

# 8<sup>th</sup> Grade Study Guide

## Chapter 4

### Energy

#### THE NATURE OF ENERGY Section 1

- Define energy.
- Compare and contrast potential and kinetic energy.
- Describe the various sources and forms of energy.
- Calculate energy in joules (J).
- Identify the different types of potential energy.
- Calculate gravitational potential energy.

#### CONSERVATION OF ENERGY Section 2

- Identify examples of energy changing forms.
- Graph changes in potential and kinetic energy.
- Define mechanical energy.
- Explain the law of conservation of energy.
- Identify the role of friction in energy transformations.
- Compare and contrast fusion and fission.
- Define calorie.

