



## The Solar System – Great Distances!

The concepts of size and distance on a planetary scale are difficult concepts to explain and understand. When discussing these topics, great potential exists to include math concepts.

**Challenge 1:** Create a way to illustrate the relative size of the planets

**Challenge 2:** Create a way to model the distance of the planets to the sun.

### Here is the data:

|         | <u>Diameter</u> | <u>Distance to the Sun</u> |
|---------|-----------------|----------------------------|
| Mercury | 5000 km         | 58,000 km                  |
| Venus   | 12,300 km       | 107,000 km                 |
| Earth   | 12,600 km       | 149,000 km                 |
| Mars    | 6,700 km        | 227,000 km                 |
| Jupiter | 138,700 km      | 774,000 km                 |
| Saturn  | 114,600 km      | 1,419,000 km               |
| Uranus  | 51,200 km       | 2,856,000 km               |
| Neptune | 49,600 km       | 4,474,000 km               |
| Sun     | 1,382,400 km    | 0                          |
| Moon    | 4,000 km        | 149,000 km                 |