Science 9

Physics Study Guide

Name:
Date:
Block:

Create a study guide that includes the major vocabulary and concepts you learn in this unit. Include **definitions**, **examples**, and/or **relevant diagrams**. Your study guide can be a rewriting of your notes, a series of questions/answers, a brochure, a mind map showing the connections between concepts, or any other way you can think of. You can create your study guide on a regular sized piece of paper, a large piece of poster paper, or cue cards

Physics I: Energy

Vocabulary	Concepts
Mechanical Kinetic Energy Radiant/Solar/Light Energy Thermal Energy (heat) Sound Energy Electrical Kinetic Energy Elastic Potential Energy Chemical Potential Energy Gravitational Potential Energy Nuclear Energy Electrical Potential Energy Magnetic Potential Energy	Types of kinetic and potential energy Energy transformation

Physics II: Static Electricity

Vocabulary	Concepts
Protons Electrons	Charged vs uncharged materials Law of electric charge

Physics III: Circuits must be Complete for Electrons to Flow

Vocabulary	Concepts
Anode Cathode Electrolyte Voltage (electrical potential difference) Current Resistance Source (battery/electrochemical cell) Resistor/Load Switch Ammeter Voltmeter	How does an electrochemical cell work? Insulator vs. conductor Short circuits

Physics IV: Circuit Diagrams & Ohm's Law

Vocabulary	Concepts
	Drawing circuit diagrams (with symbols) Relationship between voltage, current, and resistance Ohm's Law calculations

Physics V: Series and Parallel Circuits

Vocabulary	Concepts
Junction point	The definition of, how to draw circuit diagrams for, what happens to voltage/current in, and real-life examples of: Series circuits Parallel circuits

Physics VI: Power; Sustainability; Generating Electrical Energy

Vocabulary	Concepts
Smart meter Phantom load Turbine Shaft Generator	Calculating power What are the EnerGuide and ENERGYSTAR® labels How does electrical energy get generated? Renewable vs non-renewable energy Wind turbines, solar panels, geothermal sources