{1}{R_p} = \frac{1}{R_1} + \frac{1}{R_2} + \cdots$

How wave speed is tied to frequency

Energy added to or taken from an object $W = \Delta E = F \cdot d \cdot \cos\theta$

The rate of energy used up in a circuit component

Power

$P = I V$ $\left[\frac{J}{s}\right]$

Current: $I = \frac{\text{charge}}{\text{Time}}$

Voltage: $\frac{\text{Energy}}{\text{charge}}$

You