

# Tracking the Sun

Observe the apparent motion of the sun through the course of the day and record those observations.

**CAUTION:** Never look at the sun! We can always use shadows to tell where the sunlight is coming from.

## Helpful Materials and Tools:

- ✓ a compass to find directions (optional)
- ✓ a sunny day (at least sunny enough to tell where the sun is)
- ✓ large paper for drawing
- ✓ marker, crayon or pencil



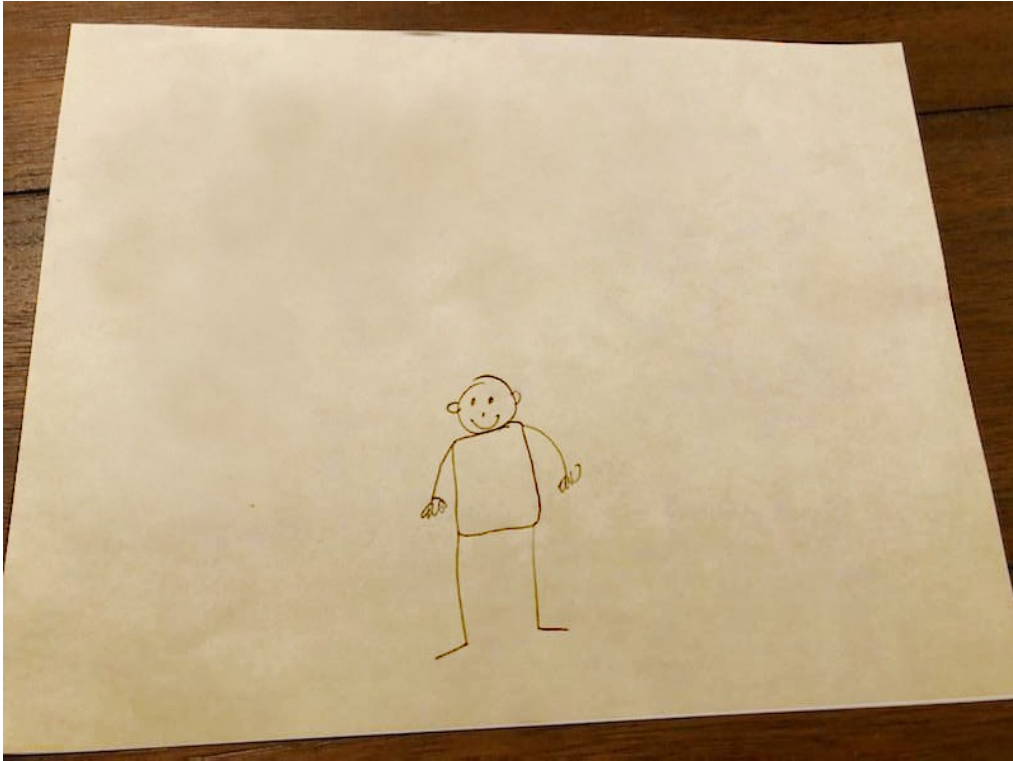
Before starting this activity, determine which directions are north, south, east and west around your home. You may already know this, or you may find out using a GPS device or a directional compass.

