

CHAPTER

29

STUDY GUIDE FOR CONTENT MASTERY

Our Solar System

SECTION 29.1 Overview of Our Solar System

In your textbook, read about early ideas.

Write the letter of the term from Column B next to its matching item in Column A.

Column A

Column B

- | | |
|---|-----------------------------|
| _____ 1. Motion of a planet moving in the opposite direction of the normal direction of planetary motion as observed from Earth | a. aphelion |
| _____ 2. Point in a planet's orbit when it is farthest from the Sun | b. astronomical unit |
| _____ 3. Nicolaus Copernicus's model of the solar system in which the planets orbit the Sun | c. eccentricity |
| _____ 4. Oval shape centered on two points instead of one point | d. ellipse |
| _____ 5. Point in a planet's orbit when it is closest to the Sun | e. heliocentric |
| _____ 6. Defines a planet's elliptical orbit as the ratio of the distance between the foci and the length of the major axis | f. perihelion |
| _____ 7. Unit of measure that is the average distance between the Sun and Earth (1.4960×10^8 km) | g. retrograde |

In your textbook, read about gravity and orbits.

Use each of the terms below just once to complete the passage.

acceleration	center of mass	distance	force
Isaac Newton	masses	Moon	universal gravitation

English scientist **(8)** _____ developed an understanding of gravity by observing the motion of the **(9)** _____, the orbits of the planets, and the **(10)** _____ of falling objects on Earth. He learned that two bodies attract each other with a **(11)** _____ that depends on their **(12)** _____ and the **(13)** _____ between the bodies. This is called the law of **(14)** _____. He also determined that each planet orbits a point between itself and the Sun. That point is called the **(15)** _____.