

CHASING SHADOWS

Learn how the position of the Sun in the sky changes over the course of a day!

INSTRUCTIONS

STEP 1: Place your chosen item outside in the sun.

STEP 2: Use the chalk to trace the outline of your shape. Note the time on your observation sheet.

STEP 3: Check on your item several times throughout the day and trace the shadow each time.

SUPPLIES

Chalk
Something to trace

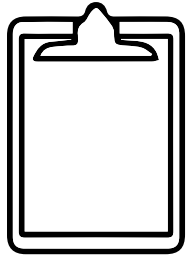
WHAT IS HAPPENING?

When an object, like a tree or a building, is hit by the Sun's rays, it creates a shadow on the ground. The length and direction of the shadow depend on the angle at which the Sun's rays hit the object and the time of day.

As the Earth rotates on its axis throughout the day, the position of the Sun in the sky changes. In the morning, the Sun is lower in the eastern sky, and objects cast long shadows. At noon, when the Sun is high in the sky, shadows are shorter. In the evening, the Sun is lower in the western sky, and shadows lengthen again.

Chasing Shadows Observations

Use this worksheet to process and evaluate your work.



RECORD

Draw what you saw as your shadow was changing.



What did you notice about the pattern of the changes?

Did the shadow change at all, or did it just move?

What did you learn about the Sun and the Earth?

