

SCIENCE @ THE LIBRARY

SUNRAY CATCHER BRACELET

MATERIALS:

Color Changing UV Beads
Elastic
Brightly Colored Pony Beads
Ultraviolet Flashlights (optional)

WHAT TO DO:

Thread a mix of UV beads and Pony beads onto a piece of elastic to make a bracelet. Remember to stay away from any door or windows where ultra-violet light could come into the room. When you're finished, cover the bracelet with your hand and walk outside into the sunlight. Don't take your eyes off the beads as you expose them to sunlight. Like magic the beads change from white to a rainbow of colors.

HOW DOES IT WORK?

The UV Beads contain different pigments that change color when exposed to ultraviolet light from any source including the sun. The beads are all white in visible light. In UV light, depending on the pigment added to each bead, you will see different colors. Each bead will change color about 50,000 times before the pigment will no longer respond to UV light.

The term "light" is often used as a generic word to describe many different forms of light such as incandescent light, fluorescent light, or sunlight, for instance. However, not all light is made up of the same energy.

TRY THIS AT HOME:

Take your bracelet off (while the beads are white) and put it in a clear zipper-lock bag. Get your bottle of sunscreen out and try to coat as much of the zipper-lock bag as you can and then take the bag outside. You'll be able to tell immediately if your sunscreen is doing its job!

Sponsored by the Mohawk Valley Library System and participation by the ELFUN Society

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