



# DO YOUR OWN SPF TESTING

**Finally, they'll understand why you're always encouraging them to put on their sunscreen**



Anyone who's been the recipient of an eye-roll from a kid after you've told them to put on their sunscreen will appreciate this educational project. Once they see the effect that the sun has on objects, kids will be able to understand that there's actual science behind all of your nagging.

Using sunscreen and sun-sensitive objects, your kids will learn how to filter UV light, the effectiveness of different SPF numbers, and why sunscreen is so important. Sorry, you'll still have to nag them, though.

## GATHER THIS:

- Shoe boxes
- UV beads
- Plastic wrap
- Sunprint Paper
- Tape
- Sunscreen with different SPFs

## THEN DO THIS:

1. Fill your shoeboxes with the UV beads and pieces of sunprint paper (make sure to set up in the shade). You can tape down the materials so they don't move around.
2. Using a different SPF for each box, smear sunscreen on the UV beads and sunprint paper. Remember to leave one box sunscreen free!
3. Cover the top of the boxes with plastic wrap.
4. Place your boxes so that they receive direct rays from the sun. You can use an object to prop up your box.
5. Check your boxes every 30 minutes. Compare the color of the testing materials. Your testing materials as well as the testing boxes can be used again and again unless the sunblock has been wiped off.

## ASK THIS:

- What happened to the sun-sensitive items?
- What was the difference between the items coated with sunscreen vs. unprotected?

## WHAT IS HAPPENING?

The SPF number is supposed to be an indication of how long the sunscreen is effective. To determine this in minutes, multiply the SPF by 10. For example, SPF 30 = 300 minutes (30 x 10), or 5 hours. The height of the sun affects the amount of radiation received. If the sun is really high in the sky the UV radiation received by your skin is greater than when the sun is lower in the sky.



## WHAT THIS TEACHES:

Skills: Observation  
Themes: Light and energy, health