Items Needed To Complete Each Lesson

Every child will need his own notebook, blank paper, lined paper, and colored pencils.

Lesson 1

- A laundry basket or large plastic container
- A bag of M&M's (you can also use Skittles[®] or any other candy that comes in a variety of colors)
- A plain sheet of white paper
- Clean paper towels
- 21 sheets of construction paper in three different colors matching three of the candies
- 6 (or more) extra sheets of construction paper to line the laundry basket or container.
- A stopwatch or some other kind of timer

Lesson 2

- A box of lemon gelatin (Jell-O[®] brand works best)
- Sugar
- Hot water
- Red food coloring
- Two bowls
- Serving cups or dishes

Lesson 3

- Masking tape
- Tape measure
- Two thermometers that read room temperature and above
- A white trash bag and a black trashbag (They need to be the same size and thickness.)
- Some small stones

Lesson 4

- Two blindfolds
- Colored tape
- Cellophane tape or glue
- A surface on which you can mark off a 2-foot by 2foot square with tape
- Several pieces of cardboard
- Paper
- Scissors
- A ruler
- Six drawings (or small pictures) of a cougar. They can all be copies of one drawing or picture.

Lesson 5

- Copy of a world map you can cut up
- Protective eyewear
- Breathing mask or surgical mask
- A shallow, wide, disposable foil baking pan
- Cement mix and water (amount depends on the size of your pan)
- A strong piece of cardboard or small piece of wood (A cement trowel would be ideal.)
- A small disposable container, such as a margarine container or a short plastic cup
- Bait (such as peanut butter, peanuts, sunflower seeds, mealworms, or scraps of meat)

Lesson 6

• Tape measure

Lesson 7

- Stopwatch or some other kind of timer
- Ruler or tape measure
- Owl pellets (You can buy these at science supply houses. The course website, discussed in the introduction to the book, has links to several places that will send them to you in the mail.)
- Paper plate
- Bamboo skewer or toothpick
- A blank sheet of paper
- Tweezers
- Latex or rubber gloves

Lesson 8

- A folder or poster board
- Cutouts of every continent (except Antarctica)
- Index cards
- Beads in different colors (You need several beads of each color.)

Lesson 9

- A small plastic bottle (like the kind drinking water comes in)
- A pin
- A balloon
- Water

Lesson 10

• A lizard to raise and the things needed to care for it.

Lesson 11

• A turtle to raise and the things needed to care for it.

Lesson 12

- Two plastic bags (large, zippered bags are best)
- Several small stones
- Several leaves
- Two cardboard cylinders, like those used in toilet paper rolls
- A few metal coat hangers your parents will allow you to destroy
- Pliers
- Wire cutters or very strong scissors
- A timer, like a stopwatch

Lesson 13

- A ball of yarn
- Tape
- A long, sturdy wooden dowel or broom handle
- A foam board about $1\frac{1}{2}$ feet long and $1\frac{1}{2}$ feet wide
- Marker
- An adult with sharp knife (like an X-ACTO[®] knife) or sharp blade
- Duct tape or glue
- A flashlight
- A shoebox
- Oil-based paint (yellow is best, but any bright color will do)
- A paint brush (one with a small tip, like what an artist would use)
- A yardstick or measuring tape
- Chalk

Lesson 14

- Glass baking pan or bowl
- Ruler
- Bucket
- Large spoon, a spade, or a shovel
- Five-gallon bucket with a lid
- Newspaper (just the black and white sections)
- Water
- Earthworms
- An oblong baking tray
- Moist paper towels
- Heating pad
- Ice pack