

APPENDIX C

A COMPLETE LIST OF LAB SUPPLIES

Items in boldface, blue type are found in the laboratory equipment sets that are sold for the course. The other materials are available at supermarkets, hardware stores, or drug stores. If the bullets are black, the items are used in an experiment that employs only household items. Green bullets accompany items used in microscope experiments. Red bullets accompany items used in dissection experiments.

MODULE I

- A rectangular clear plastic or glass container, approximately 4 inches wide by 5 inches long
- Measuring cup
- 1 cup of salt
- 1 cup of unbleached sugar
- A spatula that is slightly smaller in width than the container width
- A liquid measuring cup
- A small saucepan
- Stove
- A tablespoon
- Salt
- A metal stirring spoon
- A small bowl
- 6 clear drinking glasses
- 2 colors of food coloring (yellow and blue work the best)
- Chilled water from the refrigerator
- Turkey baster
- 1 sheet of cardstock
- Scissors
- A tack or pushpin
- 1 foot of string
- A pencil
- A cork bulletin board or sheet of corrugated cardboard
- A marker

- A helper
- A bathtub
- A cork or small toy boat
- A 12-inch length of 2-by-4 wood

MODULE 2

- A tall, clear drinking glass
- A sprig of a live freshwater aquarium plant from genus *Elodea* (this can be purchased from most aquarium stores or larger pet stores). The most common species in the United States is called the American waterweed. Plants from genus *Elodea* are sometimes called Anacharis, but this name is also used for similar plants, some of which are illegal in some states. If American waterweed and Anacharis are outlawed in your state, find a water plant with stalks that look like long, slender bottle brushes.
- A small, sharp knife
- Alcohol: isopropyl (rubbing) or ethanol based
- Paper towels
- A metal washer
- A sunny window or flood lamp
- A large, clear, glass measuring cup (if you are using the flood lamp)
- Water
- A measuring cup for liquids
- Measuring spoons
- A packet of active dry yeast (can be purchased at a grocery store)
- Sugar
- A stirring spoon
- A turkey baster (with a removable bulb)
- A small bit of clay
- Masking tape
- Three coffee mugs
- One fresh, raw egg
- Plastic wrap
- A flexible sewing tape measure (You can also use string to measure circumference, then hold it up to a stiff ruler.)
- White vinegar
- Clear sugar syrup (like Karo syrup)
- Distilled water (You can purchase this at any large supermarket.)

MODULE 3

- Microscope
- A prepared slide of diatoms
- A prepared slide of dinoflagellates
- A prepared slide of foraminiferans
- A prepared slide of radiolarians

MODULE 4

- A natural sponge (If you didn't order the kit that came with this course, you can probably purchase this at a craft store or in the paint department of a home improvement store.)
- A bread knife or scissors
- 3 small balloons
- 3 plastic straws
- A pair of scissors
- Some cellophane tape
- A sink with a tap

MODULE 5

- Dissecting tools and tray
- A clam specimen
- A magnifying glass
- Disposable gloves (You can purchase these with or without latex from a drug store.)
- A microscope
- Some lens paper
- A prepared slide of barnacle nauplius
- A prepared slide of crab zoea
- A sea star specimen
- Some water
- A slide
- A coverslip
- Some lens paper

MODULE 6

- A microscope
- Some lens paper
- A prepared slide of dogfish placoid scales
- A prepared slide of cycloid scales
- A prepared slide of ctenoid scales
- Dissecting tools and tray
- A dogfish shark specimen
- A magnifying glass
- Disposable gloves (You can purchase these with or without latex from a drug store.)

MODULE 7

- A wooden cutting board (or rectangular piece of plywood)
- Corrugated cardboard scraps
- Scissors
- Adhesive tape
- A large wooden spoon
- A helper
- An unopened 2-liter bottle of clear soda (A smaller bottle will also work, but not as well.)

MODULE 8

- 2 marshmallows
- A small metal skewer or fork
- A clear glass mason jar or beaker
- A match (plus a helper who can hold it for you)
- A sink

MODULE 9

- A large, clear glass jar
- At least 1 cup each of sand, clay, and gravel (These can be found at most garden supply stores. Please note that the clay is not modeling clay. It is the kind of clay you use for plants and often is used on baseball fields. If you do not have access to clay soil, you can use topsoil or garden soil [not potting soil] from a landscape center as long as it doesn't have fertilizer added to it.)
- A garden hose
- A large spoon
- A metal mesh kitchen strainer
- At least 1 cup each of sand and clay
- 2 medium bowls
- A 1-cup measuring cup
- A measuring cup for liquids or any container with a pouring spout
- Water

MODULE 10

- A ruler
- 3 different colored pencils: red, black, and yellow

MODULE 11

- **A small, nonliving coral skeleton** (If you did not get the kit that goes with this course, you can most likely find a sample at a saltwater aquarium store. It does not have to be large.)
- A magnifying glass
- A ruler
- A hammer
- A pencil

MODULE 12

- **A microscope**
- **A prepared slide of rotifers**
- **A prepared slide of nematodes**
- **A prepared slide of *Hydra***

MODULE 13

- A 2-liter bottle
- Some scissors or a small steak knife
- A liquid measuring cup

- A small aquarium aerator, aquarium tubing, and air stone (A long-handled spoon can be used to stir the water instead, but that shortens the time over which you can perform the experiment.)
- **Brine shrimp eggs**
- Salt without iodine (Most salt is iodized, but you can find non-iodized salt in most stores. You cannot use ocean salt for this experiment. It needs to be table salt; it just should not be iodized. Morton's, for example, makes both iodized and non-iodized salt.)
- Baking soda
- A teaspoon
- One packet of baker's yeast
- A small plastic storage container with lid
- An eyedropper
- A microscope, slides, and coverslips (or a magnifying glass)
- A clear 2-liter bottle
- A small chunk of modeling clay or Play-Doh® (about the size of a plum)
- Some wood toothpicks
- Some deli toothpicks (the kind with the curly strips of colored cellophane on the ends)

MODULE 14

- **A glowing light stick**
- Two drinking glasses
- Ice water
- Warm water
- Two glass slides (They do not have to be microscope slides. You just need 2 flat glass surfaces that can be placed on top of one another. You could use 2 glass panes from 2 small picture frames, or you could use a mirror as the bottom surface and a glass pane as the top surface.)
- An eyedropper
- **Dried ostracods (sea fireflies)**
- Water

MODULE 15

- A blank world map (There is one in the solutions and tests manual, right after the study guide solutions for this module. There is also one on the course website, which is discussed in the "Student Notes" at the beginning of this book.)
- Blue and green colored pencils (3 shades of blue)
- A world atlas or world map

MODULE 16

- One cup of dried kidney beans
- One-half cup of dried lentils (NOTE: Any type of beans will do for this experiment, but you should be able to easily differentiate between the 2 types.)
- Twenty-three 10-ounce disposable drinking cups
- A calculator