

Lab Supplies not included with the Honors Biology Lab Kit

For required labs (you must complete all three of these):

Cell Respiration Lab

- 1/2 teaspoon
- Baker's yeast
- Corn syrup (100% glucose)
- Dixie® cups (12)
- Funnel, small
- Kitchen scale
- Masking tape
- Pencil
- Permanent marker, felt tip
- Ruler with mm markings
- Spoon
- Sugar or sweeteners (3 different types)
- Timer
- Water, warm

Photosynthesis Lab

- Aluminum foil
- *Anacharis or Elodea plants (eight 6 cm pieces) (purchase at tropical fish store or pet store, or order online); If you don't have access to Anacharis or Elodea plants, you can use **any freshwater aquatic plant**
- Distilled water
- Drinking straw
- Light source
- Masking tape
- Pencil
- Permanent marker, felt tip

Osmosis and Diffusion Lab

- Corn syrup
- Dixie® cup
- Funnel (small)
- Kitchen scale
- Masking tape
- Paper towels
- Permanent marker (felt tip)
- Ruler
- Scissors
- Solo® Cups (6)
- Spoon
- Timer

For other labs (you must complete 7 of these):

**Note: A microscope is required for some labs. If you do not have access to a microscope and cannot purchase one, there are 7 labs that do not require a microscope. However, we strongly encourage students to use a microscope in this course. Microscopes can be purchased for about \$100 through the company that supplies the lab kits at: [Quality Science Labs, LLC: http://www.qualitysciencelabs.com/microscopes/ \(opens a new window\)](http://www.qualitysciencelabs.com/microscopes/). They are also available through other online retailers, including Amazon.com. The microscope should have objectives: 4X, 10X, and 40X.

Microscope and Cells Lab

- Cotton swabs
- Cup
- Knife (to cut onion)
- Newspaper
- Microscope**
- Onion
- Pencil
- Scissors
- Soft cloth
- Strand of hair
- Toothpicks
- Water

DNA Isolation Lab

- Dish detergent
- Freezer or refrigerator
- Meat tenderizer
- Rubbing alcohol
- Sports drink

Mitosis Lab

- Pencil
- Microscope**

Genetics Lab

None

Natural Selection Lab

- Coin
- Paper
- Pencil
- Scissors

Classification Lab

- Paper
- Pencil

Diversity Lab

- Fresh mushroom
- Knife
- Microscope**
- Sugar
- Squash
- Toothpick
- Yeast
- Water

Lung Capacity Lab

2 rulers with metric system markings

Mammal Tissues Lab

Microscope**

Plant Lab

- Carrot (fresh)
- Celery (stalk)
- Corn (2 kernels, fresh or frozen)
- Dicot (small) plant with flowers (Hint: netted veined leaves)
- Food coloring (red)
- Knife
- Leaves (you will need to collect)
- Microscope (optional)
- Monocot (small) plant with flowers (Hint: parallel veined leaves)
- Monocot stem (tulip, lily, etc.)
- Peanuts (2, or almonds)
- Pencil

Ecology Lab

- Microscope (optional)
- Outdoor area
- Outdoor body of water (even just a puddle)
- Paper
- Pencil
- Popsicle sticks (or other “boundaries” for your ecosystem)