



General Science 2 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: Pendulums

- string or thread
- small weight (washer or small bag of sand)
- timer
- ruler or meter stick
- pencil or wooden dowel
- pen
- paper

Unit 2, Lab 1: Vascular vs Nonvascular Plants

- nonvascular plant specimen (moss from outside)
- celery with leaves
- magnifying glass (or hand lens)
- small water containers
- food coloring
- scissors
- microscope and slides (optional)
- knife or dissecting tools (optional)

Unit 2, Lab 2: Sustainable Agriculture, Composting

- two pots
- soil
- food scraps
- shredded newspaper or dry leaves
- coffee grounds or used coffee filter
- watering can
- marker
- thermometer
- gloves (optional)

Unit 3, Lab 1: Botanical Cycles

- 3 small plant pots or Styrofoam cups
- potting soil
- acidic fruit (lemon, orange)
- nutrient rich potting soil (ex. Miracle grow)
- pea plant seeds
- ruler

Unit 3, Lab 2: Exploring Your Own Backyard

- notebook
- plant identification guide or app
- ruler
- camera or smartphone for documentation
- clear plastic cup
- thermometer
- plastic bags for specimen collection
- microscope (optional)

Unit 4, Lab 1: Bonding Bonanza

- table salt
- sugar
- aluminum foil
- 2 small bowls or cups
- 2 spoons
- timer
- magnifying glass (optional)

Unit 4, Lab 2: The Case of the Non-Newtonian Fluid

- 2 large bowls
- cornstarch
- water
- apron
- gloves
- small coin
- tablecloth or newspaper
- food coloring (optional)

Unit 5, Lab 1: DIY Water Filtration System

- empty 2L bottle
- large bowl
- dirty water sample
- five coffee filters
- sand
- gravel

- rubber band
- thin cloth (old t-shirt or bandana)
- scissors

Unit 5, Lab 2: Cabbage Chemistry

- boiling water
- red cabbage
- knife
- several small bowls or containers
- various acidic substances (citrus fruit, vinegar)
- various basic substances (baking soda, antacid)
- various neutral substances (salt, flour, milk)

Unit 6, Lab 1: Spring into Action

- spring (metal coil from a retractable pen)
- 3 small objects with various weights
- ruler or meter stick
- timer
- tape
- small kitchen scale (digital scale)

Unit 6, Lab 2: Law of Thermodynamics

- 2 Styrofoam cups
- 2 paper plates
- 1 cup hot water
- 1 cup cold water
- thermometer
- timer

Unit 7, Lab 1: Magnetic Explorer

- medium container or bowl
- water
- cardboard or cardstock
- sewing needle

Unit 7, Lab 2: Cooking Up Sunshine

- small cardboard box
- aluminum foil
- black construction paper
- plastic wrap
- tape
- scissors
- ruler
- thermometer
- oven safe dish
- water

Unit 8, Lab 1: Newton's Hovercraft

- CD or DVD
- push up bottle cap (such as that of a sports drink bottle with a squirt top)
- hot glue
- balloon
- ruler or meter stick
- marker

- masking tape

Unit 8, Lab 2: Roller Coaster Rush

- insulation foam or pool noodle
- masking or duct tape
- toilet paper and paper towel rolls
- timer
- small marble
- large marble
- felt (optional)

Unit 9, Lab 1: Power of Pulleys

- plastic bottle cap
- wooden dowel or skewer
- cardstock
- string
- 2 chairs
- plastic cup
- scissors
- glue stick
- hole punch (optional)
- various household objects that can be weighed

Unit 9, Lab 2: Ramp it Up!

- 3 ft long wooden board
- toy car
- ruler or meter stick
- protractor
- timer
- masking tape

Unit 10, Lab 1: DYNAMOmite!

- clear plastic container
- water
- bar magnet
- staples (or other small magnetic material like paper clips)
- lamp
- tape

Unit 10, Lab 2: Candy Rock Cycle

- baking sheet
- candy with a coated shell
- water
- medicine dropper or pipet
- spray bottle
- toothpicks