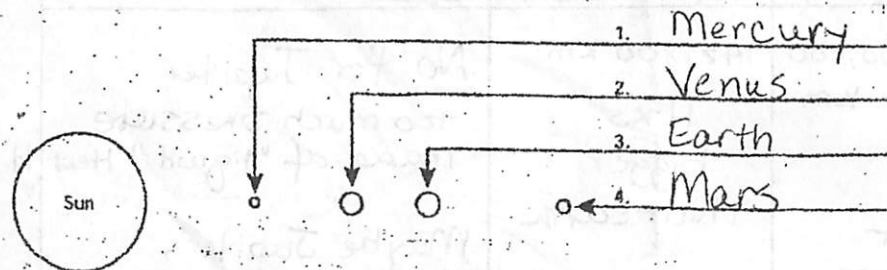


The Inner Planets - pages 566-571

◆ Understanding Main Ideas

Label the diagram with the names of the inner planets.



Write the planet or planets the statement describes.

- Mercury, Venus, Earth, Mars 5. has a rocky surface (terrestrial)
- Earth 6. 70 percent is covered with water
- Venus 7. rotates in the opposite direction from most other planets and moons
- Mars 8. called the "red planet" because of the color of the dust
- Mars 9. has at least one moon
- Venus, Earth 10. similar to each other in size, density, and internal structure
- Mercury 11. has almost no atmosphere
- Venus 12. atmosphere so heavy and thick that it would crush a human
- Mars 13. has a tilted axis so that the planet has seasons
- Mars 14. atmosphere has low air pressure and is mostly carbon dioxide

◆ Building Vocabulary

Write a definition for each of the following terms.

- 15. terrestrial planets
inner planets - small + rocky
- 16. retrograde rotation
spins or turns in the opposite direction
- 17. greenhouse effect
trapping of heat due to atmosphere

The Outer Planets

◆ Understanding Main Ideas

Answer the following questions in the spaces provided.




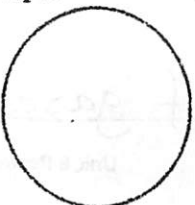
- 1. What are the ~~the~~ outer planets?
Jupiter, Saturn, Uranus, Neptune
- 2. Which planets are the gas giants?
Jupiter, Saturn, Uranus, Neptune
- 3. What are the two main differences between Pluto and the gas giants?
Size
Pluto is rocky
- 4. Why doesn't the gas on a gas giant escape into space, as it has on Mercury?
Gas giants have lots of gravity
- 5. What object in the solar system has a composition similar to that of the gas giants?
Sun
- 6. What planet is by far the most massive of all the planets that revolve around the sun?
Jupiter
- 7. What are Saturn's rings made of?
ice + dust
- 8. Why did astronomers know where to look to discover Neptune?
predicted it with math
- 9. Why do astronomers sometimes consider Pluto and its moon, Charon, to be a double planet?
revolve around each other

◆ Building Vocabulary

Write a definition for the following term in the space provided.

- 10. gas giant
large planet made mostly of gases



Planet-draw/color details	Planet surface & Temperature	Planet Atmosphere	Distance from the Sun (km)	Diameter & compare to Earth	Ability to Support Life? Explain
Jupiter 5 	-108°C -162°F very cold	Hydrogen 90% Helium 10% Trace amounts methane + ammonia	778,000,000 km 63+ moons	142,800 km 11x's bigger than earth	<u>No</u> for Jupiter too much pressure made of "liquid" H ₂ + H Maybe Jupiter's moon Europa
Saturn 6 	-139°C -212°F very cold	97% Hydrogen 3% Helium	1,427,000,000 km 60+ moons	120,540 km 9x's bigger than earth	<u>No</u> for Saturn too much pressure made of "liquid" H ₂ + He Maybe Saturn's moon Titan
Uranus 7  blue green color	-197°C -323°F very very cold	83% Hydrogen 15% Helium 2% methane	2,871,000,000 km 20+ moons	51,200 km 4x's bigger than earth	no too cold made of "liquid" H, He + methane (CH ₄)
Neptune 8  blue	-200°C -328°F very very cold	79% Hydrogen 18% Helium 3% methane	4,497,000,000 km 8+ moons	49,500 km 4x's bigger	no too cold made of "liquid" H, He + methane (CH ₄)

SB1C - compare and contrast planets in terms of size, surface, atmosphere, distance from sun, and ability to support life.

Past Neptune: Dwarf planets and Comets
 Kuiper Belt Oort Cloud Both are very far away.