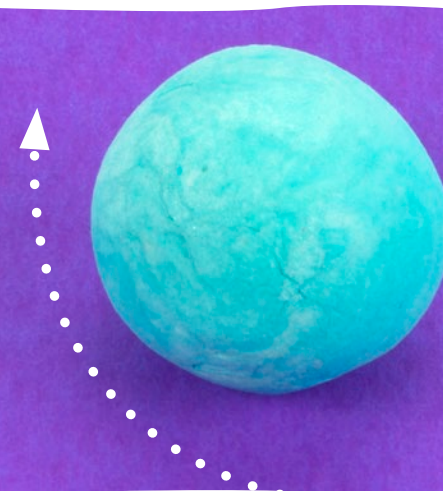
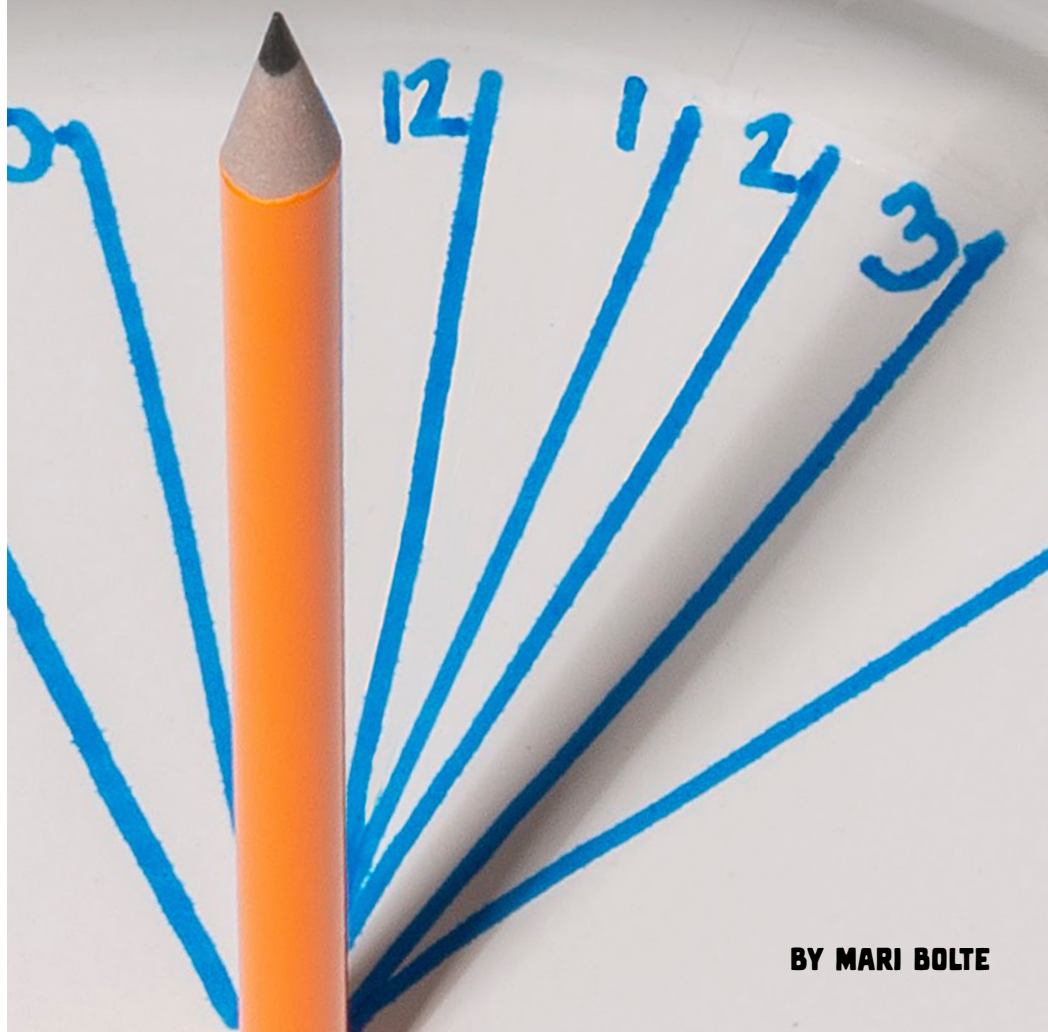




MAKE YOUR OWN

SUNDIAL



BY MARI BOLTE

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Words in **BOLD** are in the glossary.

TELLING TIME

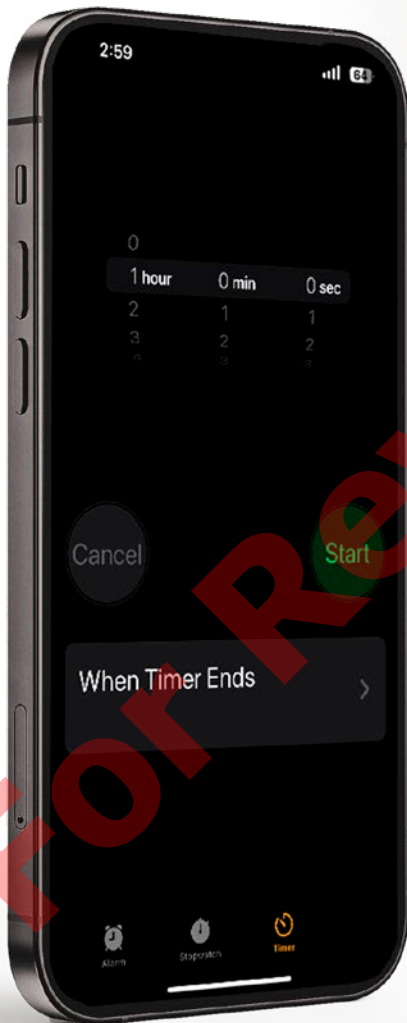
Before watches and cell phones, people told time with the sun. A sundial is the oldest tool used to tell time. It tracks the sun's movement across the daytime sky. With some simple supplies, you can make your own sundial.



WHAT YOU NEED

- a sunny day
- heavy-duty white paper plate
- sharpened pencil
- modeling clay
- rocks
- cell phone or watch with a timer
- markers





WHAT YOU DO

STEP 1

Find the center of the plate.

Then poke the pencil through it.

For Review Only

For Review Only



BEHIND THE SCIENCE

The sun's rays cannot pass through solid objects. Objects block light and cast a shadow. The piece used to cast a shadow for a sundial is called the **gnomon**. Your sundial's gnomon is the pencil.



gnomon

Earth rotates as it moves around the sun. That means the sun changes position in the sky. It rises in the east and sets in the west. As this happens, the direction an object's shadow points moves too.