1. In the **morning**, go outside and stand facing north. Stretch your arms out to your sides.

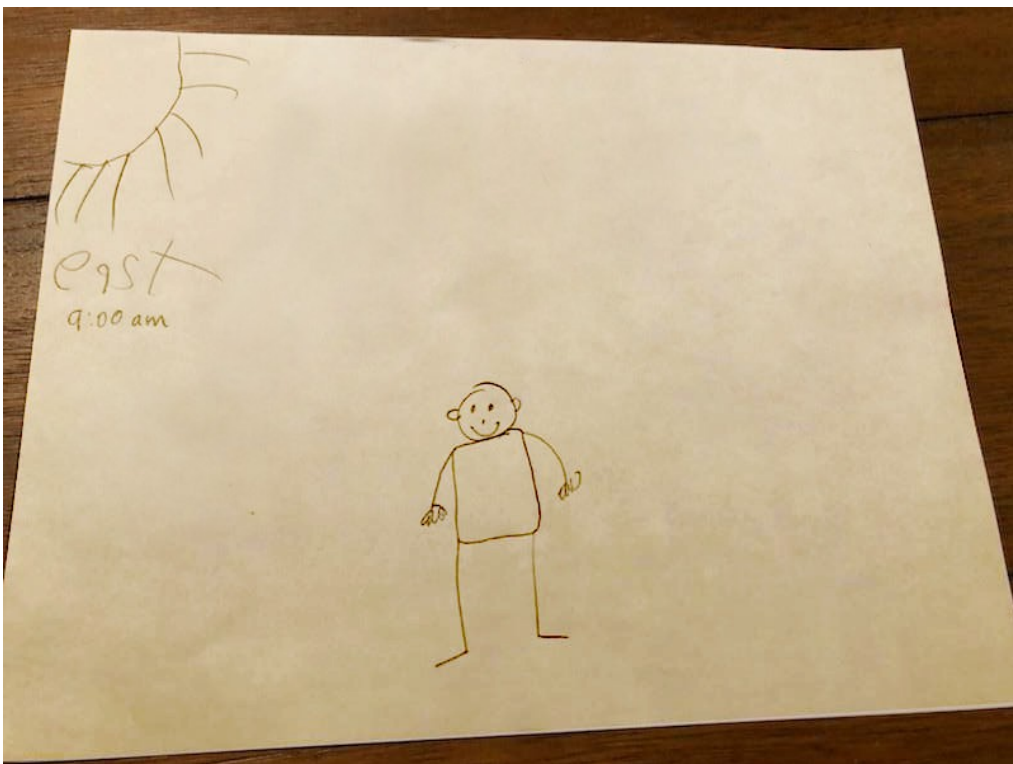
Which arm is pointing toward the sun? That is the direction east.



2. On the paper, draw a picture of yourself standing.



Add a drawing of the sun where it appeared in the morning and label that part "east". You can also put the time of day.



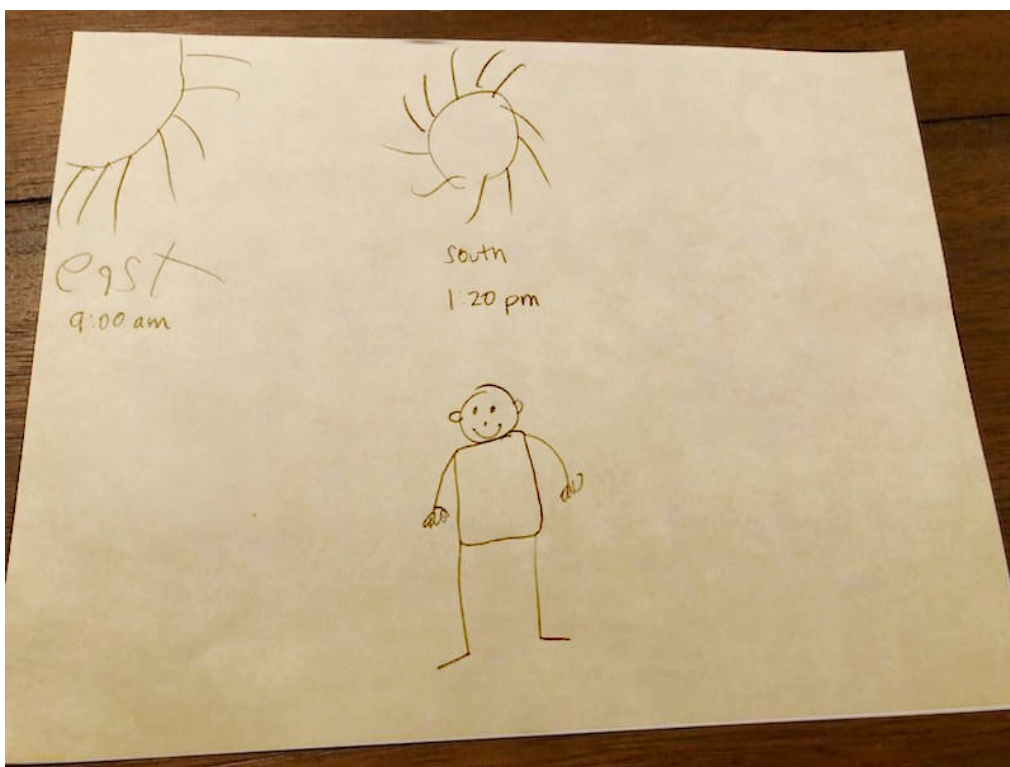
3. At the middle of the day, go outside again and stand like before, facing north.

