

Marbled Sun Prints

Make marbled paper that looks like our Sun!

The Sun (also called Sol) is the star at the center of our Solar System. Our Sun is a burning ball of superheated gas. Even though it's 93 million miles (150 million kilometers) away, we can feel its heat and light on Earth.



Materials Needed:

White paper or cardstock, wax paper or paper plate, shaving cream, red and orange food coloring, toothpicks or popsicle sticks, scissors, ruler or piece of cardboard.

Instructions:

Step 1: Spray shaving cream on the wax paper or paper plate. Smooth it out with a ruler or piece of cardboard.

Step 2: Drop a few drops of red and yellow food coloring on the shaving cream. Use a toothpick or popsicle stick to swirl the colors.

Caution: Food coloring can stain clothing, skin, or surfaces.

Step 3: Place a piece of white paper or cardstock on top of the colored shaving cream, and press down lightly.

Step 4: Peel the paper off. Scrape off the remaining shaving cream with a ruler or the edge of a piece of cardboard.

Step 5: Let your artwork dry. Cut out the sun shape!

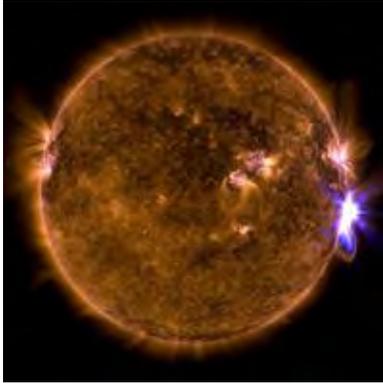
You can add more food coloring to the shaving cream, swirl the colors together, and make more prints. Each one will be unique!



Activity adapted from NASA SpacePlace: spaceplace.nasa.gov/sun-paper/en/

The Dynamic Sun

The Sun (also called Sol) is the star at the center of our Solar System. The Sun's surface is very active and always changing.

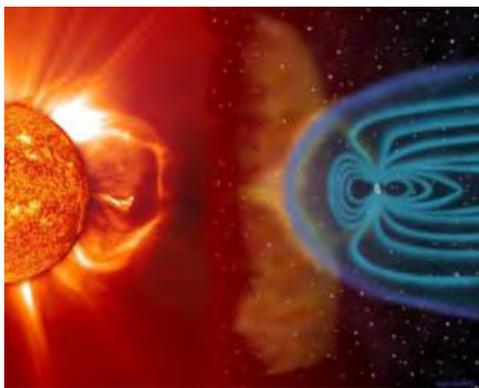
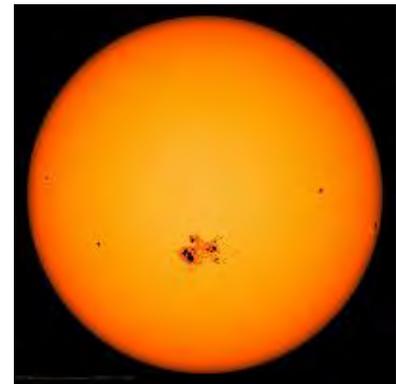


The Sun is made of gases that are always moving. This movement makes the surface of the Sun a busy place. Sometimes the Sun's surface is very active. Other times, things are a bit quieter. Scientists on Earth monitor how quiet or active the Sun is.

Left: NASA's Solar Dynamics Observatory takes a picture of a solar flare (the flash of light on the right) in 2017.

The Sun's surface sometimes has areas of intense magnetic activity, called *sunspots*. They appear dark because they are cooler than other parts of the Sun's surface. But they are still very hot, around 6,500 degrees Fahrenheit (3,600 degrees Celsius)! The number of sunspots increase and decrease in an 11-year *solar cycle*.

Right: Large sunspot in 2014. Image: NASA/SDO.



Solar wind interacting with the Earth's magnetic field. Image: SOHO (NASA & ESA).

Solar flares are sudden explosions of energy on the Sun. They can cause *coronal mass ejections*, which send out huge amount of energy into space. When the Sun is very active, we sometimes see the aurora around the North and South Poles of the Earth, because the energy from the Sun interacts with the magnetic energy of the Earth.

The atmosphere protects humans on Earth from the Sun's energy, but this space weather can disrupt satellites and the work of astronauts.

Discover more about the energetic Sun:
spaceplace.nasa.gov/solar-activity/en/