

Sundials

A sundial is an instrument with a pole in its center and markings that tell the time like a clock. The surface of a sundial has markings for each hour of daylight. When the sun shines on the pole, a shadow is cast, or appears on one of the markings on the sundial. The place where the shadow falls on the sundial tells us what time it is. As the sun moves across the sky, the shadow moves across the markings.

YOU WILL NEED

- Paper plate
- Straw or pencil
- A pencil, marker or crayon
- A compass

STEPS

1. Place the paper plate on a flat surface. The bottom of the plate should be facing up.
2. Grab a writing tool. Draw the face of a clock on the plate.
3. Using your pencil, make a small hole in the center of the plate. Make it large enough for your pencil or straw to fit through. Have an adult help if needed.
4. Place your straw/pencil in the hole you just created so that it stand upright.
5. Your sundial is now complete and can be placed outside.
6. Check the time. Can you face your sundial in the correct direction so that it represents the current time?
A sundial must be oriented towards true north.
Use a compass to help you find true north.
7. Make observations! What happens to the shadow of your pole as time passes?

CHALLENGE: There are many ways to make sundials. If you are at the beach or on a nature walk, gather some rocks and twigs to make a sundial. Make a life size sundial using chalk and yourself!

