

Name _____

Mission Log Vocabulary Match - "Journey Through the Debris"

Instructions: Read the fictional log entries from Commander Vega during her journey through the solar system. Match each **bolded word** in the log to its correct **definition** from the list below. There are 10 vocabulary words and 10 definitions. Write the **letter** of the correct definition next to each term.



Mission Log - Commander Vega

Day 12 - We've finally reached the edge of the **asteroid belt**, a wide region filled with rocky objects orbiting between Mars and Jupiter. Some of the larger ones are visible even from the cockpit.

Day 13 - While running a scan, we spotted a small, fast-moving **meteoroid**—a piece of space rock drifting freely. It missed the ship, thankfully.

Day 15 - A beautiful sight today: a glowing **comet** passed nearby. As it approached the Sun, it released gas and dust, forming a glowing **coma** and a long, bright tail behind it.

Day 16 - A piece from that comet must have broken off. It entered the upper atmosphere of our ship's simulation zone and lit up brightly. That flash was a **meteor**, burning up from friction.

Day 17 - What was left of the meteor fell onto the simulation terrain—a small black rock. It was officially classified as a **meteorite** and collected for analysis.

Day 18 - We passed near the far edge of the solar system, where the **Oort Cloud** lies—home to icy bodies that haven't been disturbed in billions of years.

Day 19 - We also logged the **Kuiper Belt**, another icy region beyond Neptune that holds many small objects, including dwarf planets.

Day 20 - This mission has helped clarify the difference between asteroids and comets. An **asteroid** is mostly rock or metal, while a comet contains ice that vaporizes when heated.

Day 21 - We observed a rare event—a **meteor shower** caused by Earth (or our ship's orbit simulation) moving through debris left by a passing comet.

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| 1. Asteroid belt ____ | A. A large collection of icy bodies far beyond Pluto, where long-period comets come from. |
| 2. Meteoroid ____ | B. A rocky or metallic object, smaller than a planet, that orbits the Sun-often found between Mars and Jupiter. |
| 3. Comet ____ | C. A rocky or metallic body that enters Earth's atmosphere and burns up, producing a streak of light. |
| 4. Coma ____ | D. A cloud of gas and dust that forms around a comet's nucleus when it nears the Sun. |
| 5. Meteor ____ | E. The region between Mars and Jupiter filled with rocky space objects. |
| 6. Meteorite ____ | F. A frozen body of ice, rock, and dust that forms a tail when heated by the Sun. |
| 7. Oort Cloud ____ | G. A small space rock traveling in space that hasn't entered the atmosphere. |
| 8. Kuiper Belt ____ | H. A leftover fragment from a meteor that survives the atmosphere and lands on a surface. |
| 9. Asteroid ____ | I. A band of icy objects beyond Neptune that includes dwarf planets. |
| 10. Meteor shower ____ | J. An event where multiple meteors are seen in the sky, usually caused by passing through comet debris. |