

Sunscreen handprints activity

See the effects of ultraviolet light.

The sun is a big ball of energy that constantly sends heat and visible light toward Earth. This keeps our planet warm and comfortable for living things. But the sun also sends energy toward Earth in the form of **ultraviolet light**.



We can't see ultraviolet, or UV, light with our eyes, but we can see and feel some of its effects:

- Ultraviolet light from the sun can fade the colors of paper and fabric. The chemicals in colored dyes can break down in the presence of ultraviolet light waves.
- Ultraviolet light can also cause sunburns. If too much ultraviolet light hits your skin, it can damage your skin cells. This can make your skin very red and painful.

However, certain chemicals can provide protection from the sun's ultraviolet rays. For example, sunscreen contains chemicals that can reflect or absorb ultraviolet light. This keeps the ultraviolet light from reaching—and damaging—your skin cells.

In this activity, see for yourself how sunscreen can be used to block the sun's ultraviolet light rays.

What you need:

- Construction paper (red or green work best)
- Sunscreen (a brand that is at least SPF 30 and doesn't contain metal oxides works best)
- Rocks or other small, heavy objects
- A sunny spot outside





What to do:

- 1. Open the sunscreen and squirt a pea-sized amount onto your hand.
- 2. Rub the sunscreen all over the palms of your hands and the surfaces of your fingers. Don't rub it in so much that the sunscreen all absorbs into your skin. You should still barely see the thin layer of sunscreen on your hands.





3. Place your hands firmly on the construction paper. Be sure to press down all of your fingers and the palms of your hands.





- 4. Place the piece of construction paper outside in a sunny spot. Make sure that the spot you choose will have constant sunlight for 3 to 4 hours.
- 5. Place a small rock on each corner of the sheet of paper. This will prevent the paper from blowing away in the wind.
- 6. Leave the paper out in the sun for 3 to 4 hours.



 After the long wait is over, go outside and look at your paper. You should notice that the sun's UV rays have faded the color of the paper. However, the areas that were protected from UV rays by the sunscreen still have the original bold color.



