



HOW TO TRACE SHADOWS

Get your kids out of the dark with this fun activity exploring shadows

Here's a riddle for you: What's as big as an elephant, but weighs nothing at all? Your shadow! Amuse your kids with that one while you herd (pun intended) them outside to make some shadows of their own.

This fun activity will show them how shadows are made and how they change in size and shape throughout the day. All you'll need is some chalk and a flat area to cast their shadows on – oh, and some sun of course.

GATHER THIS:

- Colorful chalk
- Tape measure and ruler
- A partner, or fun materials to cast shadows with (chairs, stuffed animals, plastic water bottles, items found outside such as trees, benches, etc.)

THEN DO THIS:

- 1. Go on a "shadow walk" and trace various shadows they see.
- 2. Have them trace the outline of their partner's shadow, or of one of their objects. Make sure to trace the outline of where they were standing or where the object was.
- **3.** Return to the tracings throughout the day to see how the shadows have changed.
- **4.** Trace the shadows again. Repeat throughout the day using a different color chalk every time. Measure them with your ruler. Have they grown or shrunk in size?

ASK THIS:

- What makes a shadow?
- What color is a shadow?
- Does the color of the shadow change?
- Is the shadow the same size as the object being traced?
- What time of day is the shadow the shortest? Tallest?

WHAT IS HAPPENING?

As the earth moves around the sun over the course of a day, the sun's position changes relative to our position on earth. Shadow tracing is a fun way to actually witness how the sun (apparently from our fixed position on earth) moves across the sky.





WHAT THIS TEACHES:

Skills: Observation, measurements

Themes: Sun and shadow