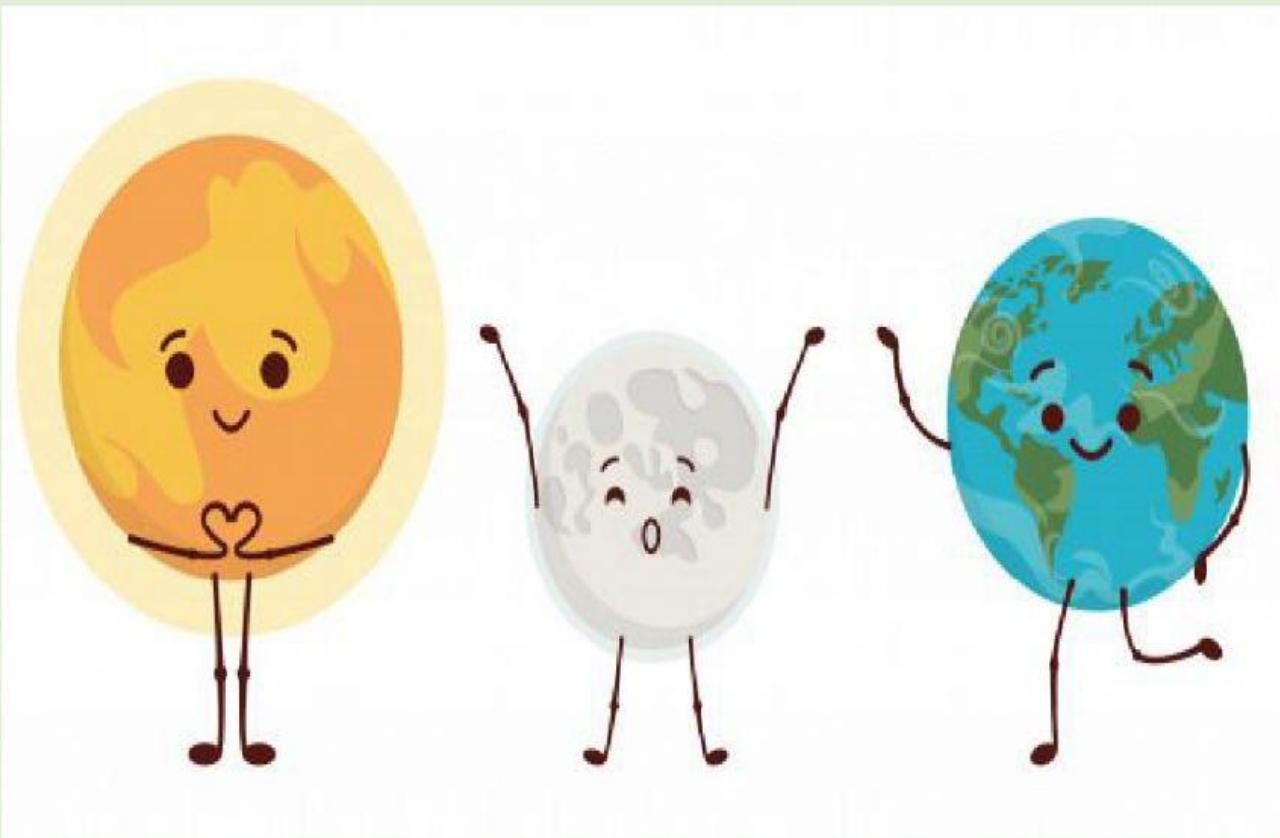




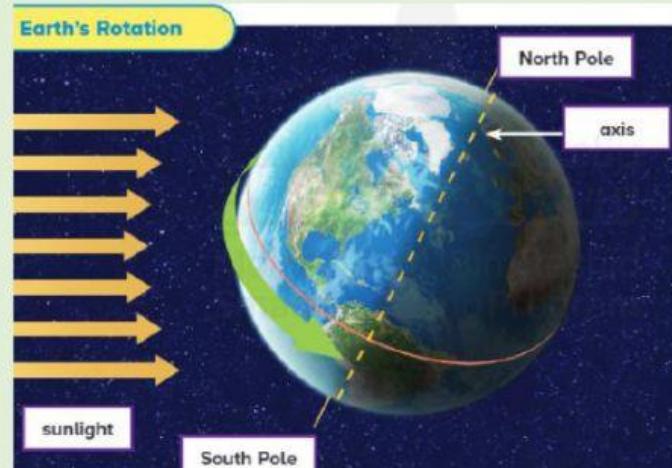
**SCIENCE**  
**CHAPTER 10-SOLAR SYSTEM AND BEYOND**  
**LESSON 1-EARTH AND SUN**  
**PART 1**



**Created by- Nisha Tanwar**

## WHAT CAUSES DAY AND NIGHT

- The earth's rotation around its axis causes day and night.
- A rotation takes 24 hours



