

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

## Chapter 2

### CHAPTER 1

- Convert within the metric (SI) system of measurement.
- Accurately create and understand data from BOT graphs.

### DESCRIBING MOTION Section 1

- Describe motion and its need for a reference point.
- Delineate between distance and displacement.
- Calculate speed using the equation  $s=d/t$  and its variants.
- Calculate and identify average and instantaneous speed.
- Identify the velocity of an object.

### ACCELERATION Section 2

- Identify acceleration. Use its formula to calculate it:  $a=\frac{v_f-v_i}{t}$

### MOTION AND FORCES Section 3

- Define force. Delineate between balanced and unbalanced forces.
- Describe and illustrate a net force.
- Describe inertia. Explain the relationship between inertia and mass.
- Identify Newton's first law of motion.

