

Objective

By the end of this lesson, you will be able to understand how the sun shows direction through shadow play and how shadows change direction in the morning, noon, and evening to teach about cardinal directions.

Materials and Prep

- Open space with sunlight
- Your body to cast shadows

No prior knowledge needed, just be ready to have fun exploring with shadows!

Activities

- **Morning Shadow Hunt:** Go outside in the morning and observe which direction your shadow is pointing. Is it long or short?
- **Noon Shadow Dance:** Dance around and notice how your shadow moves as the sun is directly above you. Where is your shadow now?
- **Evening Shadow Stretch:** In the evening, stretch your arms out and see where your shadow falls. How is it different from the morning?

Talking Points

- When the sun is in front of you, your shadow is behind you. The sun helps us know which way we are facing. Say: "Look at your shadow! The sun is in front of you, so your shadow is behind you."
- Shadows change throughout the day because the sun moves in the sky. Say: "As the sun moves, our shadows move too! In the morning, our shadow is long. At noon, our shadow is short. And in the evening, our shadow gets long again."
- Cardinal directions are like a big compass that tells us which way is north, south, east, and west. Say: "Imagine you have a big compass. North is where the sun rises in the morning. South is where the sun sets in the evening."