

The Colors of Sunshine

In this activity, your child will observe that the Sun's "white" light is actually made of many different colors of light.

What You Need:

- Access to the outdoors and a bright Sunny day!
- One sheet of white cardstock

Either

- Scissors
- Tape
- One piece of black construction paper
- One slide of a diffraction grating (*have your child avoid touching the clear filter in the slide by only touching the outside of the slide*)

Or

- A Prism



What to Do:

- Fold the black construction paper in half and cut a one-inch square in the center of the paper.
- Tape the slide with the diffraction grating over the hole in the black construction paper.
- Go outside into the bright sunlight.
- Hold the black construction paper with the slide about 5 inches over the white sheet of cardstock paper, so that the sunlight shines through the slide and onto the white paper.
- Look for the rainbow on the paper!

Parent Prompts:

What is happening to the Sun's light? (It is being spread out, so all of the colors that make sunlight "white" can be seen.)

Which colors can your child see in the rainbow? (Most people can see red, orange, yellow, green and blue, and possibly violet. Some children and adults are colorblind and may not be able to see all of these colors.)

What color is your child's shirt? Why is it that color? (Because the "white" sunlight shining on the shirt is being partially absorbed and partially reflected. The colors of the rainbow that are reflected by the shirt are the ones we see.)

