



Paper Sundials

Measuring time is essential in our daily lives. Before clocks were invented, individuals observed shadows and light created by the sun to determine time. Discover one of the ways civilizations told time by creating your own sundial. Compare your sundial to your watch to see how accurate it is!

TEKS:

- 2.5D Combine materials that when put together can do things that they cannot do by themselves, such as building a tower or a bridge, and justify the selection of those materials based on their physical properties.
- 3.6A Explore different forms of energy, including mechanical, light, sound, and heat/thermal in everyday life.

How To:

1. Download and print all sundial templates here: <http://cp.cij.com/en/contents/3151/sundial/index.html>
2. Cut out all templates along the edges.
3. Cut out the bottom of the face to create a notch, insert the red-triangle into the bottom of the face from the bottom, and glue it in place.
4. Glue the sides of the top and the bottom of the base, and fold in all the center tabs.
5. Fold the tabs around the edges of the bottom and the top of the face.
6. Cut out the inside of the thin red-edged rectangle in the middle of the top of the face, and place the top of the face over the bottom of the face to cover it (make sure the red triangle is sticking out).
7. Insert the face into the base, matching the shape of the face into the base opening. Match the "N" pointer on the base to the "12" on the face.
8. You are now ready to use your sundial!

Materials:

- Scissors
- Glue
- Top of face template
- Bottom of face template
- Gnomon template
- Top of base template
- Bottom of base template
- Angular adjustment sheets
- Directional compass

31 Days of STEM FUN!

