

Physical Science  
Final Exam Review

**Chapter 1: Science & Measurement**

Key Ideas:

Metric system & conversions

Time

Distance

Scientific Method

Experimental Technique

Speed/Velocity

$V = d/t$

**Chapter 2 Mathematical Models**

Key Ideas:

Graphs & Graphing

Slope

Acceleration

**Chapter 3 Forces & Motion**

Key Ideas:

Newton's Laws

Force

Inertia

Balanced & unbalanced  
forces (net forces)

Mass

Weight

Gravity

Friction

Momentum

**Chapter 4 Machines**

Key Ideas:

Simple Machines

Mechanical Advantage

**Chapter 5 Work, Energy, & Power**

Key Ideas:

Work

Efficiency

Power

Conservation of Energy

Potential Energy

Kinetic Energy

## **Chapter 6 Electricity & Electric Circuits**

Key Ideas:

Electricity

Open & closed circuits

Electric Charge

Static Charge

Electroscope

## **Chapter 7 Electricity**

Key Ideas:

Voltage

Current

Resistance

Ohm's Law

## **Chapter 8 Ohm's Law, Work, Power & Energy**

Key Ideas:

Ohm's Law

Power

Energy

## **Chapter 9 Circuits**

Key Ideas:

Series

Parallel

## **Chapter 16 What is Matter**

Key Ideas:

Mixtures vs. Substances

Homogenous

Heterogeneous

Changing States

States of Matter

Solid

Liquid

Gas

Plasma

## **Chapter 17 Properties of Matter**

Key Ideas:

Density

$D = m/v$

Buoyancy

Archimedes' Principle

Boyle's Law

## **Chapter 18 Atoms & Elements**

### Key Ideas:

Inside an atom

Subatomic Particles

Protons

Electrons

Neutrons

Atomic Number

Atomic Mass

Electron Energy Levels

Isotopes

Periodic Table

## **Chapter 19 Molecules & Compounds**

### Key Ideas:

Chemical Bonds

Ionic

Covalent

Chemical Formulas

Counting atoms

Ions

Percent Composition

## **Chapter 20 Chemical Reactions**

### Key Ideas:

Chemical & Physical Changes

Evidence

Chemical Properties

Chemical Reactions

Balancing Equations

Equations as Recipes

## **Chapter 21 Types of Reactions**

### Key Ideas:

Endothermic

Exothermic

## **Chapter 22 Nuclear Reactions**

### Key Ideas:

Decay Series

Half-life

## Chapter 23 Solutions

Key Ideas:

Solutes

Solubility

Solvent

Solubility graphs

Dissolving rates

## Chapter 25 Acids & Bases, pH

Key Ideas:

Acids

Neutralization reaction

Bases

Acid Metal reaction

pH

Electrolytes

Neutral = 7

Acid Rain

Acidic pH < 7

Basic pH > 7

## Chapter 26 Measuring Heat

Key Ideas:

Temperature Scales

Heat

Fahrenheit

Specific Heat

Celsius

Thermal Equilibrium

Thermal Energy

## Chapter 27 Heat Transfer

Key Ideas:

Conduction

Convection

Radiation