

Unit Plan

Chapter 10 - Physical Science – Motion

Day One

Objective: The student will be able to compare and contrast distance and displacement. The student will be able to measure motion from a reference point.

Lesson: Lecture 1, Motion Displacement, and reference

Activity: Displacement vs Distance worksheet

Day Two

Objective: The student will be able to compare and contrast speed and velocity. The student will be able to measure relative velocity.

Lesson: Lecture 2, Speed vs Velocity

Activity: Speed Worksheet

Day Three

Objective: Students will be able to calculate speed, velocity and acceleration. Students will be able to identify acceleration.

Lesson: Lecture 3, SVA

Activity: Finish Displacement and Speed Worksheets

Day Four

Objective: Students will time and measure a falling meter stick to determine the acceleration of the meter stick.

Lesson: Testing Reaction Time Day 1

Activity: Testing Reaction Time Day 1

Day Five

Objective: Students will time and measure a falling meter stick to determine the acceleration of the meter stick.

Lesson: Testing Reaction Time Day 2

Activity: Testing Reaction Time Day 2

Day Six

Objective: Students will be able to determine the state of motion from a given set of distance, velocity and acceleration graphs.

Lesson: Lecture 4 Distance-Time Graphs

Activity: Whiteboard Graph Problems Position and Velocity graph worksheet

Day Seven

Objective: Students will be able to use the “triangle method” to determine time, velocity, acceleration, and distance. Students will use motion graphs to solve problems graphically.

Lesson: Lecture 5 – DVA Triangles – Graph Summary

Activity: Acceleration Worksheet

Day Eight

Objective: Students will identify forces as the way in which velocity changes.

Lesson: Lecture6 - Forces

Activity: Finish acceleration and graph worksheets

Day Nine

Objective: Students will identify friction as a force that opposes motion.

Lesson: Lecture 7 – Friction

Activity: Finish all worksheets – Due before taking test.

Day Ten

Objective: Students will measure friction as a force using a spring scale.

Lesson: Friction Lab

Activity: Friction Lab

Day Eleven

Objective: Review Concepts of Motion

Lesson: Hard Hitting Review

Day Twelve

Objective: Review Concepts of Motion

Lesson: WWTBAM

Day Thirteen

Objective: Assess knowledge of Motion

Lesson: Motion Unit Exam

All Worksheets Due: Displacement, Speed, Acceleration, Graphs, Reaction Time, Friction