

## **Kinematics (Equations of Motion)**

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The purpose of this curriculum unit is to familiarize physical science and physics students with the basic concepts used in equations of motion (kinematics). Students will gain knowledge of the fundamental quantities such as; distance, time, speed, velocity, displacement, acceleration etc. This unit is helpful to students studying physical science (9<sup>th</sup> grade), physics (12<sup>th</sup> grade) and AP physics. However, unit is also useful in assisting Algebra I and II, Geometry and Discrete Math students in understanding linear and quadratic equations.

The objectives of this curriculum unit are achieved through theoretical and practical approach. Lesson plans are based on classroom activities. Throughout the unit only Standard International units are used. The difficulty level of problems is properly taken care of in each lesson plan and assignment.