

MAKE A SUNDIAL

A sundial is an instrument that shows the time of day by the shadow of the sun cast onto a plate marked with the hours of the day. It's easy to create a sundial with items around the house!



MATERIAL LIST

A paper plate for the sundial face

Decoration tools – Crayons, markers, colored pencils, paint, etc.

Item for center pole – known as the gnomon on the sundial. Items that work well are a bendy straw, colored pencil or anything straight and about 6-8 inches long.

Compass (many smart phones have a compass app)

Tape (if using a bendy straw)

INSTRUCTIONS

- 1. Decorate your plate and write the numbers around the edge, like on the face of a clock, shown in photos above. Make sure to leave a small space in the very center of your plate for the center hole.
 - a. Or, <u>print out your sundial face</u> and glue/tape it to your pate, then decorate!
- 2. Poke a hole in the center of the paper plate using a sharp pencil or scissors.
- 3. Place your gnomon on the center hole, if using a bendy straw, tape the short part on the underside of the plate to hold the straw in place. If using a colored pencil, place the pointed end upwards and the bottom end will hold the pencil straight up.
- 4. Take your sundial outside on a sunny day at noon and place it in a flat, sunny area.
- 5. Find north using your compass and point the 12pm part of the sundial north.
 - a. If using a straw, tilt the straw slightly towards 12pm to cast a longer shadow.
- 6. Observe the sundial over a few hours. The shadow of the gnomon tells you the time!