

# A Scale Model of the Solar System

**Objective:** To be able to describe the spacing and relative sizes of the planets (and Pluto) of the solar system using a scale model prepared in this laboratory.

**Materials:** Picture of the eight planets and Pluto drawn to scale, 100 inches of adding machine paper, a meter stick, colored pencils, a glue stick and scissors.

**Procedure:** Cut out the partial image of the sun, each planet, and Pluto from the picture at the bottom of this page or, if the image is too small, simply draw a dot to represent it. Draw an "X" about 2 inches from one end of the adding machine paper. Glue the picture of the sun on the X. Using the following data table and a scale where 1 AU (Astronomical Unit) = 2.5" measure the distance of each planet from the sun and glue the cut-out image at the correctly measured distance. Add Pluto last.

Planet	AU	Inches
Mercury	0.387	
Venus	0.723	
Earth	1.000	
Mars	1.524	
Jupiter	5.203	
Saturn	9.539	
Uranus	19.180	
Neptune	30.060	
Pluto (dwarf planet)	39.440	

Now to complete your model record the following information neatly next to each planet's picture: Name of the planet, AUs from the sun, Period of revolution, Period of rotation, diameter in miles. Indicate whether each planet is Terrestrial or Jovian. You may wish to use colored pencils to highlight information and make your model more interesting.

