

# Paper Plate Sundial

You will need:

- Paper plate
- Pencil or straw
- Pens
- A sunny day!



1. Use a sharp pencil to push a hole through the centre of a paper plate.
2. Write the number 12 at the top of the plate.
3. At 12pm on a sunny day, take the plate outside. Push a pencil/straw through the hole so it stands up. Position it so the shadow it makes falls on the 12.
4. Secure the plate to the ground with pins or a stone!
5. One hour later, at one o'clock, check the position of the shadow along the edge of the plate and write the number one on that spot. Continue each hour predicting the position and then checking and marking the actual position and time on the edge of the plate.
6. At the end of the day you will have your very own sun clock. On the next sunny afternoon, you will be able to tell the time just by watching where the shadow of the pencil/straw falls on your clock.

## THE SCIENCE

The sun looks as though it moves in the sky throughout the day – actually, it is the Earth that is moving around the sun! Shadows change direction depending upon the time of day. A sundial like this one uses a shadow's position to tell the time.