**SOLAR SYSTEM SCALE LAB**

By Sarah Deane, University of Tennessee GK-12 Earth Project Fellow

1. In our scaled model, what is the diameter of the Sun **in inches**? __________ in
   What is the actual equatorial diameter of the Sun **in miles**? __________ mi

2. In our model, how far is Mercury from the Sun **in feet**? __________ ft
   What is the actual distance **in miles**? __________ mi

3. What planet is closest in size to the Earth? _________________________
   What is the diameter **in miles** of this planet? __________ mi

4. If the Sun was a hollow ball, how many Earths would fit inside it? __________

5. In our scaled model of the Solar System, how big is the Earth **in inches**? __________ in
   What is the actual equatorial diameter of the Earth **in miles**? __________ mi

6. Mars’s orbit takes it just inside the ____________________________.
   How many Earth Days does it take Mars to orbit the Sun? __________
   True or False: The equatorial diameter of Mars is LARGER than that of Earth. __________

7. What is the model-scale diameter of the Solar System’s largest planet **in inches**? __________ in
   What is the actual equatorial diameter of this planet **in miles**? __________ mi

8. In our model, how far is Saturn from the Sun **in feet**? _________________ ft
   How far is it **in miles**? ____________________________ mi
   How wide are Saturn’s rings? __________________________ mi

9. Which planet is closest to the Sun? _________________
   Which planet has been known as the “king of the gods”? _________________
   Which planet is known as the “Red Planet”? _________________

10. Why does our scaled model of the Solar System not have Uranus, Neptune, or Pluto?
    (Hint: In our model, Uranus would be over 1,600 feet from the Sun and is actually 1,783,939,400 miles from the Sun).

11. Please list 3 “things” that you learned about any of the planets today that are NOT listed above.
    (For example, What is another name for the Sun? How thick are Saturn’s rings?)

   1) ________________
   2) ________________
   3) ________________

**Bonus question (optional): Give one reason why Pluto is now known as a Dwarf Planet, and not a “real” planet.**