Solar System Science Quiz for 5th Graders

**Instructions:** Read each question carefully and choose the best answer. You can write down your answers on a separate sheet of paper. Good luck!

### Multiple Choice (1 point each)

- 1. Which planet is the hottest in our solar system?
  - a) Mercury
  - b) Venus
  - c) Earth
  - d) Mars
- 2. The largest planet in our solar system is:
  - a) Jupiter
  - b) Saturn
  - c) Uranus
  - o d) Neptune
- 3. Which planet has rings made of ice and dust?
  - a) Venus
  - b) Earth
  - c) Saturn
  - d) Pluto
- 4. The only planet in our solar system that spins on its side is:
  - a) Mercury
  - o b) Venus
  - c) Uranus
  - d) Neptune
- 5. What is the name of the dwarf planet that used to be considered a planet until 2006?
  - a) Ceres
  - b) Pluto
  - c) Eris
  - d) Haumea

#### True or False (1 point each)

- 1. The sun is a star, not a planet. (True/False)
- 2. All the planets in our solar system orbit the sun in perfect circles. (True/False)

#### Short Answer (2 points)

1. Name the four inner, rocky planets in our solar system, starting closest to the sun.

# Bonus Challenge (3 points)

• Explain why Pluto is no longer considered a planet. Briefly describe the criteria that define a planet.

# Grading Rubric:

- Each multiple choice question: 1 point for the correct answer, 0 points for an incorrect answer
- Each true or false question: 1 point for the correct answer, 0 points for an incorrect answer
- Short answer question: 2 points for naming all four planets correctly, 1 point for naming three planets correctly
- Bonus challenge question: 3 points for a clear and accurate explanation of Pluto's reclassification and the definition of a planet, 2 points for partially complete or less accurate explanations, 1 point for mentioning some relevant information

### Answer Key:

- Multiple Choice: 1. b, 2. a, 3. c, 4. c, 5. b
- True or False: 1. True, 2. False
- Short Answer: Mercury, Venus, Earth, Mars
- Bonus Challenge: Pluto no longer meets the criteria for a planet because it doesn't have gravitational dominance in its orbital region (it shares its region with other Kuiper Belt objects). A planet must be the dominant gravitational influence in its region, be round due to its own gravity, and be directly orbiting the sun.

Have fun and happy learning! Remember, even the most knowledgeable scientists keep exploring and learning about the wonders of the solar system!