

Magnetism

Study Guide: Chapter 9 in *Conceptual Physical Science*, 4th edition

Objectives: When you finish this chapter you should be able to:

- Compare and contrast the electrical and magnetic force.
- Describe the nature of magnetism.
- Determine the direction of the magnetic field in a wire.
- Explain and determine the direction of the magnetic force for electrons flowing through a wire.
- List applications of the magnetic force on moving charges.
- Define and explain electromagnetic induction. Define Faraday's Law.
- Explain the operation of electrical transformers.
- Use the transformer equations to compute voltage and current.

Activities:

- Read chapter 9.
- Chapter 9: Answer mentally Review Questions 2-10, 12, 13, 14, 15, 19, 21, 22, 23, 27.
- Answer Exercises 34, 40, 43, 44.
- Work Problems 1 -6.
- Practice Book: pages 61-64 (4th edition)