Nuclear

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Waves

$$v = f\lambda \qquad n = \frac{\sin(\text{big})}{\sin(\text{small})} \qquad \sin c = \frac{1}{n}$$

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Electricity

$$Q = It \qquad V = IR$$

$$P = IV \qquad E = QV$$

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F/M/E

$$v = \frac{d}{t} \qquad a = \frac{\Delta v}{t}$$

$$F = ma \qquad W = mg$$

$$W = Fd \qquad \text{GPE} = mgh \qquad \text{KE} = \frac{1}{2}mv^2$$

$$\text{efficiency} = \frac{\text{useful energy output}}{\text{total energy input}}$$

$$p = mv \qquad M = Fd$$

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EMag

$$\frac{\text{input (primary) voltage}}{\text{output (secondary) voltage}} = \frac{\text{primary turns}}{\text{secondary turns}}$$

$$\text{input power} = \text{output power}$$
$$V_\text{p} I_\text{p} = V_\text{s} I_\text{s}$$

(for 100% efficiency)

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SLG

$$\rho = \frac{m}{V} \qquad p = \frac{F}{A} \qquad p = \rho g h$$