Name _____ Date _____ Class _____

Observing the Solar System

This section describes the history of ideas about the solar system.

Use Target Reading Skills

Look at Figures 2 and 3 in your textbook, and write two questions about the visuals in the graphic organizer below. The first question is done for you. As you read, write the answers to your questions.

Q. What is a geocentric model?
A.
Q.
A.

Earth at the Center

1. What did the Romans name the points of light that the Greeks called planets?

_____

_____

2. In a geocentric system, what is at the center of the universe?

_____

_____

3. How was Ptolemy's model different from the earlier Greek model?

_____

_____

_____

Observing the Solar System *(continued)*

Sun at the Center

4. A description of the solar system in which all the planets revolve around the sun is called a(n) _____.

5. In the 1500s, who further developed the heliocentric explanation for the motion of the planets?

_____

6. What were two observations that Galileo made through his telescope that supported the heliocentric model?

_____

_____

_____

_____

7. Circle the letter next to the name of the person or group whose ideas about the solar system are accepted today.

   a. Copernicus
   b. the people of ancient Greece
   c. Ptolemy
   d. the Romans

8. What is an ellipse?

_____

_____

9. Complete the table below, which shows what each scientist contributed to our knowledge of the solar system.

Observer	Time	Accomplishment
Copernicus	**a.**	Further developed heliocentric model; worked out arrangement of known planets
Brahe	Late 1500s	**b.**
c.	**d.**	Used a telescope to make discoveries that supported the heliocentric model
Kepler	Early 1600s	**e.**

f. Use the table to give examples of how the work of many scientists over time has led to our current understanding of the solar system.

_____

_____

_____

Modern Discoveries

10. What does the solar system consist of?

_____

_____

_____