

Materials Provided in Kit**Unit A: Experimental Design: Studying People Scientifically**

- 16 Lab-Aids 2-point sensors
- 16 porcupine balls
- 1 1/2-cup measuring cup
- 1 2-cup measuring cup
- 16 9-oz plastic cups
- 250 small tasting cups
 - 1 tube of edible red food coloring
 - 5 packets of unsweetened lemon drink mix
- 200 paper clips
- 150 plastic toothpicks

Unit B: Body Works

- 40 1-gallon plastic bags
- 40 9-oz plastic cups
 - 1 60-mL bottle of 0.1M hydrochloric acid solution
 - 1 180-mL bottle of phenolphthalein solution
- 16 60-mL bottles of 0.05M sodium hydroxide solution
 - 1 60-mL bottle of 0.1M sodium hydroxide solution
- 200 wrapped straws
 - 1 set of 4 colors sidewalk chalk
 - 1 set of Circulation Game cards
- 8 sets of modeling clay
 - 1 set of Role cards
- 1 240-mL bottle of vinegar
- 8 120-mL bottles of vinegar
- 200 antacid tablets
- 16 30-mL graduated cups
- 16 plastic droppers
 - 1 15-mL bottle of blue food coloring
- 16 stir sticks
- 16 SEPUP trays
 - 8 30-mL bottles of bromthymol blue (BTB) indicator solution
 - 8 clamps
 - 1 Heart Sounds CD
 - 8 pressure bulbs
 - 4 siphon bulbs
- 16 plastic bins
 - 8 plastic human torsos (front and back)
- 16 pieces of 1/2-inch diameter tubing
 - 8 pieces of 1/4-inch diameter tubing
- 8 sets of 35 Organ and Structure cards
- 8 set of 35 Organ Function cards

- 8 sets of 8 Body System cards
- 1 Color transparency, "Systems to Cells: 1"
- 1 Color transparency, "Systems to Cells: 2"
- 8 sets of colored pencils
- 1 box of wooden toothpicks

Unit C: Cell Biology and Disease

- 32 SEPUP trays
 - 8 Chemplates®
 - 1 1/2-cup measuring cup
- 16 30-mL graduated cups
- 32 9-oz plastic cups
- 32 plastic droppers
 - 8 SEPUP funnels
- 24 stir sticks
 - 8 30-mL bottles of "Disease Indicator" solution
 - 2 30-mL bottles of "Ed" solution
 - 2 30-mL bottles of "Heather" solution
 - 2 30-mL bottles of "Laura" solution
 - 2 30-mL bottles of "Miriam" solution
 - 2 30-mL bottles of "Mr. Klasky" solution
 - 2 30-mL bottles of "Mr. Milligan" solution
 - 2 30-mL bottles of "Ms. Shah" solution
 - 2 30-mL bottles of "Tran" solution
- 200 glass coverslips
 - 1 package of hay infusion
- 16 sets of 8 Interview Cards
 - 8 15-mL bottles of Methyl Cellulose solution
- 16 single depression microscope slides
- 60 microscope slides
 - 1 set of 8 Place cards
- 1 60-mL bottle of 2% sodium carbonate solution
- 100 sterile swabs
 - 1 package of beans
- 8 30-mL bottles of bromthymol blue (BTB) indicator solution
 - 1 vial of carbon pieces
 - 2 15-g containers of activated charcoal
 - 1 300-g container of cornstarch
- 8 plastic droppers
- 160 7-cm filter paper circles
 - 8 15-mL bottles of blue food coloring
 - 8 gas delivery tubes
 - 8 20-mL bottles of Lugol's (iodine) solution

- 8 4X magnifiers
- 2 packages of rice
- 90 rubber bands
- 150 sandwich bags
- 8 plastic spoons
- 40 sugar packets
- 16 3-dram vials with caps
- 8 30-mL bottle of “Donated Blood Type A” solution
- 8 30-mL bottle of “Donated Blood Type B” solution
- 8 30-mL bottle of “Donated Blood Type O” solution
- 8 30-mL bottle of “Fong's Blood Serum” (Type B) solution
- 8 30-mL bottle of “Jordan's Blood Serum” (Type AB) solution
- 8 30-mL bottle of “Sasha's Blood Serum” (Type A) solution
- 8 sets of 6 Classification cards
- 1 480-mL bottle of corn syrup solution
- 1 480-mL bottle of 70% ethyl alcohol (ethanol)
- 8 sets of 9 Micro-life cards
- 8 human blood slides
- 8 human cheek cell slides
- 4 bacillus (bacteria) slides
- 4 coccus (bacteria) slides
- 4 trypanosoma slides
- 4 amoeba slides
- 4 paramecium slides
- 1 480-mL bottle of vinegar
- 6 125-mL bottles of agar
- 160 60-mm plastic petri dishes
- 16 number cubes
- 16 sets of 50 plastic disks (20 green 15 orange, 15 blue)
- 8 sets of game pieces (1 each of 4 colors)
- 1 container of Glogerm™ powder
- 8 sets of Lab-Aids Hut, House, Lab and Weird Events game cards
- 8 Lab-Aids Maracondo Fever game boards
- 2 ultraviolet (UV) lights
- 1 box of wooden toothpicks
- 1 Color transparency, “Systems to Cells: 1”
- 1 Color transparency, “Systems to Cells: 2”
- 8 sets of colored pencils

