

Shop List for the Supercharged Science Teleclass

Re-ignite your curiosity and spark new ideas! Materials you'll need to get before the next class:

Microscopes Teleclass

- Dead bugs from the windowsill, plant leaves, feather, penny, and a dollar bill
- Compound microscope (if you have it) OR two handheld magnifying lenses
- If you have a microscope, then also find blank slides and cover slips, eyedropper, and tweezers

Chemistry Teleclass

- sodium tetraborate ("Borax")
- clear glue
- yellow highlighter
- UV black light (\$5 from the pet store)
- baking soda
- vinegar, orange juice, grapefruit juice, apple juice
- red cabbage
- 70% ethyl alcohol
- sodium silicate (www.sciencecompany.com)

Electricity Teleclass

- AA battery case (Radio Shack # 270-408)*
- two AA batteries for your battery case (cheap dollar-store "heavy duty" type are perfect)*
- LEDs (Radio Shack part #276-026, 276-012, 276-016, 276-311, or any under 3V)*
- Alligator wires (Radio Shack #278-1157)*
- 1.5-3V DC motor (Radio Shack #273-223)*
- buzzer (Radio Shack #273-053) or siren (#273-079)
- index card
- 6 brass fasteners
- two large paper clips
- large 7-9" latex (*not* mylar) balloon
- yardstick
- large spoon

Robotics Teleclass

- stuff from Electricity Teleclass (* items only)
- block of foam (at least a 2" cube)
- 10 skewers
- Wine bottle cork or wooden clothes pin

Sonic Vibrations Teleclass

- 3 tongue-depressor size popsicle sticks
- 3 rubber bands (3" x 1/2" or similar)
- two 3"x5" index cards
- 3' of string or yarn
- 1" x 8.5" strip cut from a sheet of paper
- scissors, tape, and a hot glue gun

Rocketry Teleclass

- Old bike inner tube (get a couple different sizes for free from a bike repair shop – it's okay if they have a leak)
- 2L empty, clean soda bottle
- 1/2" diameter by 12" long PVC pipe
- Optional: four index cards
- Duct tape
- Ten sheets of 8.5 x 11" paper (regular copy paper, not construction paper!)
- 2 rubber bands (3" x 1/4" or similar)
- Scissors
- Tape (masking tape is great because we can use the inner diameter of the roll to trace our circle)
- Hot glue gun with glue sticks

Light Wave Teleclass

- two pairs of polarized sunglasses
- glass of water
- two handheld magnifying lenses
- penny and \$1 bill

Flying Machines Teleclass (Aeronautics Teleclass)

- 5 sheets of 8.5x11" paper
- 2 index cards
- 2 straws
- 2 small paper clips
- Scissors, tape

Optional: ping pong ball and a small funnel

Optional: 20' string, hole punch, stapler, and one extra straw

Lasers Teleclass

- 1 red laser pointer (laser pen or keychain laser)
- 1 CdS cell (Radio Shack part #276-1657)
- old CD (that can be scratched)
- stuff from Electricity Teleclass (* items only)
- cardboard scrap (4"x6") or index card
- 2 paper clips
- 2 brass fasteners
- Tape
- Two small mirrors (mosaic or from a compact)
- *Optional:* crystal-cut pieces (plastic or glass)

Roller Coaster Physics Teleclass

- 4 (or more!) pieces of 3/4" x 6' thin, non-adhesive foam pipe insulation (*not* neoprene)
- 1 roll masking tape
- 10 marbles
- Bucket with handle, filled halfway with water