

Masconomet Regional High School Curriculum Guide

Course Title: Science 9

Course Number: 3111

Department: Science

Grade Level and Phase: CP2 Grade 9

Course Number: 3111

Length of Course: 1 year

Course Description:

This course covers the major concepts of physics including forces, motion, and energy. Practical aspects of science are stressed. Students enrolled in the course will take the Introductory Physics MCAS exam in June.

Objectives:

As a result of this course, students will be able to understand the objectives set forth by the Massachusetts State Frameworks in order to take the graduation-required MCAS test in June of the academic year. See attached for a comprehensive list of objectives.

Materials and Activities:

1. *Monster Truck Rally: Standards 1.1-1.3*
2. *Newton's Laws Demonstrations, Second Law Lab: 1.4,1.5*
3. *Fun with Friction 1.6*
4. *Gravity Drop 1.7*
5. *Coast into Conservation/Roller Coaster Lab: 2.1,2.2*
6. *Work on your Vertical Leap, Power Trip: 2.3, 2.4*
7. *Interactive Lab demo—momentum, Skateboard demo: 2.5*
8. *Temperature vs. Heat lab: 3.1-3.3*
9. *Specific Heat of a Metal: 3.4*
10. *Swing into Harmonic Motion: 4.1, 4.2*
11. *Ripple Effect: 4.4-4.6*
12. *Electricity Lab kit used for: 5.1-5.6*
13. *Light and Optics lab kit used for: 6.1, 6.2*

Assessment:

- *Unit quizzes and exams.*
- *Lab reporting and practical exams*
- *Mid-year and Final exams*
- *MCAS test*