Solar System

Name: _____ Date: _____ Grade: Grade 5

Part A: Multiple Choice

Circle the best answer for each question.

1. Venus is closer to the Sun than Earth, yet Mercury has wider temperature swings than Venus. What best explains this?

- A) Mercury spins faster than Venus so it heats and cools more quickly each day.
- B) Venus has a thick atmosphere that traps heat, while Mercury has no atmosphere at all.
- C) Mercury is smaller than Venus so it cannot hold onto heat as long.
- D) Venus reflects all sunlight back into space while Mercury absorbs it.

2. Why do the outer planets have many more moons than the inner planets?

- A) Outer planets spin faster which pulls in more objects from space.
- B) Outer planets are much larger and their stronger gravity captures more objects.
- C) Inner planets are too hot for moons to form near them.
- D) Moons can only form from rings and inner planets have no rings.

3. A student says Neptune must be the coldest planet because it is farthest from the Sun. Which fact would best support this claim?

- A) Neptune has the strongest winds in the solar system.
- B) Neptune takes about 165 Earth years to orbit the Sun once.
- C) Neptune receives very little solar energy due to its great distance from the Sun.
- D) Neptune is an ice giant made of frozen water and ammonia.

4. Mars shows evidence of ancient river valleys and lake beds. What does this evidence most strongly suggest?

- A) Mars once had active volcanoes that melted ice across the surface.
- B) Mars once had conditions warm enough for liquid water to flow on its surface.
- C) Mars currently has underground oceans hidden beneath its polar ice caps.
- D) Mars was once closer to the Sun and has slowly drifted outward over time.

Part B: Fill in the Blank

Write the correct answer on each line.

1. Earth is the only planet in our solar system known to support _____ .

2. The _____ effect on Venus causes its surface temperature to reach over 450 degrees Celsius.

Answer Key · Solar System · Grade: Grade 5

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Part B: Fill in the Blank

Write the correct answer on each line.

1. Earth is the only planet in our solar system known to support **life** .

2. The **greenhouse** effect on Venus causes its surface temperature to reach over 450 degrees Celsius.