

Objective

By the end of this lesson, you will be able to understand how shadows change direction in the morning, noon, and evening to learn about cardinal directions.

Materials and Prep

Materials: Sunny day, open outdoor space

Prep: Ensure a clear view of the sky with no obstructions

Activities

1. Morning Shadow Hunt: Go outside in the morning and observe the direction of your shadow. Where is it pointing?
2. Noon Shadow Dance: At noon, go back outside and notice how your shadow has changed direction. Is it shorter or longer?
3. Evening Shadow Tag: In the evening, play a game of shadow tag with a family member. Watch how the shadows move as you play.

Talking Points

- When the sun is in the morning, our shadows point towards the west. Say, "In the morning, our shadow points towards the west like a sleepy bear waking up."
- At noon when the sun is high in the sky, our shadows appear shorter and point towards the north. Say, "At noon, our shadow is short and points to the north like a tiny elf dancing."
- In the evening, as the sun sets in the west, our shadows grow longer and point towards the east. Say, "In the evening, our shadow grows long and points to the east like a giant stretching."