Introduction

Lab Options

This course includes the option of hands-on or dry lab activities.

- Dry labs have no required materials.
- Hands-on labs require the materials listed below.

Lab Manual

- Each lab contains complete instructions – there is no lab manual for this course. It is strongly recommended that students keep a detailed notebook of their work.

Disclaimer

Apex Learning® has no liability whatsoever regarding any hands-on laboratory activities. The personnel at the school at which the student conducts the hands-on lab activities, or the student's parent or guardian if the lab activities are completed at home, are responsible for all such hands-on lab activities, including ensuring that qualified personnel are available to supervise the activities.

Questions

Contact Apex Learning Support by phone at 1-800-453-1454 or by email at support@apexlearning.com.

Hands-On Lab Materials

Observing Waves

Semester 2: 1.1.7

- Coiled spring e.g., Slinky brand
- Stopwatch
- Meterstick or ruler
- A partner

Exploring Sound Waves

Semester 2: 1.2.5

- Drum or coffee can
- A few paper clips
- Rubber band
- Tuning fork
- Cup of water
- Fork

The Periodic Table

Semester 2: 2.1.7

- Internet access to the following website: Interactive Periodic Table
- Graph paper

Observing Phase Changes

Semester 2: 2.2.5

- Stopwatch or timer
- Thermometer
- Four styrofoam drinking cups
- Three stirring rods, made of wood or plastic
- Ice cubes, preferably of similar shape and size
- Hot, but not boiling, water
- Room-temperature water
- Cold water, from the refrigerator

Thermodynamics

Semester 2: 2.2.8

- Ice cream mixture:
    - 1 cup of half-and-half
    - 1 cup of whole milk
    - 1/4 cup of sugar
    - 3 tablespoons of vanilla pudding mix
    - 1/4 teaspoon of vanilla
    - 2 kg of crushed ice
- Apron
- Large coffee can with lid or similar container
- Large baby-food jar or sandwich-sized reclosable plastic baggie
- 300 g of rock salt
- Thermometer
- Towel
- Spoons

Modeling Molecules

Semester 2: 3.1.7

- One package of large, white marshmallows
- One package of small, white marshmallows
- One package of small, mixed-color marshmallows
- One small box of Dots or other small round candy that a toothpick can pierce
- Toothpicks

Observe a Chemical Reaction

Semester 2: 3.2.5

- Small plastic sandwich bag that can be sealed
- Calcium chloride
- Baking soda
- Small capped vial with phenol red
- Laboratory balance or equivalent scale
- Teaspoon