

SCIENCE

FROM HOME



Daylight Measuring

Before clocks, there were sundials. Sundials use a stick or rod to measure the movement of the sun through the day to tell the time. However, fall, or Autumn, is a season of change. Animals migrate, leaves fall and the days change. As the Northern Hemisphere, or top half of the earth, begins to shift to winter, the days grow colder, but also shorter. Considering this, how accurate are sundials? Let us find out.

Know before you begin

- This activity can be done inside or outside
- All supplies are easy to find
- Adult supervision is recommended
- Please choose a safe space for this activity

Materials

- Printer
- Thick paper like card stock-tape the template to a piece of thin cardboard or a manilla envelope if thick paper is not available
- Scissors
- Protractor
- Glue stick or tape
- A space that receives full sun all day
- A compass or a cell phone with a compass app

Instructions

- Print out the attached template and follow the instructions printed on the page. If you can't print the page, trace it using a protractor to get the correct angle for the dial.
- Place your sundial on a flat, stable surface outside that will not get wet.
- Orient the tip of the sundial's needle toward north.
- Observe if the time is correct. Continue to check on your sundial each day or week to see if it gives the correct time.

Reference: https://sdo.gsfc.nasa.gov/assets/docs/Solar_Clock.pdf

I Tell Only Sunny Hours

