

Date: Monday, June 15, 2020
Time: 1:00 p.m. (45-60 minutes)

Materials:

Sunscreen – 3 types
Gallon Bags - 3
Sun Print Paper – 3
Sheets
Paper Towel (not
included)

STEM Activity Agenda

Sunscreen Experiment



I. Welcome

Be sure to have your materials ready before the video session starts and always ask an adult for permission or help when needed.

II. Activity Overview

- Spending any time outside requires some protection from the sun's UV rays. Sunscreen is a good way to protect your skin, but which sunscreen is best at keeping out UV rays? This experiment will test three different types of sunscreen and Skin Protecting Factors (SPF) to determine which can provide the most protection.

III. Grade Levels

- All grade levels are welcome to participate K-12 (D, B, J, C, S, A)

IV. Activity

- Sun Sensitive Paper can change immediately when exposed to sunlight. So, it is important to keep the paper in the packet until ready to use.
- Steps
 1. Take out the first piece of sun sensitive paper. Label the back of the paper with which SPF you are using and then place the paper inside one of the gallon bags and seal it. Smear the sunscreen on the outside of the bag.
 2. Make sure to wipe your hands well in between each sunscreen
 3. Repeat this step 1 with the other two SPFs
 4. Set each of your baggies outside in the sun for about 5 mins
 5. Bring them back inside and take the paper out of the baggies
 6. Dip each paper in water to save the image (you can also use a sink to run cold water over the paper instead of dipping)



• **What Did You Observe?**

Dark Blue = More UV rays Light Blue = Less UV Rays White = No UV Rays

- 1. What color is your paper?**
- 2. Which SPF provided the most protection?**
- 3. What happened if you had solid bits of sunscreen on the bag?
Did it cause your paper to look different?**
- 4. What would you do to improve this experiment?**

v. Clean Up

A Girl Scout always leaves a place cleaner than she found it.

You can always save your sun paper and use it to in future paper crafts at home.

VI. Closing

Be sure to tune into our next activity – Water Relay Creations at 3:00 p.m.

See you soon, Girl Scout!