

Grade Eight

Science Content Standards.

Focus on Physical Science

Motion

1. The velocity of an object is the rate of change of its position. As a basis for understanding this concept:
 - a. Students know position is defined in relation to some choice of a standard reference point and a set of reference directions.
 - b. Students know that average speed is the total distance traveled divided by the total time elapsed and that the speed of an object along the path traveled can vary.
 - c. Students know how to solve problems involving distance, time, and average speed.
 - d. Students know the velocity of an object must be described by specifying both the direction and the speed of the object.
 - e. Students know changes in velocity may be due to changes in speed, direction, or both.
 - f. Students know how to interpret graphs of position versus time and graphs of speed versus time for motion in a single direction.