Name _____

# Sunlight Shifts Answer Key

Answers will vary. Strong responses should include:

1. Polar day is when the sun stays above the horizon for 24 hours. Antarctica experiences it because the South Pole is tilted toward the sun during its summer.
2. Polar night is when the sun stays below the horizon for 24 hours. Antarctica experiences darkness when the South Pole is tilted away from the sun during its winter.
3. Earth's tilt changes the angle of sunlight, causing Antarctica to receive continuous sunlight in summer and none in winter.
4. Scientists may adjust sleep schedules, use blackout curtains, and rely on reminders to rest because the sun never sets.
5. People may face limited visibility, extreme cold, difficulty working outdoors, and challenges to mental health due to darkness.
6. The Equator receives fairly direct sunlight year round, so daylight patterns do not shift enough to create full day or full night conditions.
7. Animals may change feeding, breeding, or migration patterns depending on the amount of light available.

### Teacher's Guide

**Purpose:** Supports Grades 6 to 12 in understanding how Earth's tilt creates extreme daylight patterns in Antarctica and how these patterns affect humans and wildlife.

### Differentiation Tips

- Provide a simple diagram of Earth's tilt for visual support.
- Let students discuss their answers in pairs before writing.
- Encourage advanced learners to include scientific vocabulary such as axis, rotation, or revolution.

### Engagement Ideas

- Begin with a quick demonstration using a flashlight and a globe to show how polar day and night occur.
- Ask students to imagine spending a month with no darkness or no daylight and share their predictions.