

# In-class pop quiz#3 Mar 25, 2026

**1. The greenhouse effect is mainly**

- a. Due to plant life and conversion of CO<sub>2</sub> to O<sub>2</sub>
- b. Due to human life and production of O<sub>2</sub>
- c. Due to absorption of infrared radiation by CO<sub>2</sub> and H<sub>2</sub>O
- d. Due to unique composition of atmosphere of the Earth

**2. Why did the terrestrial planets lose essentially all of the hydrogen and helium from their atmospheres?**

- a. It was swept out by the solar wind.
- b. There was no H or He to start with.
- c. They are too warm and their gravity is too weak.
- d. Their magnetic fields are too weak.

**3. We would expect the interior of Mars to retain heat better than \_\_\_\_\_ but not as well as \_\_\_\_\_.**

- a. Earth, Venus
- b. Mercury, Earth
- c. Venus, Earth
- d. Mercury, Earth's moon
- e. Earth, Mercury

## PQ3 –Contd.

**4. The larger number of impact craters seen on Mercury, compared to Earth, implies that Earth**

- a. has less internal heat than Mercury
- b. has a much older surface than Mercury
- c. has a much younger surface than Mercury
- d. has never had many impacts
- e. formed a long time after Mercury

**5. The Martian surface possesses several interesting features including**

- a. All of the other answers are correct
- b. evidence of volcanic activity
- c. polar caps
- d. craters
- e. seasonal variations