

Introduction

Lab Options

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

- Dry labs require the lab manuals – no additional materials are required.
- Hands-on labs require the lab manuals and the materials listed below.

Lab Manual

Prentice Hall Earth Science Lab Manual, Student ed. Edward J. Tarbuck and Frederick Lutgens (Prentice Hall, 2006).

See the [Course Materials List](#) for how to acquire this manual.

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

Scientific Method

Semester 1: 1.1.3

- Balloons
- Binder clip
- Marker, permanent
- Paper, cut into strips 100 cm x 2 cm
- Tape measure

Determining Latitude and Longitude

Semester 1: 2.1.4 / Earth Science PH: Exploration 1

- Globe (optional)
- Protractor
- Ruler
- World map

Mineral Identification

Semester 1: 3.5.1 / Earth Science PH: Exploration 2 / Alternate dry lab available

- Resource 16 in the DataBank
- Mineral samples
- Hand lens
- Streak plate
- Copper penny
- Steel knife blade
- Glass plate
- Piece of quartz
- Magnet
- Hammer
- 50-mL graduated cylinder
- Tap water
- Balance
- Thin thread
- Scissors
- Paper or cloth towels
- Dilute hydrochloric acid

Determining How Temperature Changes with Altitude

Semester 1: 4.1.7 / Earth Science PH: Investigation 17A

- Ruler or straight edge
- Colored pencils
- Tracing paper
- Resource 12 in the DataBank

Determining Geologic Ages

Semester 2: 1.1.5 / Earth Science PH: Investigation 13

- Resources 10+11 in the DataBank
- Geologic block diagram (figure 1 provided)
- Logarithmic scale showing decay of U-235 (provided)

How Does Temperature Affect Water Density?

Semester 2: 2.2.2 / Earth Science PH: Exploration 15 / Alternate dry lab available

- (2) 100-mL graduated cylinders
- 2 test tubes
- 2 beakers
- Stirrer
- Food coloring or dye
- Ice
- Tap water

- Graph paper
- Colored pencils

Acid Rain and Brine Shrimp

Semester 2: 3.3.3

- Beaker, 150 mL
- Brine shrimp eggs
- Cups, plastic 9 oz. (6)
- Eye dropper
- Graph paper
- Magnifying glass
- Marker, permanent
- pH paper
- Scoop, large (5cc)
- Scoop, small (1cc)
- Sea salt
- Spatula, metal, small
- Thermometer
- Baking soda
- Lamp (Any incandescent desk or table lamp to set cups under to keep the eggs warm.)
- Matches
- Spoon for stirring
- Spring water
- Squares of paper or a few paper napkins
- Vinegar, white
- Quart or liter container

Human Impact on Climate and Weather

Semester 2: 4.3.4 / Earth Science PH: Exploration 21

- Paper
- Pen or pencil