

# Make A Sun Out of Leaves

Enjoy the autumn sunshine with this outside activity!

## Materials Needed:

Yellow/orange/red leaves\*, bag or basket for collecting.

*Optional:* Cardboard circle 6-10 inches (15-25 cm) in diameter.

*\*Alternative:* make your own leaves out of yellow/orange/red paper. Tear or cut out shapes to make leaves. They do not have to be perfect!



## Instructions:

**Step 1:** Collect leaves that remind you of the colors of the Sun (yellow, orange, red), or cut leaf shapes from colored paper.

The Sun gives off a white light that is a mixture of colors, like a rainbow. The Earth's atmosphere causes some of the colors to scatter, making the sun look yellow or orange. (Caution: Never look directly at the Sun!)

**Step 2:** Place your cardboard circle on the ground (if it is windy, you can do this indoors). The circle is a guide to build your Sun, and is optional.

The Sun is an extremely hot ball of gases. Its energy is the reason we have daylight and life on Earth.

**Step 3:** Cover your circle with leaves. Decorate with more leaves around the edges. Experiment with colors and patterns. Make your sun as big and bright as you like! Take pictures of your artwork and share them with friends and family.

Think of how big the Sun is compared to Earth. If the Sun was the size of a door, Earth would only be the size of a penny!

Get inspired with pictures of land art by artist Andy Goldsworthy:

[usaartnews.com/photo-video/natural-sculptures-by-andy-goldsworthy](http://usaartnews.com/photo-video/natural-sculptures-by-andy-goldsworthy)

# The Sun's Energy and Life on Earth

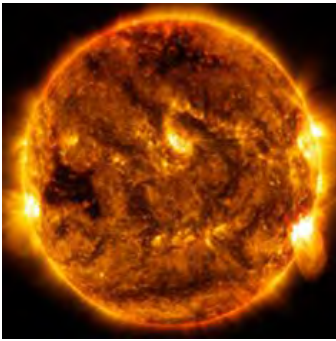


Image: NASA/SDO.

**The Sun is the star at the center of our solar system. Its warmth and light make life possible on Earth.**

**Learn more about where the sun's energy comes from: [spaceplace.nasa.gov/sun-heat/en/](https://spaceplace.nasa.gov/sun-heat/en/)**

## **Why do leaves change colors in the fall?**

Plants get their energy from the light of the Sun. They only have enough energy to grow when it is light and warm enough. Because of the way the Earth is tilted, we have different seasons through the year. In winter, there is less sunlight and it gets darker and colder.

Many *deciduous* plants (plants that shed their leaves) have adapted to seasonal changes by dropping their leaves in autumn. Plants also save energy by stopping the production of chlorophyll, the pigment that makes leaves green. Without chlorophyll, red and yellow pigments in the leaves show their colors.



In the boreal forests of Interior Alaska, leaves on birch trees turn golden yellow once the weather cools. These plants will grow new green leaves in the spring, when the days become sunny and warm again.



**The changing leaves on deciduous trees are just one example of the importance of the Sun's energy for life on Earth. The energy from the Sun creates a delicate balance of heat and light, which makes life possible for all of Earth's life forms.**