Dwarf Planets and Other Objects

Directions: Complete this concept map by choosing terms from the word bank and writing them in the correct spaces.

Ceres
meteorites

Eros
meteoroids

Ida
inner

Pluto
long-period

inner
outer

short-period

1.  

2.  

3.  

4.  

5.  

6.  

7.  

8.  

9.  

10.  

Impact craters

Asteroids

Planets

Comets

Dwarf planets

Solar System Objects

The Solar System
# Dwarf Planets and Other Objects

**Key Concept** What are the characteristics of comets and asteroids?

**Directions:** On each line, write the term or phrase that correctly completes each sentence.

<table>
<thead>
<tr>
<th>Characteristics of Comets</th>
<th>Characteristics of Asteroids</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A comet is ______________</td>
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<td>_________________________</td>
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<td>2. The particles in a comet are held together by</td>
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<td>_________________________</td>
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<td>3. A comet's tail forms when</td>
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<td>4. The difference between a short-period comet and a long-period comet is ______________</td>
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<td>5. The zone that long-period comets come from is the ______________</td>
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<td>_________________________</td>
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<td>6. Asteroids are ______________</td>
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<td>_________________________</td>
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<td>7. Most asteroids orbit the Sun in the</td>
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<td>_________________________</td>
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<td>_________________________</td>
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<td>8. Scientists believe that asteroids might be left over from ______________</td>
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<td>_________________________</td>
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<td>9. The asteroid belt is between the orbits of</td>
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<td>_________________________</td>
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<tr>
<td>10. Pallas is ______________</td>
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<td>_________________________</td>
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<tr>
<td>11. Asteroids and comets ______________ the Sun.</td>
<td></td>
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</tbody>
</table>

The Solar System
Dwarf Planets and Other Objects

Key Concept  How does an impact crater form?

Directions: Use a term from the word bank to answer each question. Some terms might be used more than once or not at all.

asteroid  asteroid belt  comet  impact crater
meteor  meteorite  meteoroid

1. What is a small rocky particle that moves through space and most often is about the size of a grain of sand? __________________________

2. What is a streak of light caused by a glowing meteoroid? __________________________

3. What usually burns up when it reaches Earth's atmosphere? __________________________

4. What is a particle of rock that survives a fall through Earth's atmosphere and hits the surface of Earth? __________________________

5. What forms on the surface of a planet, moon, or other space object, has a rounded shape, and results from a meteoroid strike? __________________________

6. What is acted on by friction, is one of many millions that enter Earth's atmosphere without hitting the surface, and becomes quite hot as it falls? __________________________

7. What formed when a meteorite struck where Arizona is today, producing a 1.2-km-wide depression? __________________________

8. What strikes planets and moons and is made of rock? __________________________

9. What type of depressions are present on Earth in more than 170 locations? __________________________
Lesson Quiz A

LESSON 4

Dwarf Planets and Other Objects

Multiple Choice

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

1. A spherical object orbiting the Sun that has objects of similar mass orbiting nearby or crossing its path is a
   A. comet.
   B. planet.
   C. dwarf planet.

2. Which object lost its designation as a planet in 2006 and is now classified as a dwarf planet?
   A. Eris
   B. Pluto
   C. Ceres

3. Comets form a glowing tail when
   A. they cross the path of a glowing meteoroid.
   B. they are at the farthest point in their orbit around the Sun.
   C. the Sun’s energy changes their ice into a gas and makes it glow.

Matching

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

Matching Set 1

4. chunks of rock and ice that orbit the Sun between Mars and Jupiter
   A. impact crater
   B. asteroids
   C. Kuiper belt

5. source of short-period comets in the outer part of the solar system

6. depression formed when a meteorite hits Earth

Matching Set 2

7. small, rocky particle that moves through space
   D. meteor
   E. meteorite
   F. meteoroid

8. streak of light made by a glowing rocky particle moving through Earth’s atmosphere

9. small, rocky particle that strikes a planet or moon