

**Content Vocabulary**

Chapter 21.3 Review

**LESSON 3**

**The Outer Planets**

**Directions:** In this word search puzzle, find and circle the five terms listed below. Then on each line, write the term that correctly completes each sentence.

Galilean moons                  orbit                  probe                  rotation                  Titan

Y	G	B	G	Z	D	F	D	R	H	I	D	U	T
A	D	A	Z	A	O	U	P	T	T	E	Q	G	I
W	U	I	L	I	A	X	N	H	V	R	X	J	T
L	N	E	D	I	H	Z	S	Z	R	H	U	X	A
X	W	A	K	B	L	D	M	O	H	Q	R	G	N
U	T	N	M	J	E	E	E	B	F	V	X	B	T
W	F	I	J	C	L	C	A	V	N	B	A	G	B
A	Q	A	H	Q	Y	U	A	N	S	G	Q	R	L
T	G	Q	U	P	R	O	B	E	M	N	Z	Z	U
I	C	P	M	B	G	A	U	V	I	O	T	R	Y
B	X	X	Z	N	T	Y	P	B	Q	L	O	W	X
R	O	T	A	T	I	O	N	G	Z	Z	O	N	K
O	P	P	N	Y	N	R	H	C	R	E	V	O	S

Copyright © Glencoe/McGraw-Hill, a division of The McGraw-Hill Companies, Inc.

1. Io, Europa, Ganymede, and Callisto are called the \_\_\_\_\_.
2. Saturn's largest moon, \_\_\_\_\_, is bigger than the planet Mercury.
3. Like Jupiter, Saturn has a rapid \_\_\_\_\_ and horizontal bands of clouds.
4. Jupiter takes almost 12 years to complete one \_\_\_\_\_.
5. Scientists use a \_\_\_\_\_ to examine planets and moons in the solar system.

**Key Concept Builder** 

**LESSON 3**

# The Outer Planets

**Key Concept** How are the outer planets similar?

**Directions:** Complete the compare-and-contrast chart by writing terms from the list in the correct spaces.

- |                            |                    |
|----------------------------|--------------------|
| diameter of planet         | mass               |
| distance from the Sun      | number of moons    |
| gases change to liquid     | size of rings      |
| strong gravitational force | small solid core   |
| hydrogen and helium gases  | temperature        |
| lack a solid surface       | tilt of rotation   |
| period of revolution       | period of rotation |
| mainly liquid interiors    | type of rings      |

**How are the outer planets similar?**

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**How are the outer planets different?**

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

Copyright © Glencoe/McGraw-Hill, a division of The McGraw-Hill Companies, Inc.

**Key Concept Builder** 

**LESSON 3**

# The Outer Planets

**Key Concept** What are the outer planets made of?

**Directions:** Answer each question by writing the correct outer planet or planets on the lines provided.

**Jupiter      Neptune      Saturn      Uranus**

1. Which planets have a small amount of methane in their atmospheres?  
\_\_\_\_\_
2. Which planets have atmospheres composed of hydrogen and helium gases?  
\_\_\_\_\_
3. Which planet has an atmosphere of 90 percent hydrogen? \_\_\_\_\_
4. Which planets have rings?  
\_\_\_\_\_
5. Which planet has a tilted axis of rotation? \_\_\_\_\_
6. Which planet's interior is most like the one on Uranus? \_\_\_\_\_
7. Which planet has the largest and most complex ring system?  
\_\_\_\_\_
8. Which planets have interiors made of partially frozen water and ammonia?  
\_\_\_\_\_
9. Which planet's surface is a thick, slushy layer of water, ammonia, and other materials?  
\_\_\_\_\_
10. Which planet takes 165 years to orbit the Sun? \_\_\_\_\_
11. Which planet has a core that might be the size of Earth and ten times its mass?  
\_\_\_\_\_
12. Which planet has rings, each containing thousands of narrower ringlets?  
\_\_\_\_\_
13. Which outer planets have periods of rotation that are shorter than Earth's?  
\_\_\_\_\_

Copyright © Glencoe/McGraw-Hill, a division of The McGraw-Hill Companies, Inc.

**Lesson Quiz A****LESSON 3****The Outer Planets****Multiple Choice**

**Directions:** *On the line before each question or statement, write the letter of the correct answer.*

- \_\_\_\_\_ 1. All the outer planets are made mostly of  
A. water ice.  
B. metal and rock.  
C. gas and liquid around a solid core.
- \_\_\_\_\_ 2. Which planet is the solar system's largest?  
A. Jupiter  
B. Saturn  
C. Neptune
- \_\_\_\_\_ 3. The outer planets have atmospheres composed mostly of  
A. nitrogen and oxygen.  
B. hydrogen and helium.  
C. water vapor and carbon dioxide.
- \_\_\_\_\_ 4. Which planet has a moon larger than the planet Mercury?  
A. Saturn  
B. Jupiter  
C. Uranus

**Matching**

**Directions:** *On the line before each definition, write the letter of the term that matches it correctly. Each term is used only once.*

- |  |            |
|--|------------|
| _____ 5. has a sideways axis of rotation                     | A. Jupiter |
| _____ 6. size, makeup, and structure are like that of Uranus | B. Neptune |
| _____ 7. has the most complex ring system                    | C. Saturn  |
| _____ 8. has a Great Red Spot and at least 63 moons          | D. Uranus  |