Exercise B6: Size and Scale of the Solar System

Student name: ________________________  Class: ____________ Date: _____________

Check the box with the correct answer.

**Question 1:** The four inner planets of the solar system in order of distance from the Sun are:

- [ ] a. Earth, Mercury, Venus, Mars
- [ ] b. Mars, Venus, Mercury, Earth
- [ ] c. Mercury, Venus, Earth, Mars
- [ ] d. Mercury, Venus, Sun, Mars

**Question 2:** What do the four terrestrial planets have in common?

- [ ] a. They all revolve about the Sun in the same direction.
- [ ] b. They are all about the same physical size.
- [ ] c. They all have the same orbital shape, that is, ellipses with the same eccentricity.
- [ ] d. They all have the same aphelion distance.

**Question 3:** What is interesting about the status of Ceres in the Solar System?

- [ ] a. It orbits outside the main asteroid belt.
- [ ] b. It is the only dwarf planet in the main asteroid belt.
- [ ] c. Its orbit carries it over the N and S poles of the Sun.
- [ ] d. It orbits the Sun in the opposite direction of the terrestrial planets.

**Question 4:** The four outer planets of the solar system in order of distance from the Sun are:

- [ ] a. Saturn, Jupiter, Uranus, Neptune
- [ ] b. Neptune, Uranus, Jupiter, Saturn
- [ ] c. Jupiter, Saturn, Uranus, Neptune
- [ ] d. Sun, Jupiter, Uranus, Neptune
**Question 5:** What do the four terrestrial planets and the four gas giant planets all have in common?

- **a.** They all revolve about the Sun in the same direction.
- **b.** They are all about the same size.
- **c.** They all have identical orbital shapes, that is, ellipses with the same eccentricity.
- **d.** They all have the same aphelion distance.

**Question 6:** What is the approximate distance in au between the Sun and the farthest gas giant planet? Use the **Angular Separation Tool** to measure the appropriate distance.

- **a.** 30 AU
- **b.** 19 AU
- **c.** 9 AU
- **d.** 5 AU

**Question 7:** The three dwarf planets in the Kuiper belt are:

- **a.** Pluto, Haumea, Makemake
- **b.** Neptune, Pluto, Ceres
- **c.** Neptune, Haumea, Makemake
- **d.** Pluto, Haumea, Uranus