Adapted from NASA's Earth, Moon and Mars Balloons Lesson http://www.nasaexplores.com/

EARTH, MOON, MARS SCALING

Student

Name: _____ Date: _____

Use the information from this table to determine the scale of your Earth balloon and to calculate the size of your other models. Be sure to fill in any missing information from the tables. Measurements are presented in kilometers (km) and centimeters (cm). Blow all balloons up to your calculated model sizes.

| Astronomical Body | Diameter (km) | Model Diameter (cm) |
|-------------------|---------------|---------------------|
| Earth | 12,756 | 20 |
| Moon | 3,476 | |
| Mars | 6,794 | |
| Phobos | 22 | |

Use the following table to calculate the distances between the planets.

| Astronomical Bodies | Distance (km) | Model Distance (cm) |
|---------------------|---------------|---------------------|
| Earth to Moon | 384,000 | |
| Earth to Mars | 78,000,000 | |

