

Exercise C1: The Inner Planets of the Solar System

Student name: _____ Class: _____ Date: _____

Check the box with the correct answer.

Question 1: Which piece of evidence suggests that the inner planets were formed from the same rotating cloud of gas and dust?

- a. The atmospheres of these planets are composed mostly of hydrogen.
- b. The planets obey Kepler's laws.
- c. The planets orbit the Sun in the same direction and in almost the same plane.
- d. Asteroids are found outside the orbit of Mars.

Question 2: Carefully examine the view in the Main Window. Which of the inner planets has the most eccentric orbit?

- a. Mars
- b. Venus
- c. Earth
- d. Mercury

Question 3: What is the length of a Mercury day in Earth days?

- a. 96 days
- b. 176 days
- c. 58.6 days
- d. 24 days

Question 4: Most planets in our solar system rotate in a counter-clockwise direction when viewed from above the North pole of the Sun. What is unusual about the rotation of Venus?

- a. Venus does not rotate.
- b. The spin axis of Venus is almost parallel to the ecliptic plane.
- c. Venus rotates in the same direction as the rest of the planets.
- d. Venus rotates in the opposite direction to all other planets.

Question 5: Two small, irregularly-shaped moons, Phobos and Deimos, orbit Mars. They are believed to be captured asteroids. What are the approximate orbital periods of Phobos and Deimos respectively?

- a. 7 days, 12 hours; 1 day, 2 hours.
- b. 7 hours, 35 minutes; 1 day, 6 hours.
- c. 14 days, 10 minutes; 2 days, 12 hours.
- d. 15 hours; 2 days, 12 hours.

Question 6: Which planet(s) are found within the Sun's habitable zone?

- a. Earth
- b. Earth and Venus
- c. Venus, Earth and Mars
- d. Earth and Mars