

Traveling Energy Exploration Station Solar Cooking Supplies List

The supplies listed below are for building the designs that are included with the educator's guide. None of these supplies are included in the station.

Hot dog cooker

Tall slender cans with foil liners (Pringles or tennis ball cans), scissors, plastic wrap, stiff wire, sun

Sun tea

Clear glass jar with a lid, water, tea bag, thermometer

Solar Box cooker

- Corrugated cardboard - 2 large boxes, 19" x 23" x 8 ½ and 24" x 28" x 10" (or cardboard to make them) several extra pieces.
- Glass or plastic pane at least 20" x 24" or slightly larger than inner box.
- Glue – a pint of water based white glue or carpenter's glue.
- Aluminum foil – about 75 feet x 12" wide
- Insulation – crumpled newspaper or clean dry straw, rice hulls, etc. Must withstand high temperatures
- Large tray – thin metal (or foil covered piece of cardboard) for inside bottom. Paint top side with black tempera or high temperature black paint.
- Dark cooking pots with dark lids
- Stick or wire to prop reflector, also string or cord
- Silicone caulk or Paper Mache (shredded paper soaked in water, mixed with glue)
- Tools – scissors, knife, bowl or flat pan, brush or roller to spread glue

Pizza Box Ovens

Pizza box- recycled or new, black construction paper, aluminum foil, clear plastic (heavy laminate works best), glue, tape, scissors, ruler, marker, wooden dowel

Solar Funnel Cooker

1 sheet of poster board, glass mason jar, black spray paint, paint brushes, diluted glue, aluminum foil, three brads, oven bag, block of wood (4"x4"x2") cardboard box to hold the oven in place on a windy day.

Collapsible Solar Cooker, Minimum Solar Cooker, Easy Lid Cooker, and the Bernard Solar Panel Cooker

Two cardboard boxes that would fit inside one another, glue, aluminum foil, scissors, black metal cookie sheet or black metal cooking pot, Plexiglas or glass lid to fit larger box