

Day, Night, and the Spinning Earth

Lesson Overview

This weekly lesson plan introduces 6-year-olds to the concept of Earth's rotation and how it creates the cycle of day and night. Through hands-on modeling, observation, and creative play, students will understand that the Sun doesn't move—we do!

Learning Objectives

- **Identify** the Earth as a planet that rotates (spins).
- **Demonstrate** how Earth's rotation creates day and night using a model.
- **Explain** that the Sun stays in one place while the Earth moves.
- **Observe** and record changes in light and shadows throughout the day.

Materials Needed

- A globe (or a large ball like a basketball)
- A bright flashlight or a desk lamp
- A small sticker (to represent the student's location)
- Two paper plates
- Art supplies: Markers, crayons, glue, construction paper (yellow and black)
- A brass fastener (brad)
- A "Shadow Stick" (a pencil and some playdough or a ruler)

Day 1: The Big Spin (Introduction)

The Hook: Ask the student, "Does the Sun go to sleep at night? Where does it go when we can't see it?"

I Do (Instruction)

Explain that we live on a giant ball called Earth. Even though it feels like we are standing still, the Earth is actually spinning very fast, like a slow-motion ballerina or a top. Use the term **Rotation**.

Talking Point: "Imagine you are on a merry-go-round. When you spin around, you see different things, right? The Earth does the same thing!"

We Do (Guided Practice)

Stand in the center of the room. Have the student stand facing you. You represent the Sun. Have the student slowly spin in a circle. Ask: "When can you see me? When is your back to me?"

You Do (Independent Practice)

The student draws a picture of themselves on one side of a piece of paper (the "Day" side) and themselves sleeping on the other side (the "Night" side).

Day 2: The Flashlight Earth (Modeling)

I Do (Instruction)

Darken the room. Turn on a flashlight and point it at the globe. Explain that the flashlight is the Sun. Point out how only half of the globe is bright, while the other half is dark.

We Do (Guided Practice)

Place a sticker on the globe where you live.

1. Slowly rotate the globe.
2. Stop when the sticker is in the light. Ask: "Is it breakfast time or bedtime?"
3. Rotate until the sticker is in the dark. Ask: "What are we doing now?"

You Do (Independent Practice)

The student takes the "Sun" (flashlight) and the "Earth" (ball/globe) and demonstrates the rotation to a family member or a stuffed animal, explaining when it is day and night.

Day 3: Shadow Hunters (Observation)

I Do (Instruction)

Explain that because the Earth is spinning, the Sun appears to move across our sky, which creates shadows. Shadows change because our position relative to the Sun changes.

We Do (Guided Practice)

Go outside (or use a lamp inside) and set up a "Shadow Stick" (a pencil stuck upright in playdough on a piece of cardboard). Trace the shadow at 9:00 AM.

You Do (Independent Practice)

Check the shadow again at 12:00 PM and 3:00 PM. Trace the new shadows in different colors.

Reflection: "Did the pencil move? No? Then why did the shadow move?"

Day 4: Around the World (Global Perspective)

I Do (Instruction)

Explain that while we are awake, children on the other side of the world (like in Australia or China) are fast asleep. This is because their part of the "ball" is facing away from the Sun.

We Do (Guided Practice)

Find your home on the globe. Find the spot exactly on the opposite side. Use the flashlight again to show that when one side is bright, the other **MUST** be dark.

You Do (Independent Practice)

Create a "Split World" collage. Fold a paper in half. On one side, use bright colors to show what people do during the day (school, playing). On the other side, use dark colors to show what people do at night (sleeping, stars, owls).

Day 5: The Day & Night Wheel (Assessment)

I Do (Instruction)

Review the week: Earth rotates once every 24 hours. Rotation causes the Sun to "rise" and "set."

We Do (The Project)

Create a Day/Night Spinner:

1. Take two paper plates. On Plate 1, draw a Sun on the top half and stars/moon on the bottom half.
2. On Plate 2, cut out a "window" (a large wedge) that takes up half the plate. Draw a little house or a person at the bottom of the window.
3. Put Plate 2 on top of Plate 1 and connect them in the center with a brass fastener.

You Do (Summative Assessment)

The student uses their spinner to explain the cycle.

Success Criteria: - Can they explain what "Rotation" means? - Can they show how the Earth moves to make the Sun "disappear"?

Differentiation & Adaptability

- **For Struggling Learners:** Focus purely on the "Light vs. Dark" aspect with the flashlight. Use the phrase "Sunlight = Day, Shadow = Night."
- **For Advanced Learners:** Introduce the concept of the Earth's *axis* (the imaginary line it spins on) and explain why some parts of the world (like the North Pole) have very long days or nights in the summer/winter.
- **Digital Option:** Watch a time-lapse video of Earth from the International Space Station to see the "line" between day and night (the terminator line).

Closing Recap

Ask the student: "If you could stop the Earth from spinning, what would happen?" (Encourage creative answers like 'It would be lunchtime forever' or 'The other side would never see the stars!'). Remind them: The Earth is a busy planet, always spinning to make sure everyone gets a turn in the Sun!