

## Amazing Rays

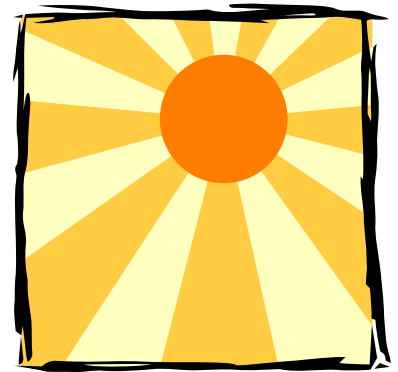
Our Sun is the nearest star. Its light gives us energy—energy to heat up Earth’s surface and energy for plants to grow.

Let your child know that the Sun’s light is a type of energy, which the special (photosensitive) paper in this activity can use to change color. Plants can use the sunlight as energy to grow, and everything uses the sunlight as energy to warm up.

In this activity, you and your child will explore the Sun’s light as energy using photosensitive paper.

### What You Need:

- One sheet of 8½" × 11" photosensitive “black and white” paper (from photo supply or science education store)
- Pencils
- Scissors
- Tape
- One sheet of black cardstock
- Access to the outdoors and a bright Sunny day!



### What to Do:

- Cut the cardstock in half
- Draw two shapes onto half of the cardstock
- Cut out the shapes
- Place double-sided tape onto the shapes and the half sheet of cardstock to attach them to the photosensitive paper later
- Discuss the questions below before taking your child outside to complete the activity
- Go outside and get a piece of the photosensitive paper – Be prepared to act quickly!
- Very quickly tape the 2 shapes to the photo paper covering up one shape with the half sheet of cardstock
- Wait 2 minutes and observe what happens!

Parent Prompts:

Will the special paper under the poster board shape get any sunlight? (No)

So will the part of the paper in the dark receive the same energy from the Sun?  
(No)

What do you think will happen to the paper under the shapes?  
(The covered areas will not change)

What do they see?

(A clear impression on the side exposed to the Sun's light and heat, where the shape blocked the Sun. The rest of the paper darkened to a color where the Sun's light reached it. There will be little or no impression on the side covered by the black poster board; that side did not receive light, but it was heated.)

Where did the paper get the energy it needed to change colors?  
(The sunlight)