Name _____

Scale Model of the Solar System

Purpose:

1) represent the natural world using models and identify their limitations
2) identify and describe the solar system
3) explain the use of light years to describe distances in the universe

Materials:

Roll of adding machine tape	Map pencils	Meter stick
Tape		

What to do:

1. Given this data:

Name of Planet	Actual Diameter of Planet	Scaled Diameter of Planet	Actual Distance From Sun	Scaled Distance From Sun
Sun	1 390 000 km	***140 mm***	---	---
Mercury	4 900 km	***5 mm***	58 000 000 km	***6 cm***
Venus	12 100 km	***12 mm***	108 000 000 km	***11 cm***
Earth	12 800 km	***13 mm***	150 000 000 km	***15 cm***
Mars	6 800 km	***7 mm***	228 000 000 km	***23 cm***
Jupiter	143 000 km	***143 mm***	778 000 000 km	***78 cm***
Saturn	125 000 km	***125 mm***	1 427 000 000 km	***143 cm***
Uranus	51 100 km	***51 mm***	2 871 000 000 km	***287 cm***
Neptune	49 500 km	***50 mm***	4 497 000 000 km	***450 cm***

2. Use the <u>scaled</u> data to draw the Sun and the planets to scale on your adding machine tape.
    a. You will have to tape several strips of adding machine tape together to make it wide enough.
    b. Begin with the Sun and work towards Neptune.
    c. Use your map pencils to color the planets.
    d. Add natural and man made satellites for extra credit.
3. Double check your measurements!