Grade 9, 10
Distance Learning Module 9: Week of: June 1st - June 5th

Conceptual Physics - *Modified from [Unit 1: Forces & Motion Unit](#)*

Targeted Goals from Stage 1: Desired Results

Content Knowledge: Velocity is the change in position with respect to time

Acceleration is the change in velocity with respect to time and it has a direction (it is a vector)

Velocity = delta x / delta t ; a = delta v/ delta t ; delta x (Distance) = 1/2 at^2

Vocabulary: acceleration, velocity, accelerated motion, non-accelerated motion, d = at^2(distance = acceleration*time^2), v = at (velocity = acceleration*time, vector, distance, time, gravity, 9.8 m/s^2.

Skills: Students will be able to calculate time in an object that is accelerating

Students will be able to calculate the distance traveled in a moving object using the d = 1/2at^2 formula.

Analyze qualitative and quantitative data to interpret patterns, draw conclusions, and/or make predictions.

Expectation:

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday Students will be be introduced to calculating time and distance when given acceleration and other relevant values	Khan Academy Calculating Time in an object that is Accelerating Khan Academy Calculating Distance an AirBus 380 Needs to Take Off	Calculating Velocity and Distance Using Acceleration EdPuzzle

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Tuesday: Students will be able to calculate time in an object that is accelerating	Calculating Time and Distance in an Accelerating Object Video Lesson and Practice Gravity and Acceleration Lesson Page	Gravity and Acceleration Lesson Page Answers on Google Form Gravity and Acceleration Exit Slip
Wednesday: Students will be able to calculate time, velocity and distance for objects that are accelerating using the $d = 1/2at^2$ and the $V = at$ formula.	Watch Video Lesson for Free Fall Acceleration Motion Practice Page Free Fall Acceleration Practice	Submit Accelerated Motion Practice Page Answers using Annotate with Kami or by taking a picture/upload
Thursday: Students will be able to calculate the distance traveled in a moving object using the $d = 1/2at^2$ formula.	Calculating Acceleration and Distance Acceleration Calculations Lesson Page	Calculating Acceleration and Distance Lesson Page Answers on Google Form Acceleration Calculation Classwork Exit Slip
Friday Students will be able to describe what momentum is and be able to calculate momentum using the $p = mv$ formula	What is Momentum?	Momentum EdPuzzle Lesson

Week criteria for success (attach student checklists or rubrics):

Students will complete all activities in the Module

Students will score at least a 75% on the acceleration calculation exit slips.

Supportive resources and tutorials for the week (plans for re-teaching):

Physical Science Concepts in Action Glossary

Physical Science Concepts in Action Chapter 11 Motion

Unit 1 Part 2 Motion Review Guide