Watch this video about earth rotation

**CLICK HERE TO  
OPEN EARTH  
ROTATION LAB**

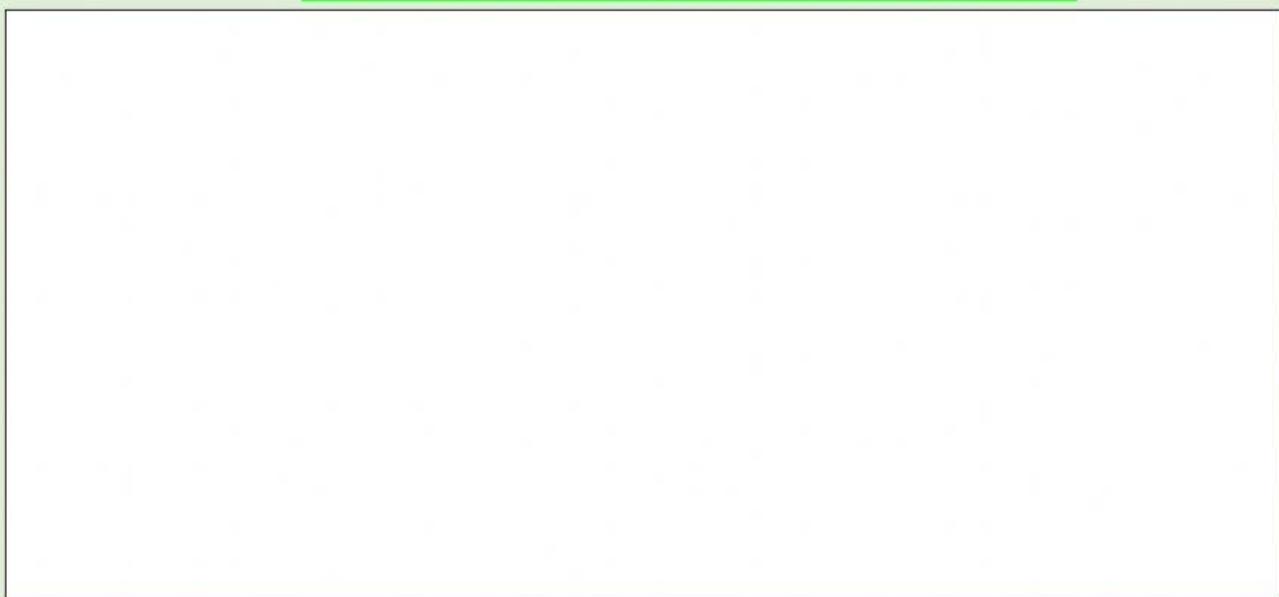


## SHADOWS

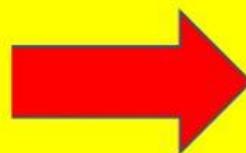
**A shadow forms when light is blocked.**

- ❖ As the position of the Sun changes, your shadow changes too.
- ❖ **EARLY IN THE MORNING, YOUR SHADOW IS LONG.**
- ❖ **IT SHRINKS UNTIL MIDDAY.**
- ❖ **THEN IT GROWS LONGER AGAIN UNTIL SUNSET.**

**Watch this video about changing shadows**



**CLICK HERE TO  
OPEN SHADOW LAB**



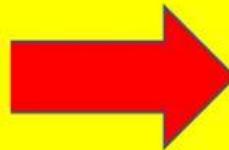
## **APPARENT MOTION**

**Apparent motion is the way something appears, or seems, to move.**

- ❖ The Sun appears to rise in the east.
- ❖ It seems to set in the west. Apparent motion is not real motion.

[Watch this video about apparent motion](#)

**CLICK HERE TO DO  
EDUSHARE  
ACTIVITY**

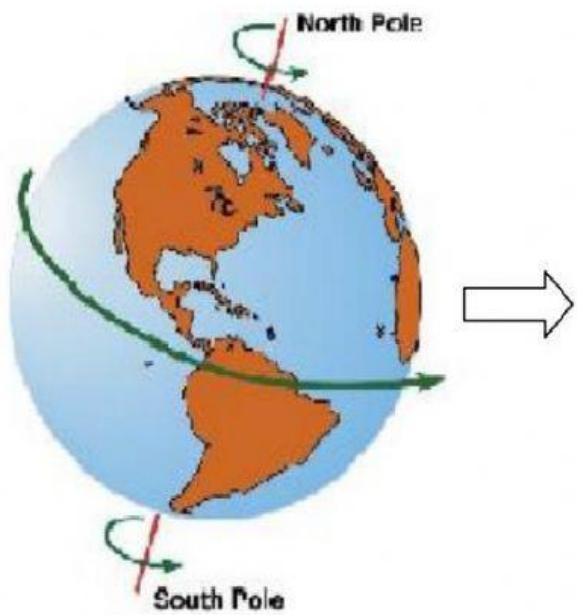


**PRACTICE QUESTIONS:**

- 1. The spinning of the earth on its axis is:**
  - A. Rotation**
  - B. Revolution**
- 2. For one rotation on its axis earth takes:**
  - A. 24 hours**
  - B. 60 minutes**
  - C. 24 days**
- 3. The axis is a real line from north pole to south pole.**
  - A. True**
  - B. False**
- 4. It is the movement of the sun that causes day and night.**
  - A. True**
  - B. False**
- 5. What causes day and night?**
  - A. Rotation of the sun**
  - B. Rotation of the earth**
- 6. Which process takes Earth 24 hours to complete?**

