

Solar-Powered Snacktime

Every day the sun showers light and energy down to Earth. This powerful energy is called radiation. Today's activity harnesses this radiation through an upcycled pizza box – a solar oven! After the grown-ups cut the box, the kids get to be the chef. So, stash a leftover pizza box aside to create a fun and delicious activity.

Materials:

- Pizza box (or other hinged cardboard boxes, 2-3 inches deep)
- *Adults* - knife/scissor/box cutter
- Clear plastic wrap (fully transparent)
- Black construction paper
- Tape or glue
- A sunny day
- Optional: thermometer (instant read or digital thermometers work great)

Directions:

Adults, cut a square out of the top of pizza box leaving at least a 1-inch border. (See website for visuals and examples.)

Glue or tape two layers of plastic wrap to the top of the box, creating a window from the cut-out. The clear materials allows the light energy to enter and the heat is trapped, allowing the oven's temperature to rise.

Attach the black construction paper to the inside bottom of the box. The black paper will absorb the sunlight, converting it to heat.

Recipes:

S'mores (Graham crackers, chocolate chips, marshmallows)

Nachos (Tortilla chip rounds, shredded cheese)

Quesadilla (Flour tortilla, shredded cheese, toppings)

Enrichment:

- Dueling ovens: Experiment with different materials to try and speed up the cook time. Does aluminum foil work better than black paper? Try one oven with black lining and the other oven with aluminum foil lining (keep the foil as smooth as possible for maximum results).
- Chocolate race: Create a delicious race, by comparing the melt time for mini chocolate chips, regular chocolate chips, and chocolate bars. You're off to the races!