Unit D: Genetics

- 160 pieces of control paper
- 16 9-oz plastic cups
- 8 plastic droppers

- 120 germinating paper circles
- 1 jar of Nicotiana seeds
- 40 clear petri dishes
- 160 pieces of PTC paper
- 1 Marfan Foundation: “How Do Your Genes Fit?” DVD
- 8 packages of 30 blue and 20 orange plastic disks
- 40 black petri dishes
- 16 1-inch foam balls
- 56 1-1/2-inch foam balls
- 100 brass fasteners
- 50 yellow paper clips
- 16 blue pipe cleaners
- 16 orange pipe cleaners
- 60 blue straws
- 50 green straws
- 40 red straws
- 40 blue thumbtacks
- 1 box of toothpicks
- 8 sets of colored pencils

Unit E: Ecology

- 80 aluminum foil squares
- 8 30-mL bottles of bromthymol blue (BTB) indicator solution
- 1 elodea certificate
- 80 filter papers for 100-mm petri dish
- 1 lumbriculus variegatus (blackworms) certificate
- 50 pieces of nematode extractor filter paper
- 40 owl pellets
- 1 container of aquarium gravel
- 1 container of sand
- 1 set of 4 colors sidewalk chalk
- 200 glass coverslips
- 8 20-mL bottles of Lugol's (iodine) solution
- 60 microscope slides
- 80 wrapped plastic straws
- 8 sets of 18 animal cards
- 1 240-mL bottle of bromthymol blue (BTB) indicator solution
- 16 small brushes
- 8 sets of 6 phyla cards
- 8 Lab-Aids nematode extractor sets (funnel, disc, stand and clamp)
- 8 pieces of nematode extractor tubing
- 16 100-mm plastic petri dishes
- 16 plastic pipets

- 64 pointed wooden sticks
- 25 armbands
- 64 clear plastic vials with caps
 - 8 30-mL graduated cups
- 32 9-oz plastic cups
- 16 plastic droppers
- 16 4X magnifiers
- 16 15-cm metric rulers
 - 1 box of toothpicks

Unit F: Evolution

- 8 numbered dice
- 2 Lab-Aids drill core sets
- 16 paper bags
- 150 clear plastic bags
 - 2 3-inch wide paper rolls
- 800 beige rods
- 800 green rods
 - 8 sets of 5 skeleton cards
 - 8 sets of 3 fossil footprint cards
 - 2 fossils specimens, 1 each of 8 different fossils
- 16 4X magnifier
- 16 sets of 6 Fossil Time cards
- 16 sets of 6 Geologic Event Time cards
 - 8 Lab-Aids Battling Beaks Arenas
 - 8 9-oz plastic cups
- 96 plastic forks
 - 8 sets of colored pencils

Unit F: Bioengineering

- 160 sheets of 8.5 x 11 card stock
- 16 triangular fabric slings
- 10 rubber gloves
 - 1 set of 8 station cards
 - 3 sets of modeling clay
- 16 9-oz plastic cups
- 20 medium non-latex gloves
- 20 medium plastic gloves
- 150 sandwich bags
- 520 wrapped straws
 - 8 3 meters long pieces of string
 - 8 120-ft rolls of filament tape
- 32 4-inch long transparent tubes, 3/4 inch diameter
- 16 30-mL graduated cups
- 160 plastic tasting cups
- 16 marbles
 - 1 box of paper clips
- 50 large paper clips
- 16 safety pins
 - 8 120-ft rolls of brown package tape
 - 8 120-ft rolls of masking tape
 - 8 120-ft rolls of transparent tape
 - 1 box of toothpicks
- 232 4-inch transparent tubes, 5/8 inch diameter

Materials Not Provided in kit**Unit A: Experimental Design: Studying People Scientifically**

- 1 overhead projector
- 1 computer with Internet access
- 1 projection device
- 1 2 quart container
- 2 1 quart containers
 - gummy candies shaped like life preservers
 - gummy candy worms
 - masking tape
 - medicine labels (optional)
 - meter sticks
 - paper towels
 - permanent ink markers
- 1 stirring spoon
 - sugar
 - supply of water

Unit B: Body Works

- 1 overhead projector
- 1 computer with Internet access
- 1 projection device
- 1 class set of safety goggles
 - access to watch or wall clock with second hand
 - balances
- 1 1 liter beaker
 - bleach
- 1 CD player
 - calculators
 - chart paper
 - chicken wings (raw)
- 16 dissection scissors
- 16 forceps
- 16 dissection trays
 - markers
 - meter sticks
 - overhead transparency pens
 - paper towels
 - scissors
 - transparent tape
 - unlined paper
- 8 1 liter bottles or other measuring containers, graduated into 100-mL divisions
- 1 antacid tablets (non-effervescent) containing calcium
 - apple and knife (optional)

