

## Earth and Space

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### Summary

The Sun is a star made of hot gases. It is the closest star to Earth. The Earth spins on its axis to give us night and day. The side of Earth facing the Sun has day; the side facing away has night. This rotation makes it appear as if the Sun rises and sets in the sky. The Earth's orbit also gives us four seasons. During its orbit, the part of Earth tilted toward the Sun has summer; the part tilting away has winter. At night, we see stars, constellations, and the Moon. The Moon's orbit around Earth makes the shape of the Moon seem to change. Like Earth, there are other planets that orbit the Sun.

### Before Reading

#### Take a Picture Walk

Build background for the book by taking a picture walk with children. Discuss the pictures and preview the key vocabulary and concepts. Invite children to share what they know about the Sun, the Earth, and the Moon.

#### Vocabulary

axis, constellation, crater, orbit, phase, rotation, solar system

#### Comprehension Skill: Alike and Different

*Say:* One way we learn about things is to think about how they are alike and different. As you read, think about ways the Earth and the Moon are alike and ways they are different.

### During Reading

#### Think Critically

Have children answer the *What Did You Learn?* questions located on the inside back cover of their book.

1. **What is the Sun made of?** The Sun is made of gases.
2. **What is the Earth's axis?** An imaginary line through the center of the Earth around which the Earth spins.

### After Reading

#### Writing in Science

Earth's rotation causes night and day. Write to explain how this happens.

#### Organize Information

*Graphic Organizer: Alike and Different*  
Have children complete the Alike and Different chart on the BLM for this Leveled Reader to tell how the planets in our solar system are alike and different.

#### Related Resources

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| Vocabulary Cards   | Equipment Kit      |
| Every Student Learns   | Activity Flipchart |
| Quick Study  | LabZone            |
| Big Book of Science Songs and CD   |                    |
| Graphic Organizer Transparencies   |                    |
| Quick Activity Transparency  |                    |
| <a href="http://www.pearsonsuccessnet.com">www.pearsonsuccessnet.com</a> |                    |

**Write your answers.**

1. What causes the four seasons?  
**The tilt of the Earth and the Earth's orbit around the Sun cause the four seasons.**
2. What is the shape of the lighted part of the Moon called?  
**The shape of the lighted part of the Moon is called a phase.**
3. What is the solar system?  
**The solar system is the Sun, the Moon, the Earth, and other planets and their moons.**
4. Look at the picture of the planets in our solar system.  
How are the planets alike and different?  
Use the graphic organizer to help you.  
**Possible answer:**

### **Alike**

### **Different**

|  |   |
|--|---|
| <b>round</b><br><b>move around the Sun</b> | <b>size</b><br><b>distance from the Sun</b> |
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