

DAYLIGHT HOURS: BUILD a SUNDIAL (K-2)

The SCIENCE of a SUNDIAL:

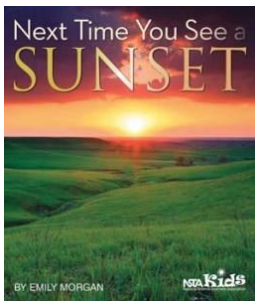
People first learned about time by watching the **sunrise** and **sunset**, and observing the shadows cast throughout the day.



A **sundial** is a tool that uses the sun's shadow to tell the time of day.



When the sun is at its highest point of the day, the shadow on the sundial is the **shortest**.



READ:

[Next Time You See a Sunset](#) by Emily Morgan provides both insight and beautiful images to share more information about the sun and its 'movement' around the earth.

Enjoy a special [reading from the International Space Station](#) by astronaut Mark Vande Hei.

ACTIVITY: BUILD a SUNDIAL

Materials: paper plate, pencil or stick, clay (optional), 12 rocks/paperclips, compass, clock

TIP: Don't have a compass? [You can make one](#) with a few simple items!

1. Choose a sunny area to set up your sundial.
2. Push the pencil through the center of the plate.
3. Put the stick or pencil in the ground (or in a large piece of modeling clay, if your space is on a concrete or wooden surface).
4. Using the compass, angle the pencil slightly north.
5. Visit your sundial each hour to mark the shadow's location at that time.

TIP: Use rocks, pennies or paperclips to mark each hour

What is happening? The earth is tilted, and this affects the length of our shadows. As the earth turns, the sun crosses the sky. When we move, so does the shadow.



For step-by-step instructions, watch the video at: [Sundial STEM Activity](#)

This at-home educational activity is from the Literacy Coalition of Palm Beach County's literacy-based Stories & STEM program. Stories & STEM is made possible with support from Prime Time Palm Beach County, Inc., which receives significant funding from the Children's Services Council of Palm Beach County, Inc.

Having fun? Send pictures or video links of you and your Stories & STEM projects to csharkey@literacypbc.org