

Chapter 23 Touring Our Solar System

# Section 23.4 Minor Members of the Solar System

(pages 660–664)


*This section describes the characteristics of asteroids, comets, and meteoroids.*

## Reading Strategy (page 660)

**Building Vocabulary** As you read this section, write a definition for each vocabulary term in your own words and enter it in the table. For more information on this Reading Strategy, see the **Reading and Study Skills** in the **Skills and Reference Handbook** at the end of your textbook.

Vocabulary	Definition
asteroid	
	glowing head of a comet
meteor	
	meteoroid that reaches Earth's surface

## Asteroids (page 661)

1. Is the following sentence true or false? Asteroids are small, rocky bodies in space. \_\_\_\_\_
2.  Most asteroids are found between the orbits of \_\_\_\_\_ and Jupiter.

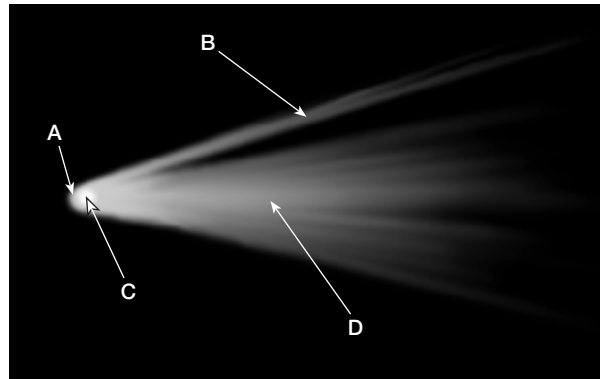
## Comets (pages 661–663)

3. \_\_\_\_\_ are pieces of rocky and metallic materials held together by frozen gases. Circle the correct answer.  
Comas                  Comets                  Meteoroids
4. Circle the letter of the term for the glowing head of a comet formed when frozen gases vaporize.  
a. coma                  b. gas tail                  c. dust tail

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5. Select the appropriate letter in the figure that identifies each of the following parts of a comet.

- \_\_\_\_\_ nucleus
- \_\_\_\_\_ tail of ionized gases
- \_\_\_\_\_ coma
- \_\_\_\_\_ tail of dust



6. The two regions from which comets originate are the \_\_\_\_\_ and the Oort cloud.
7. Is the following sentence true or false? The nucleus of Halley’s comet is spherical. \_\_\_\_\_

**Meteoroids (page 663)**

*Match each description with its object.*

- | Description   | Object       |
|---|--------------|
| _____ 8. small, solid particle from space that reaches Earth’s surface        | a. meteor    |
| _____ 9. small, solid particle from space that burns up in Earth’s atmosphere | b. meteoroid |
| _____ 10. small, solid particle that travels through space                    | c. meteorite |
11. ☞ The three sources of most meteoroids are interplanetary debris that was not swept up by planets, \_\_\_\_\_, and solid remains of comets that once traveled near Earth’s orbit.
12. A(n) \_\_\_\_\_, or display of frequent meteor sightings, can result when Earth encounters a swarm of meteoroids.
13. Large craters on Earth such as Meteor Crater in Arizona were formed when very large \_\_\_\_\_ hit Earth’s surface.
14. Is the following sentence true or false? Meteorites are now the only extraterrestrial materials scientists have to examine directly.  
\_\_\_\_\_