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| **Physics: Warneck/DeHaan** | | **Week: S1W10** | | |
| **Objective** | **Standards** | | **TEACH/ASSESS** | **HW** |
| **11/12/Monday**  Explore the idea of acceleration in a motion map. | **P2.1g** Solve problems involving average speed and constant acceleration in one dimension.  **P2.2A** Distinguish between the variables of distance, displacement, speed, velocity, and acceleration.  **P2.2B** Use the change of speed and elapsed time to calculate the average acceleration for linear motion.  **P2.2C** Describe and analyze the motion that a velocity-time graph represents, given the graph.  **P2.2e** Use the area under a velocity-time graph to calculate the distance traveled and the slope to calculate the acceleration. | | Acceleration motion map whiteboard introduction. |  |
| **11/13/Tuesday**  Complete idea of acceleration motion map. | Conclusion of the acceleration motion map introduction. Introduction to Activity 1. |  |
| **11/14/Wednesday \*PLC**  Work as groups to complete numbers one and two from Activity 1. | Complete #1 and #2 from Activity 1. Whiteboard designated numbers from activity. | If #1 and #2 are not completed they will need to be done for homework. |
| **11/15/Thursday**  Discuss Wednesday’s lab on acceleration. | Continue whiteboard discussion from Wednesday. Carry out class demonstration of #7 from Activity 1. |  |
| **11/16/Friday**  Continue working as groups to complete all of Activity 1. | Complete designated numbers from Activity 1. |  |

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| **Physics: Warneck/DeHaan** | | **Week: S1W11** | | |
| **Objective** | **Standards** | | **TEACH/ASSESS** | **HW** |
| **11/19/Monday**  Convert p-t to v-t Graphs. | **P2.1g** Solve problems involving average speed and constant acceleration in one dimension.  **P2.2A** Distinguish between the variables of distance, displacement, speed, velocity, and acceleration.  **P2.2B** Use the change of speed and elapsed time to calculate the average acceleration for linear motion.  **P2.2C** Describe and analyze the motion that a velocity-time graph represents, given the graph.  **P2.2e** Use the area under a velocity-time graph to calculate the distance traveled and the slope to calculate the acceleration. | | * Graph the p-t and v-t for the 100 m Dash Lab | * ***a = v/t*** * ***v = x/t*** |
| **11/20/Tuesday**  Convert p-t to v-t Graphs. | * Graph the p-t and v-t for the 100 m Dash Lab |  |
| **11/21/Wednesday** | Happy Thanksgiving! | |
| **11/22/Thursday** |
| **11/23/Friday** |

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| **Physics: Warneck/DeHaan** | | **Week: S1W12** | | |
| **Objective** | **Standards** | | **TEACH/ASSESS** | **HW** |
| **11/26/Monday**  Whiteboard and discuss the 100-meter dash data. | **P2.1g** Solve problems involving average speed and constant acceleration in one dimension.  **P2.2A** Distinguish between the variables of distance, displacement, speed, velocity, and acceleration.  **P2.2B** Use the change of speed and elapsed time to calculate the average acceleration for linear motion.  **P2.2C** Describe and analyze the motion that a velocity-time graph represents, given the graph.  **P2.2e** Use the area under a velocity-time graph to calculate the distance traveled and the slope to calculate the acceleration. | | * What does the slope of a velocity-time graph mean? * What does the slope of a position-time graph mean? | * ***a = v/t*** * ***v = x/t*** |
| **11/27/Tuesday**  Work with groups to complete motion sensor challenge and begin vocabulary review sheet. | * *Acceleration Quiz Part 1* * Test Review: vocabulary, motion maps |  |
| **11/28/Wednesday**  Whiteboard and discuss Activity 2. | * *Activity 2*: *Comparing Constant Velocity to Constant Acceleration* |  |
| **11/29/Thursday**  Work with groups to complete Activity 3. | * Four different position-time graphs for CB. * *Activity 3:* *Stacks of Graphs* |  |
| **11/30/Friday**  Vocabulary Quiz  Whiteboard and discuss formulas. | * *Acceleration Quiz Part 2* * Whiteboard formulas * Pre-test | Complete pre-test |

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| **Physics: Warneck/DeHaan** | | **Week: S1W13** | | |
| **Objective** | **Standards** | | **TEACH/ASSESS** | **HW** |
| **12/3/Monday**  Pre-Test | **P2.1g** Solve problems involving average speed and constant acceleration in one dimension.  **P2.2A** Distinguish between the variables of distance, displacement, speed, velocity, and acceleration.  **P2.2B** Use the change of speed and elapsed time to calculate the average acceleration for linear motion.  **P2.2C** Describe and analyze the motion that a velocity-time graph represents, given the graph.  **P2.2e** Use the area under a velocity-time graph to calculate the distance traveled and the slope to calculate the acceleration. | |  |  |
| **12/4/Tuesday**  Review Pre-Test. | Respond to questions about unit. |  |
| **12/5/Wednesday**  Review acceleration-time graphs. | Whiteboard activity: stacks of graphs. |  |
| **12/6/Thursday**  Review acceleration-time graphs and motion maps. | Whiteboard activity: review. |  |
| **12/7/Friday**  Unit III: Uniform Acceleration Test | **Test** |  |

