

MindSpark

Physics Notes

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Chapter 1: Laws of Motion

Newton's First Law: Body remains at rest/motion unless external force acts.

Second Law: $F = ma$.

Third Law: Every action has equal and opposite reaction.

Chapter 2: Work, Power, Energy

Work = Force \times Distance.

Power = Work/Time.

Energy forms: Kinetic ($\frac{1}{2}mv^2$), Potential (mgh).

Chapter 3: Heat & Thermodynamics

Heat is energy transfer due to temperature difference.

Laws of Thermodynamics govern energy flow.

Chapter 4: Waves & Sound

Wave: disturbance transferring energy.

Sound: longitudinal wave, requires medium.

Chapter 5: Electricity Basics

Ohm's Law: $V = IR$.

Series and parallel circuits.

Key Points: Use SI units; always draw diagrams where applicable.