



## **TAKE AND MAKE:** Solar Science Experiments

We see the effects of the sun all around us. Here are several experiments/activities that will help you know more about the sun.

UV beads illustrate some of the harmful effects of the sun and therefore, why we use sunscreen. UV light is one type of light from the sun. We can't see it, but insects and birds can. While this UV light can help our bodies produce Vitamin D, too much of it can also cause sunburn or skin damage. Take the UV beads in your kit and string them on a pipe cleaner to make a bracelet. Go outside to watch them react to the UV rays – even on a cloudy day. You might also want to experiment with sunscreen, sunglasses, or windows and see what happens!

You can also use the power of the sun, construction paper, and natural objects to create a work of art. Take your piece of paper and place it in a sunny place. You may need to weight it down. Place natural objects on the paper and leave it all in the sun for several hours. The UV rays of the sun help break down the dye in the paper creating your design. We found that we had to tape down some of the objects so they didn't blow away. If you use tape, be careful that it doesn't show.

Next, you can make a sundial clock. Decorate the plate if you'd like. Cut out and glue the clock face to the back side of the plate. Poke the pencil through the center of the plate and take it outside. You'll need to place the clock with the "12" facing north to determine the correct time. Watch how your clock tells time during the day.

These activities are based on:

<http://solar-center.stanford.edu/activities/UVBeads/UV-Bead-Instructions.pdf>

<https://www.scholastic.com/parents/school-success/learning-toolkit-blog/diy-art-make-construction-paper-sun-prints.html>

<https://www.raisingarizonakids.com/2015/06/how-to-make-sundial-clock/>