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| **Physics: Warneck/DeHaan** | | **Week: S1W14** | | |
| **Objective** | **Standards** | | **TEACH/ASSESS** | **HW** |
| **12/10/Monday**  Construct an experimental procedure for measuring acceleration due to gravity. | **P2.1g** Solve problems involving average speed and constant acceleration in one dimension.  **P2.2B** Use the change of speed and elapsed time to calculate the average acceleration for linear motion.  **P2.2C** Describe and analyze the motion that a velocity-time graph represents, given the graph.  **P3.6B** Predict how the gravitational force between objects changes when the distance between them changes.  **P3.6C** Explain how your weight on Earth could be different from your weight on another planet. | | Introduce laboratory and elicit theory for gravity. |  |
| **12/11/Tuesday**  Work with group to carry out designed experiment to collect data. | Guide groups and assess group dialogue. |  |
| **12/12/Wednesday**  Work with groups to complete lab report. | Assist students with completing lab reports. |  |
| **12/13/Thursday**  Group present lab reports. | Groups present experiment reports. Groups must include a five-minute question and answer session following their presentation. |  |
| **12/14/Friday**  Group lab reports. | **All lab reports are due.** |

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| **Physics: Warneck/DeHaan** | | **Week: S1W15** | | |
| **Objective** | **Standards** | | **TEACH/ASSESS** | **HW** |
| **12/17/Monday**  Complete group presentations and review elements of gravity. | **P2.1g** Solve problems involving average speed and constant acceleration in one dimension.  **P2.2A** Distinguish between the variables of distance, displacement, speed, velocity, and acceleration.  **P2.2B** Use the change of speed and elapsed time to calculate the average acceleration for linear motion.  **P2.2C** Describe and analyze the motion that a velocity-time graph represents, given the graph.  **P2.2e** Use the area under a velocity-time graph to calculate the distance traveled and the slope to calculate the acceleration. | | Gravity wrap-up. |  |
| **12/18/Tuesday**  Review test questions and correct appropriate answers. | Test return and review. | **Test re-take times:**  2:30-3:30 p.m. |
| **12/19/Wednesday \*PLC**  Prepare an experimental approach to the acceleration challenge. | Teacher introduces the acceleration unit challenge. Students form groups and plan their approach to the challenge. | **Test re-take times:**  6:45-7:15 a.m.  2:30-3:30 p.m. |
| **12/20/Thursday**  Record necessary measurements and data to complete acceleration challenge. | Student groups take measurements and data for the acceleration challenge. | **Test re-take times:**  6:45-7:15 a.m.  2:30-3:30 p.m. |
| **12/21/Friday**  Execute designed approach to complete acceleration challenge. | Student groups attempt to complete acceleration challenge. | **Test re-take times:**  6:45-7:15 a.m.  **Happy Holidays!** |

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| **Physics: Warneck/DeHaan** | | **Week: S1W16** | | |
| **Objective** | **Standards** | | **TEACH/ASSESS** | **HW** |
| **1/7/Monday**  Review acceleration challenge and complete lab report. | P3.1A - Identify the force(s) acting between objects in “direct contact” or at a distance.  **P3.1d** - Identify the basic forces in everyday interactions.  **P3.2A** - Identify the magnitude and direction of everyday forces (e.g., wind, tension in ropes, pushes and pulls, weight). | | Conduct review. Introduce bowling ball challenge; initial predictions. |  |
| **1/8/Tuesday**  Complete bowling ball challenge and discussion. | Conduct challenge and initial predictions for paradigm lab. | Complete predictions for day one of paradigm lab. |
| **1/9/Wednesday**  Discuss homework and make predictions for upcoming lab. | Go over homework. Have students make predictions with lab group for day two of paradigm lab. | Complete predictions for day two of paradigm lab. |
| **1/10/Thursday**  Explore concept of vector addition. | Vector addition lecture and Mythbusters video clip. |  |
| **1/11/Friday**  Begin Midterm review. | Cover review packet for midterm exam. | **Complete review packet.** |

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| **Physics: Warneck/DeHaan** | | **Week: S1W17** | | |
| **Objective** | **Standards** | | **TEACH/ASSESS** | **HW** |
| **1/14/Monday**  Discuss answers to review packet. | **P1.1C**  **P1.1g**  **P1.1h**  **P1.2g**  **P1.2h**  **P2.1A**  **P2.1C**  **P2.1D**  **P2.1g**  **P2.2A**  **P2.2B**  **P2.2C**  **P2.2e**  **P2.3a**  **P3.6B**  **P3.6C** | | Review for Midterm Exam. | **Study** |
| **1/15/Tuesday**  Discuss answers to review packet. | Review for Midterm Exam. | **Study** |
| **1/16/Wednesday \*PLC**  Midterm Exam. | **3rd and 6th**  **Midterm Exams** |  |
| **1/17/Thursday**  No class. | **1st and 2nd**  **Midterm Exams** |  |
| **1/18/Friday**  No class. | **4th and 5th**  **Midterm Exams** |  |