



DISCUSSION & REFLECTION

The point of this exploration is to think further about the Sun's energy.

Have each group discuss their observations amongst themselves for two or three minutes, and perhaps choose a spokesperson for the entire class discussion, if necessary.

Bring the groups together, and discuss the basic findings, and what caused them. Prompt with questions such as:

- The beads in which canisters changed color?
- Did they all change into the same colors?
- Why do you suppose that certain beads changed color and not others?
- Look at the results from the different canisters, and compare two, now three canisters.

What do you notice? What is different from each canister? For example, is white cloth different from black cloth in changing the amount of UV radiation that reaches the beads?

What can you conclude about which materials best blocked ultra-violet radiation?

LESSON ADAPTATIONS

For students who know about other planets, ask them to speculate about how much of the Sun's power reaches them. Ask about visible light, heat, and UV radiation. You may want to mention here the other forms of solar energy discussed in the Science Overview (including gamma, X-rays, infrared and radio waves).

Prompt with study questions or research topics such as:

- How would the Sun's energy be different on different planets such as Mercury or Pluto?
- What features about the other planets make them different from Earth? Why are those features important when we think about light, heat, and UV radiation?

To make this lesson more relevant to students' knowledge of biology in the early grades:

- Explain how insects use their ability to sense ultra-violet radiation. Butterflies and bees see ultraviolet light as a distinct color that makes certain markings on flowers very vivid to them and guides them to the nectar tubes.

