SCHOLASTIC

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Solar System Quiz

1. A student is preparing an outline for a report titled "The Solar System: From the Sun Outward." What is the most logical order of topics? ~~Drag each term or phrase into its correct position at left to organize the items in the proper sequence~~.

Number the correct sequence

Outer Planets

Inner Planets

Asteroid Belt

Oort Cloud

2. At the center of the solar system is the (Moon/Earth/Sun/galaxy). Earth and (7/8/9/23) other planets circle around the Sun in wide oval-shaped paths. These paths are called (tracks/orbits/gravity/rays).

3. Which note card best summarizes the important points in the article?

a. The solar system is made up of the Sun and all the objects its gravity holds together. These objects include planets, dwarf planets, asteroids, comets, moons, and other bodies. The Sun lies at the center of the solar system. Astronomers seek to improve our understanding of the solar system, its origin, and its future.
b. The solar system is made up of the Sun and all the objects its gravity holds together. These objects include the planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune. In 1543 a Polish astronomer, Nicolas Copernicus, stated that the planets circle the Sun. Since that time, astronomers have learned a great deal more about the solar system and the other objects that comprise it.
c. The solar system is made up of Earth and all the objects that revolve around it. These objects include the Sun, the Moon, and the planets. The solar system also contains many moons, asteroids, meteoroids, and comets. Astronomers have a complete understanding of the solar system, its origin, and its future.

Which is right?
- ○ Note Card 1
- ○ Note Card 2
- ○ Note Card 3

4. Which of the following is responsible for holding the solar system together?

- ○ the temperature of the Sun
- ○ the rings of Saturn
- ○ the gravity of the Sun
- ○ the Oort Cloud

5. Which note card best summarizes the important points in the article?

a.
- "Inner planets" refers to the four worlds closest to the Sun.
- All are small rocky worlds.
- The inner planets are named Mercury, Venus, Earth, and Mars.

b.
- The surface of Mercury is heavily cratered.
- Venus has a very dense atmosphere.
- Earth has one moon, and Mars has two.

c.
- The conditions on Mercury and Venus would be hostile to humans.
- Earth is the only planet in our solar system known to support life.
- Astronauts may be able to someday explore Mars.

Which is right?
- ○ Note Card 1
- ○ Note Card 2
- ○ Note Card 3

6. Compared to the inner planets, the outer planets are _____.

- ○ far larger in diameter
- ○ much closer together
- ○ more densely populated
- ○ less gaseous in composition

7. Which of the selections below would likely be the LEAST reliable source for learning more about comets?

- ○ a biography of Edmond Halley
- ○ the comet discussion from the NASA Web site
- ○ a disaster film about a comet impact
- ○ an astronomy lecture at the local planetarium

8. Which of the following is NOT an important point to include in a summary of asteroids?

- ○ Asteroids range from pebble-sized to hundreds of miles across.
- ○ A dense belt of asteroids lies between Mars and Jupiter.
- ○ Asteroids are made of rocks and metal.
- ○ The asteroid Vesta was discovered in 1807.

9. What are Saturn's rings made of?

- ○ solid discs of silver and iron
- ○ countless fragments of ice and rock
- ○ streaming clouds of plasma and gases

10. Astronomers believe that the solar system arose from _____.

the collision of two gigantic comets
- an intense magnetic storm
- material left over from the birth of the Sun
- a process very different from other known solar systems

11. Which scientific advance had the greatest impact on the course of solar system discovery?

- the Earth-centered model of the universe
- the use of the telescope to study the heavens
- the launching of *Sputnik 1*
- the demotion of Pluto to "dwarf planet" status

12. If you were designing the first space probe, which argument would you have used to persuade NASA to incorporate uncrewed probes into the U.S. space program?

- Most destinations in space are too far away or too inhospitable for human exploration.
- Fewer astronauts would require training, saving NASA money.
- Manufacturers of space technology need work.
- Astronomers see little value in direct human observation of distant planets.

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