Date: _____

THE SOLAR SYSTEM IN SCALE

Introduction

Unlike what our eyes see, planets are different in size and distance from each other. In this exercise, you will learn about the size of planets and their distance from the Sun.

Objectives

Here are your objectives for this activity:

- ✓ Identify each planet
- ✓ Learn their arrangements in the Solar System
- ✓ Work scientifically to derive conclusions from data and observations.

Exercise

1. The table below shows the eight planets' diameter and distance from the Sun as compared with Earth.

Planet	Diameter	Distance from Sun
Mercury	0.4	0.4
Venus	1	0.75
Earth	1	1
Mars	0.5	1.5
Jupiter	11	5
Saturn	10	10
Uranus	4	20
Neptune	4	30

2. Scale the distance of planets between each other in the Solar System by following these steps:

a. Get a strip of paper and fold it into three equal parts.

b. Label the left end 'Sun', the first fold 'Saturn', the second fold 'Uranus' and the right end 'Neptune'.

c. Fold the left end to the first fold and name that new fold 'Jupiter'.

d. Make another three equal folds between the left end and the fold labelled ‘Jupiter’.
e. Label the first new fold from the left ‘Mars’.
f. Divide the space between ‘Sun’ and ‘Mars’ into three equal sections. From left to right, label these sections ‘Mercury’, ‘Venus’, and ‘Earth’.
g. Research about inner and outer planets, and the temperature of each planet.

Answer these questions:

1. Compare the diameters of the eight planets using a bar chart or any other appropriate bar or graph.

2. What are the differences between inner planets and outer planets?

3. Distinguish the diameters of outer planets with the inner planets.

4. How is the distance from the Sun related to the temperature of a planet?