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| **Acceleration:** A change in velocity over time.**Average Speed:** The total distance traveled divided by the total time for a given trip.**Average Velocity:** The total displacement traveled divided by the total time for a given trip.**Dimension:** The x, y, or z plane.**Direction:** A description that may include North, South, East, West, positive, negative, up, down, left, or right.**Distance:** A measure of space between two points.**Displacement:** A change in position.**Equation:** A statement that the values of two mathematical expressions are equal.**Free Fall:** The acceleration of a falling object due to Earth’s gravity and in the absence of air resistance.**Horizontal:** Parallel to the horizon or ground.**Instantaneous Speed:** Describes an objects speed at one moment in time or at one specific point in the object’s path. | **Instantaneous Velocity:** Describes an objects speed at one moment in time or at one specific point in the object’s path.**Kinematic:** Of or related to motion.**Magnitude:** A quantity’s size or amount without regard to its direction or other factors.**Motion:** The action or process of moving or being moved.**One-Dimensional:** Moving in either the x or y dimension.**Quantity:** The amount of something.**Scalar:** A quantity that is completely described by its magnitude and measurement units.**Speed:** The rate at which an objects distance changes over time.**Vector:** A quantity that includes both magnitude and direction.**Velocity:** Describes an object’s change of position over time.**Vertical:** Perpendicular to the horizon or ground. |