- 1 small drum (optional)
 - hard candies (optional)
 - mop(s)
- 1 plastic wrap, 1 roll
 - sheep hearts (optional)
 - sponges
- 2-3 stethoscopes (optional)
 - string
 - distilled water
- 1 large bottle of carbonated water (optional)
 - Unlined paper

Unit C: Cell Biology and Disease

- 1 overhead projector
- 1 computer with Internet access
- 1 projection device
 - access to microwave or hot water bath
 - access to refrigerator
 - access to sinks with running water and soap
- balances
- chart paper
- class set of compasses
- forceps
- graph paper
- green leaves (non-waxy)
- 1-hole puncher
- index cards, large (optional)
- markers
- 16 microscopes
 - Microscope video camera (optional)
 - microscope lens paper (optional)
 - miscellaneous prepared microscope slides such as cat hair, bee stinger, the letter e, thread, etc. (optional)
 - paper towels
 - permanent ink markers
 - research materials such as books, magazines, CD-ROMS, Internet access, etc.
 - 1 class set of safety goggles
 - scissors
 - sticky-notes (optional)
 - supply of water
 - transparent tape
 - assorted antimicrobial solutions

apple and knife (optional)
 bacterial culture such as plain yogurt, non-processed cheese, soil infusion or hay infusion

- 16 batteries (AA)
- clay or soft chewable candy (optional)
- 1 colander or sieve
- 1 container, large
- sterile cotton (optional)
- eggs, de-shelled and massed
- nail brushes (optional)
- onions, red and/or white
- paint, 1-1/2 tablespoons of blue tempera (optional)
- paper disks (punched from filter paper or brown paper towel)
- plastic knives
- pot holder or towel
- props, such as a suit jacket, microphone, fake beard, etc. (optional)
- various materials such as a comic strip, newspaper text, human hair, leaves, etc
- water, distilled
- water spring or (treated tap water)
- water, warm
- yeast, 5 1-oz packets fresh quick rise, dry

Unit D: Genetics

- 1 overhead projector
- 1 DVD player
- 1 monitor
- chart paper
- glue (optional)
- graph paper
- markers
- meter stick
- overhead transparency pens
- permanent ink markers
- scissors
- masking tape
- transparent tape
- pennies

Unit E: Ecology

- overhead projector
- 16 microscopes
- microscope video camera (optional)
- microscope lens paper (optional)
- access to centrifuge (optional)
- research materials such as books, magazines, CD-ROMS, Internet access, etc.
- class set of safety goggles
- class set of compasses
- scissors
- transparent tape
- thermometers (optional)
- unlined paper
- aluminum foil, 1 large piece (optional)
- aquatic leaf litter (such as oak leaves in spring water)
- 1 large bowl (optional)
- 1 candle (optional)
- cardboard or paper (optional)
- celery stalks
- 1 clipboard (optional)
- green leaves (non-waxy)
- 1 fire extinguisher or fire blanket (optional)
- fish food
- foam trays
- light source such as lamps or windows that receive good natural light
- 1 map of world geopolitical boundaries
- 1 map of world climatic zones (optional)
- matches (optional)
- onions (red for optional extension)
- potato chips, 1 small bag (optional)
- 1-2 potted plants
- salt
- 1 pair of tongs (optional)
- video of an ecosystem (optional)
- video of plant adaptations (optional)
- water, spring (or treated tap water)
- 1 whistle or bell (optional)

Unit F: Evolution

- overhead projector
- markers
- scissors
- cereal (Cheerios™, or other loop-shaped cereal)
- 1 picture of a dog (optional)
- props, such as a suit jacket, microphone, fake beard, etc. (optional)
- sunglasses with green lens (optional)

Unit G: Bioengineering

- overhead projector
- access to a refrigerator
- access to sinks with running water and soap
- access to watch or wall clock with a second hand
- balance(s)
- calculators
- construction paper
- dissection scissors
- dissecting trays
- forceps
- markers
- paper towels
- scissors
- supply of water
- 1 textbook (about 1 kg in weight)
- 8 70-g standard masses or substitute (i.e. plastic bag containing 70-g of pennies or gravel)
- bleach
- 4 boxes, small

- chicken wings (raw)
- 1 container, large
- design components, such as brads, staples, straight or safety pins, glue, buttons (optional)
- 2-4 dolls with long hair
- food items, such as graham crackers, peanut butter, raisins, sunflower seeds, nonfat dry milk powder, oatmeal, cereals or nuts
- food items, such as quartered, unpeeled banana pieces, pretzel or cheese snack packs; small cereal packets; wrapped candies, games, such as card games, electronic games, jacks, etc. gloves, non-latex (optional)
- 2-10 heart valve-prototypes
- measuring cups
- measuring spoons
- mop(s)
- paper plates
- paper for wrapping
- 1 pitcher containing water or other beverage
- plastic garbage bags
- plastic cutlery, assorted
- 1 plastic tub
- 10 ponytail holders
- sandwich bags
- shoes, 1 pair of large lace-up
- sponge(s)
- 2 sweaters and/or button up shirts
- 4 toothbrushes
- 2 tubes of toothpaste