



## LESSON PLAN: SENSING ENERGY

This activity will address the following questions:  
 What types of energy does the Sun produce?  
 How can we sense different types of solar radiation?

### PREPARATION

Assemble the needed materials [e.g. in the center of each table, on each student's desk, etc.]

### WARM-UP & PRE-ASSESSMENT

The warm-up show begins a process that develops understanding of solar radiation. At this age level, we are interested in exploring three aspects of energy from the Sun – light, heat, and UV. There are other activities in this module that can be used to develop more ideas about the sun's energy. Since the kids may know about the light, we begin here.

To reveal children's ideas about light, ask them to think of everything they know about light from everyday experiences. Prompt with questions as needed:

- Think of as many things as possible that give off light.
- Using my senses other than sight, how else might I sense that a light bulb is turned on?

### Materials

- Five or six Ultra-violet Detection Beads\* per child
- lamps, overhead projector, a grow-light for plants
- 9 empty, opaque film canisters per group
- Colored filters
- a white piece of cloth
- a black piece of cloth
- a baseball cap
- water
- paper clips
- plastic wrap
- a paintbrush or sponge
- Sunglasses
- Sunblock lotion  
sunscreen (spf 5 or 8, and 30)
- Flashlight
- UV eyeglasses