Where is the sun now? Is it high or low in the sky? Is it in front of you? Is it behind you?

What direction is the sun?



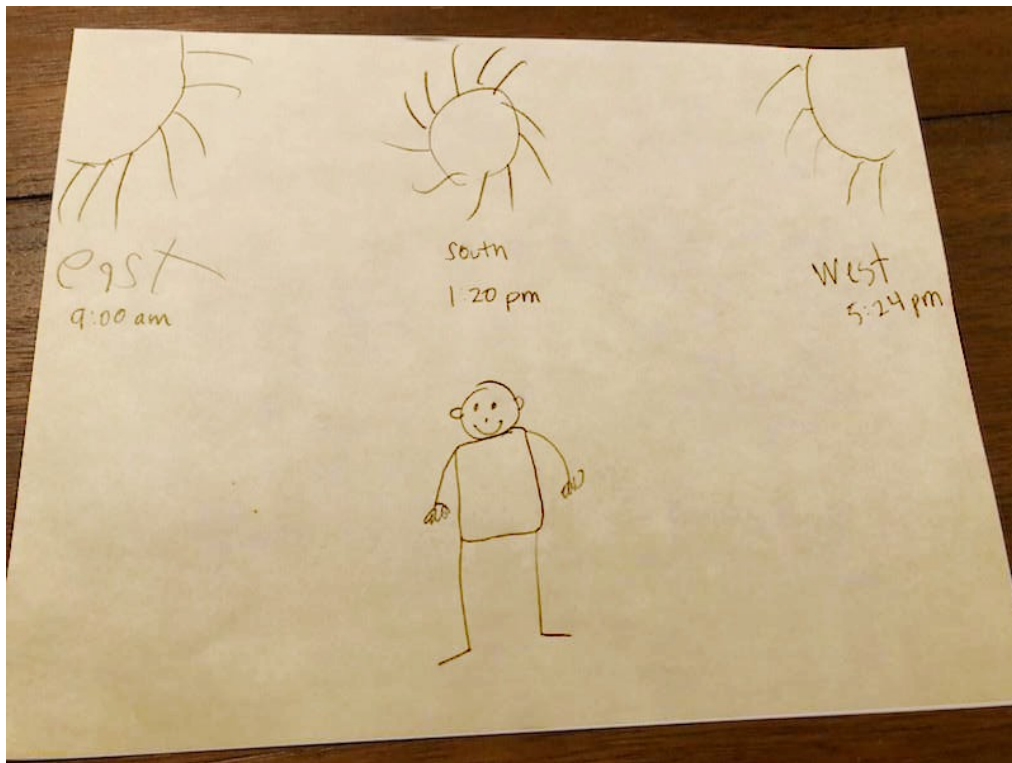
4. Add your midday sun to your picture, just like you did for the morning sun. Depending on where you live and the time of year, your picture might look very different from this one.



5. Before sunset, go out one last time and stand the same way, facing north.

Where is the sun now?

6. Draw the sun on your paper and label it, just like the others.



Extra!!!

Write the date on your paper and put it away. Make another one a few months later and compare.