

## Masconomet Regional High School Curriculum Guide

Course Title: Science 9

Course Number: 3121

Department: Science

Grade Level and Phase: CP Grade 9

Course Number: 3121

Length of Course: 1 year

### Course Description:

Science 9 is an introductory course focusing on the physics of forces, motion, heat, waves, and electromagnetism. This course requires a good working knowledge of basic algebra and graphing. Students will take the Introductory Physics MCAS 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*