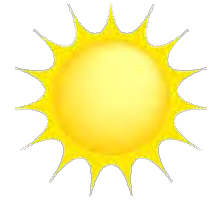


# Straw Painting the Sun



Explore the dynamic sun through the fun of straw painting!



## Materials Needed:

Straw, paper plate or circle cut from white paper, red and yellow food coloring (or liquid watercolors), cups.

## Instructions:

**Step 1:** Place a few drops of red or yellow food coloring or liquid watercolor in cups. Add about  $\frac{1}{2}$  inch (1  $\frac{1}{4}$  cm) of water to each cup.

**Step 2:** Show your child(ren) how to lift a drop of paint out of the cup by placing one end of the straw in the liquid and plugging the other end of the straw with their thumb (see picture). Keep your thumb in place as you lift the straw out. Then release the thumb to let out the drop of liquid.

**Step 3:** Gently blow through the straw to spread the paint around. Imagine these are solar flares erupting! Experiment with patterns and colors.

**Step 4:** Continue with steps 2-3 until you are satisfied with your artwork. Let your artwork dry, then hang it up!



# The Dynamic Sun

**The Sun (also called Sol) is the star at the center of our Solar System. Its gravity holds the solar system together. The Sun's warmth and light make life possible on Earth.**

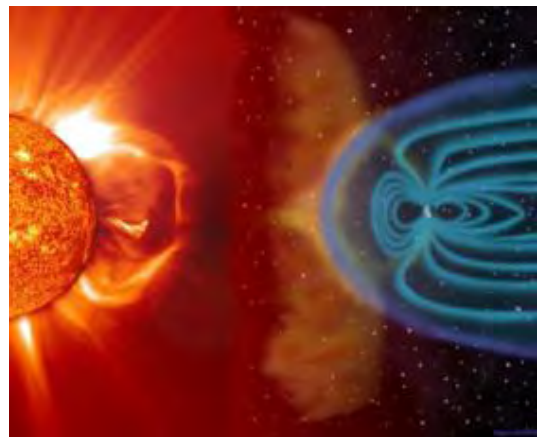


*NASA's Solar Dynamics Observatory takes a picture of a solar flare (the flash of light on the right) in 2017.*

The Sun is made of gases that are always moving. This movement makes the Sun a very active place. Solar activity changes daily, and scientists on Earth monitor how quiet or active the Sun is.

Solar flares are sudden explosions of energy on the Sun. These can cause “coronal mass ejections”, which send out huge amount of energy into space and towards the Earth.

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.



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

**Discover more about the energetic Sun:**

[spaceplace.nasa.gov/solar-activity/en/](https://spaceplace.nasa.gov/solar-activity/en/)