

5Es



SOL: 4.3 Living Systems and Processes (Ecosystems)



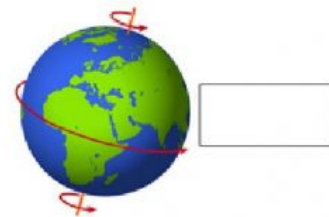
Scientists at Work:



Time: 50 minutes

Evaluate 4.5a Planets rotate on their axes and revolve around the sun

1. Drag the label to the correct diagram.



revolution

rotation

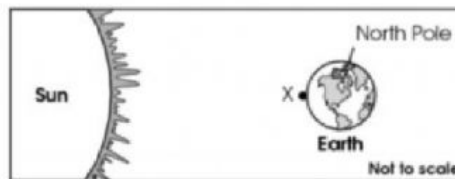


2. Why does the sun appear to move across the sky?

- a. the sun orbits the Earth
- b. The Earth is tilted on its axis.
- c. The sun rotates on its axis.
- d. The Earth rotates on its axis.

3. It is currently daytime at point X shown on Earth.

Earth and Sun



Which statement explains why it will be nighttime at point X after 12 hours?

- a. Earth is tilted on its axis
- b. Earth has a round shape
- c. Earth orbits the sun
- d. Earth rotates on its axis

Evaluate 4.5b: Planets have characteristics and a specific order in the solar system

1. Which set of notes describes Uranus?

☐ A

Planet Notes
• Terrestrial planet
• Looks similar to Earth's moon
• Smallest planet
• Has many craters

☐ C

Planet Notes
• Gaseous planet
• Similar in size to Neptune
• Blue in color
• Has 27 moons

☐ B

Planet Notes
• Terrestrial planet
• Thin atmosphere
• Known as the Red Planet
• Has two moons

☐ D

Planet Notes
• Gaseous planet
• Second largest planet
• Has 67 moons
• Known for its rings

2. Name the planets in order based on their distance from the sun.

- a. Mars, Venus, Earth, Mercury, Neptune, Uranus, Saturn, Jupiter
b. Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune
c. Mars, Mercury, Earth, Venus, Saturn, Jupiter, Uranus, Neptune
d. Mercury, Mars, Earth, Venus, Jupiter, Saturn, Neptune, Uranus

3. What do Jupiter, Saturn, Uranus, and Neptune have in common? Select **2**.

- ☐ Rocky surfaces
☐ Gaseous planet
☐ Appear similar to Earth
☐ rings
☐ more than 20 moons

4. Which of these is not an Outer Planet?

- a. Jupiter
b. Mars
c. Saturn
d. Uranus

5. Sort the characteristics into the correct category.

	Inner Planets	Outer Planets	Both
small size			
rocky surface			
no rings			
spherical			
large size			
after the Asteroid belt			
mostly gas			

Evaluate 4.5c: The sizes of the sun and planets can be compared to one another.

1. Jim is using fruits to create a model of the solar system. Use the drop-down menu to label the "planets" by size.



2. The largest, most massive, object in our solar system is--

- a. the sun
- b. the moon
- c. Jupiter
- d. Earth

3. Students study two planets, Planet X and Planet Y. The characteristics of the two planets are shown in the table below.

Characteristics of Unknown Planets

	Composition	Revolution Period	Size
Planet X	Rocky	Shorter	Smaller
Planet Y	Gaseous	Longer	Larger

Select the boxes to classify each of the four planets as having the same characteristics of Planet X or Y.

	Jupiter	Mercury	Saturn	Venus
Planet X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Planet Y	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>