- A. Rotation**
- B. Revolution**
- C. shadows**
- D. seasons**

**FILL THE BLANKS IN THIS DIAGRAM**



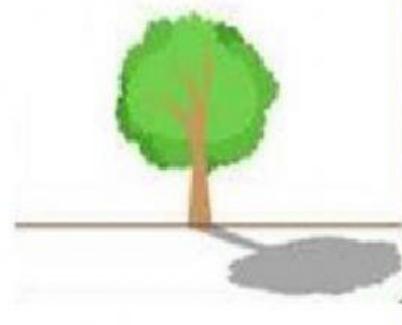
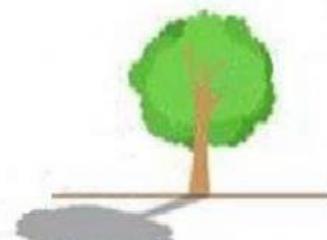
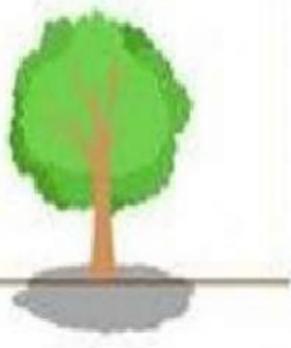
: The Earth moves  
around its own axis.

It takes

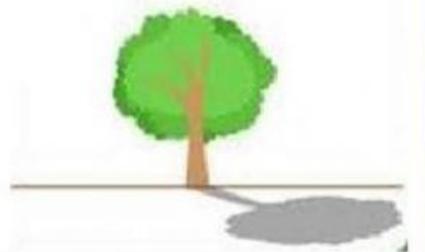
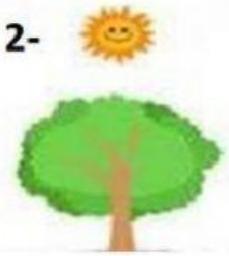
It produces

✓ Choose what the tree's shadow will look for each given picture.

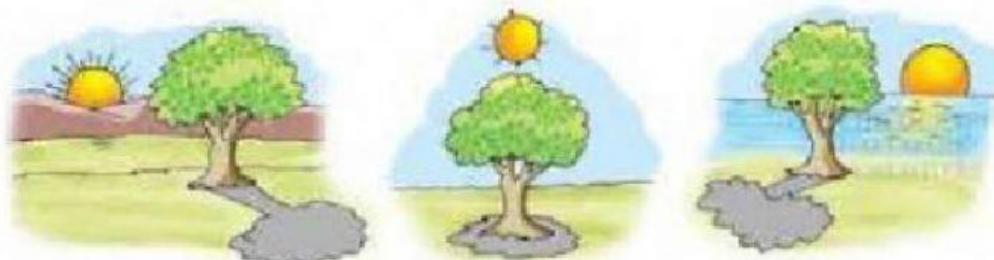
1-



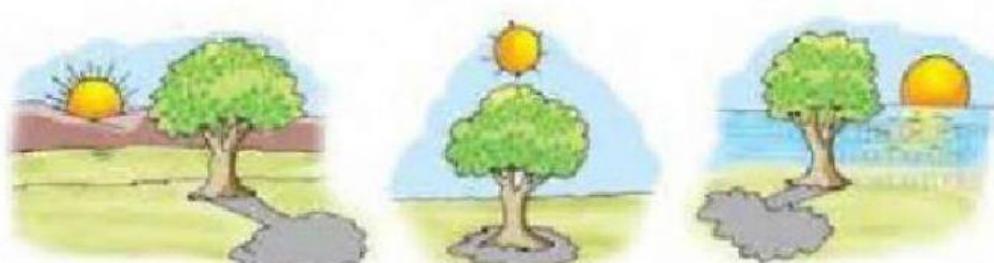
2-



Shadows are longest in the \_\_\_\_\_.



Shadows are shortest in the \_\_\_\_\_.



## QUESTIONS FROM BOOK

Your shadow is short when you go outside. What time of day is it?

- A** early morning
- B** late afternoon
- C** after sunset
- D** near noon

What causes Earth's changing seasons?

- A** Earth's rotation around the Sun
- B** the Sun's rotation around Earth
- C** Earth's tilted axis and revolution around the Sun
- D** Earth's rotation and the Moon's revolution around Earth

We see the Sun rise and set because

- A.** Earth revolves around the Sun.
- B.** Earth rotates on its axis.
- C.** the Sun revolves around Earth.
- D.** the Moon revolves around Earth.