



General Science 1 Lab Materials

The Discover! curriculum prioritizes the use of everyday items for our laboratory experiments. This is a list of materials for each of the unit labs. There is also a list of commonly used science lab items that are contained in the Discover! Middle School Laboratory Kit available for sale through Edovate (available September 2024). The purchase of this kit is NOT mandatory, and all items can be purchased or borrowed from a preferred source.

Middle School Laboratory Kit Items (used in multiple courses)

- stirring rods
- funnels
- thermometer
- safety goggles
- safety apron/safety lab coat
- gloves
- digital scale
- mL measuring beakers
- modeling clay
- thick twine
- foldable ruler/meter stick
- hand lenses or magnifying glass
- microscope and slides (portable, preferably)
- various size marbles
- 12 inch wooden dowel (this is a multipack – we just need 2 in each box)
- protractor
- bar magnet
- pipet or medicine dropper

Unit 1, Lab 1: Chemical Reactions

- 3% hydrogen peroxide
- liquid dish soap
- warm water (100°F / 38°C)
- 1 tbsp fast-action yeast
- funnel
- stirring rod
- measuring cup
- measuring spoons
- medium plastic bucket
- 500mL plastic bottle (16.907 oz)
- thermometer
- pen or pencil
- notebook
- safety goggles
- apron
- plastic or latex glove

Unit 2, Lab 1: Birdhouse Engineering

- pencil
- paper

- tape
- ruler
- scissors
- poster board (optional)
- markers (optional)

Unit 2, Lab 2: Dissecting Density

- tape
- ruler
- digital scale
- 30 pennies
- measuring cup
- solid objects to measure (toy car or marble)

Unit 3, Lab 1: The Ins and Outs of Membranes

- 2 eggs soaked in vinegar for three days
- 1 L of vinegar
- 2 tall glasses (tall enough for egg to sit inside)
- Salt
- tablespoon
- small scale
- stirring rod

Unit 3, Lab 2: Getting a Grip on Biomedical Engineering

- 10 straws
- scissors
- string
- poster board or thick paper
- paper ball
- pen
- duct tape or other strong tape

Unit 4, Lab 1: Simulating Heart Disease

- 2 small plastic cups
- 2 wide straws
- scissors or craft knife
- red food coloring
- roasting pan or another medium-height tray
- modeling clay
- 1000 mL water
- stirring rod
- timer
- measuring cup

Unit 4, Lab 2: Pill Engineering

- 60 mL flour
- 30 mL cornstarch
- 60 mL sugar
- 30 mL vegetable oil
- paper plate
- 4 bowls or cups
- clear plastic cup
- 2 cups of clear diet soda
- spoon

- 4 pieces of hard color-coated candy
- timer
- measuring spoons
- poster
- markers

Unit 5 Lab: Modeling an Epidemic

- 2 bottles distilled water (4L)
- half a head of purple cabbage
- 100 mL vinegar
- 20g baking soda
- 20 clear cups
- eye dropper or pipet
- measuring cup
- pot
- goggles
- plate
- marker

Unit 6, Lab 1: The Force from Afar

- 4 ft twine or thick string
- 3 water balloons
- water
- scissors

Unit 6, Lab 2: Spin the Planisphere

- paper
- pencil
- scissors
- thumbtack
- computer
- 11 x 11 inch cardboard
- tape

Unit 7, Lab 1: The Tilted Moon

- 2 tall nails
- modeling clay
- 30 x 30 cm cardboard
- 60 cm string or twine
- white paper
- tape
- poster
- markers

Unit 7, Lab 2: Eyes in the Sky

- 3 helium balloons
- paper or plastic cup
- 1 meter string or ribbon
- tape
- small digital scale
- meter stick or ruler
- timer or stopwatch
- 10 pennies and other light objects like plastic beads

Unit 8, Lab 1: A Giant Carbon Sink

- bottle of distilled water (2L)
- half a head of purple cabbage
- measuring cups
- measuring spoons
- 2 large plastic jars of the same size (or glass)
- plastic wrap
- 2 rubber bands (large enough to fit over the mouth of the jars)
- 2 smaller paper cups (half the size of the jars)
- tape
- salt
- water

Unit 8, Lab 2: The Great Cleanup

- 2 long feathers
- tin pan
- 10 mL oil
- dish soap
- sponge
- 10-20 cotton balls
- spoon
- paper towels
- plastic cup
- water
- cup

Unit 9 Lab: Greenhouse Effect

- 2 clear containers (same size, glass or plastic)
- 2 thermometers
- plastic wrap
- 2 rubber bands
- tape

Unit 10, Lab 1: Building a Barometer

- empty soup can
- balloon
- flexible plastic straw
- rubber bands
- colored paper or index card
- tape
- petroleum jelly

Unit 10, Lab 2: DIY Weather Studio

- 2 disposable cups with lids
- marker
- 4 straws
- pencil
- cardstock or cardboard
- 2 push pins
- tape
- 4 small cups