



# THIS IS THE START OF THE LABORATORY LIST

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THIS IS A PREVIEW. THE NUMBER OF PAGES DISPLAYED IS LIMITED.



# SUPPLY LIST

## Lesson 1

- Cover paper (construction paper, colored card stock, or scrapbook paper)
- Copy paper (10–12 sheets)
- Stapler
- Stack of cardboard (or substitute a kitchen cutting board)
- Standard-sized paper towels
- Red, blue, and yellow food coloring
- 5 small, clear cups
- Spoon
- Water
- Large, empty, open cardboard box
- Aluminum foil
- Single socket pendant lamp cord (for lanterns)
- LED full spectrum grow light bulb
- Glue
- Scissors
- Seeds
- Small flowerpots
- Vermiculite
- Peat moss
- Compost
- Your light hut
- Water
- Timer (optional)

## Lesson 2

- Seeds (bean and sunflower work best)
- 3 plastic Ziploc® bags
- 3 paper towels
- 3 or more turnip seeds (or bean seeds)
- Tape
- Ruler (should read centimeters)
- Scientific Speculation Sheet

## Lesson 3

- Flower (A lily works best because all parts of the flower are easily visible.)
- Flower dissection page of your Botany Notebooking Journal
- Glue or tape
- Adult to use a knife in this activity
- Cup of soil
- Sunny windowsill
- Sunflower seed
- Fresh flower
- Container with a lid
- Borax

## Lesson 4

- 2 flowers that are still on their plants. They should be on separate plants of the same type.
- Cotton swab (like a Q-tip®)
- Small mason jar with lid
- Red spray paint
- Adult with a drill or hammer and nail (to punch holes in the lid)
- 1 yard of wire (cut in three equal pieces)
- 1 small piece of wire (for fastening other wires)
- Water and sugar
- Vermiculite
- Compost
- Peat moss
- Flowering plants that produce the kind of nectar most butterflies enjoy eating (butterfly bush, lantana, zinnia, bee balm, purple coneflower, penta, sage, milkweed or butterfly weed, lilac, sunflower, marjoram)

## Lesson 5

- 1 Really ripe banana
- 1 fresh banana
- Squash or medium-sized pumpkin
- Adult with a sharp knife
- Burr
- Magnifying Glass
- Apple cut into 5 slices
- 4–5 cups filled with different substances: lime juice, vinegar, olive oil, water, and/or saltwater. You can also add more cups and try other substances you think may be helpful in preserving the fruit's color.

## Lesson 6

- 2 identical candles
- Matches or lighter
- Adult
- 2 large jars
- Small plant
- Plank of wood
- Large glass jar
- Organic potato (regular potatoes are sprayed with a substance to keep them from growing roots)
- 2 bamboo skewers
- Water
- Plastic sandwich bag
- Clothespin
- Living plant that is not an evergreen
- Mod Podge®
- Card stock or blank canvas
- Fall leaves
- Paintbrush
- Multiple different leaves

## Lesson 7

- Black bucket with lid
- Adult
- Hammer and nail (or drill)
- Compostable material
- 5–8 paper towels
- Water
- 5–10 bean seeds
- Romaine lettuce scrap (the bottom two inches of the base)
- Celery scrap (the bottom two inches of the base)
- Glasses or jars
- Planter big enough for two vegetables
- Garden soil

## Lesson 8

- Celery
- Cup
- Water
- Blue food coloring
- Clay or Play-Doh®
- Yellow, green, red, and blue food coloring
- 4 tall glasses
- 4 white roses or white carnations (If neither of these flowers are available at your local store, you can try to use another variety of white flower.)
- 2 paper or Styrofoam® cups with a lid
- 4 bean seeds
- Mixture of vermiculite and compost for soil
- Sharpened pencil
- Black paint

## Lesson 9

- Materials to build a raised garden bed
- Compass
- Empty plastic bottle with lid (sturdier energy drink bottles with a wide mouth work best)
- Drill or hammer and nail



## Lesson 10

- Ruler
- Colored pencils
- Twig on a tree
- Someone to help you
- Measuring tape or yardstick to measure the height of your helper
- 12-inch ruler
- Tall tree
- Crayon with all the paper removed
- Plain white paper
- Tacks (optional)

## Lesson 11

- Tape measure
- Chalk
- 2 plastic sandwich bags
- 2 clothespins
- Deciduous tree
- Conifer tree
- Pinecone
- Oven preheated to 250 degrees
- Bucket of cold water

## Lesson 12

- Paper
- Several fern fronds
- Several colors of paint
- Paintbrush or sponge
- Large glass container with a lid
- Pea-Ver-Comp mixture
- Miniature fern

## Lesson 13

- Coat hanger
- Yarn
- Tape
- Trees with lichens on them, preferably in different places (Lichens prefer oak trees because they can keep the water locked into the deep ridges of the oak bark better than in the bark of most trees.)
- 3 handfuls of moss

- 2 tablespoons of water retention gel
- Half cup buttermilk
- Blender
- Bucket
- Paintbrush (2 inch)
- Spray bottle with water
- Piece of plywood or another surface where you want your moss to grow (Ideally you want the surface to be located in a shady area.)

## Lesson 14

- 5 bottles
- 12 tsp yeast
- 10 tsp sugar
- 5 balloons
- Funnel
- Measuring cups
- Measuring spoons
- Warm water
- 3 slices of bread
- Water
- 3 plastic Ziploc® bags
- Permanent marker
- Ruler
- Store-bought mushrooms with stems in place
- Brightly colored cardstock (don't use black or white as some spores are black or white)
- Plastic cup
- Pitcher of water
- Woodchip mulch (do not use pine mulch or cedar mulch)
- Plastic tub with lid
- Colander
- Compost
- Scissors
- Spray bottle filled with distilled water