



# Sun Paper Activity



*Ready to get started with this activity? To keep track of your progress, check off the instructions for each step below as they are completed. Make sure to check the box of the last step when you're done to receive congratulations for your completed activity!*

**Consider this:** The first electric hand flashlight was shown in New York City, by Conrad Hubert, in the 1890s. His first portable flashlight was hand made from paper and fiber tubes, it had a small lightbulb and a brass reflector. The batteries he used were weak and lightbulb was not very sophisticated so when he turned on the flashlight it would provide a brief flash of light – thus giving the device its name. Flashlights have sure changed over the years! Most have LEDs instead of lightbulbs and they can produce very bright lights for long periods of time. Some are even waterproof! Now it's your turn to make an advancement on Conrad Hubert's invention.

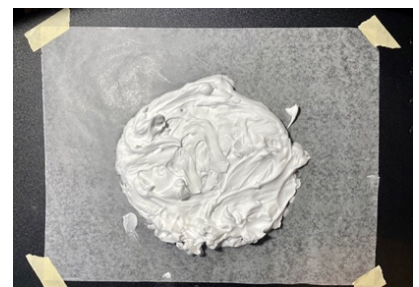
## 1. Gather Your Materials

- Shaving cream
- Cardboard or a squeegee
- Paper
- Toothpicks
- Wax paper
- Food coloring
- Tape



## 2. Apply Shaving Cream to Wax Paper

- Cut off a square of wax paper and tape it down. The wax paper should not move around.
- Spread shaving cream over your wax paper and make sure it is smooth and foamy. Make it into a circle shape.





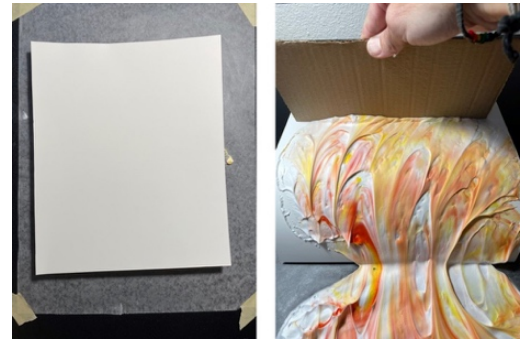
### 3. Swirl and Peel

- Drop five drops of red and yellow food coloring in a circular pattern.
- Use a toothpick to swirl the red and yellow colors together.  
What color appears?



### 4. Scrape and Peel

- Place your paper right on top of the shaving cream and food coloring. Press the paper down lightly. Give it a few seconds to absorb the dye.
- Pull the paper off and set it down (color side up). It should look like a big blob of orange shaving cream. Gently scrape off the shaving cream with a squeegee or piece of cardboard with a flat edge.



### 5. Cut into Sun Shape

- Allow the art to dry, and blot off any extra shaving cream with a paper towel.
- Be careful not to smear the food coloring before it dries.
- Once it is dry, cut out the art into your sun shape.



### 6. What to Do with Your Art

- Make it into a card (birthday, Mother's Day, Father's Day, etc.)
- Make a giant-sized piece of art and use it as wrapping paper.
- Glue it to black construction paper and frame it.
- Make other planets with different colors and add a solar system to your wall.



## 7. Things to Think About

- The sun is a burning ball of superheated gas. Is there anything else like it in the universe?
- The sun is 93 million miles (149.6 million kilometers) away, yet we can feel its heat and light on Earth. How many miles is the circumference of the earth? Compare the two measurements.
- How long has the sun been burning so brightly?
- Where does all the sun's energy come from?
- How does it make so much heat?
- The sun keeps our planet warm enough for living things to thrive. It gives us light so we can see. But it can also burn us. What causes these burns?

