1. Which statement about the solar system and its planets is correct?
   a. In the solar system, all planets orbit the Sun.
   b. There are eight planets in the solar system.
   c. The planets are small compared to the size of the solar system.
   d. All of the above.

2. What is the scale factor for a model of the solar system where Jupiter has a radius of 10 cm?
   a. 1 cm/6,378 km
   b. 1 cm/71,492 km
   c. 10 cm/71,492 km
   d. None of the above
3. In a scale model of the solar system, at what distance from the Sun would Saturn need to be placed if Earth is placed 10 cm from the Sun?
   a. 950 m  
   b. 95 cm  
   c. 9.5 km  
   d. 9.5 cm

4. Which of the following is true about a solar system model in which Earth is placed 10 cm from the Sun?
   a. Earth is so small that it is not visible.  
   b. Earth has a radius of 1 cm.  
   c. Earth has a radius of 10 cm.  
   d. None of the above.

Directions: Use Figure 1 to answer question 5.

5. Figure 1 is an illustration of the solar system. The object labeled “A” is the Sun. Name one aspect of the solar system that is not represented to scale. Briefly explain your answer.