

## Page# 95: The Solar Ruler Activity

Planet order: On board- write it down in notebook

M	V	E	M	J	S	U	N	P
Mercury	Venus	Earth	Mars	Jupiter	Saturn	Uranus	Neptune	Pluto
My	very	educated	mother	just	sent	us	noodles	pizzas

### Part A) The Ruler

Hand out adding machine tape, have them cut lengths of 1 meter (40 inches to be exact)

Mark the Sun at one end- it is 0 AU

Pluto is about 39 AU from the Sun- mark it just inside the other edge at 39 inches from the Sun

Divide paper in half	What planet is there?	Uranus-(19 AU) mark it at 19 inches
Divide right half in half again-		Neptune (30 AU) (30 inches)
Divide left half-		Saturn (9.5 AU)(9.5 inches)
Half again-		Jupiter (5 AU)(5 inches)
Half Again	(2.5 AU)-- asteroid belt (2.5 inch)	
Half Again -		Mars (1.5 AU) (1.5 inch)
Half again:		Venus (0.7 AU) (3/4 inch)
Half way between Venus and Mars-		Earth (1.0 AU) (1 inch)
Half again-		Mercury (0.4 AU)(1/2 inch)

### Measuring with a ruler:

	Neptune (30 AU) (mark it at 30 inches)
	Uranus-(19 AU) mark it at 19 inches
	Saturn (9.5 AU)(9.5 inches)
	Jupiter (5 AU)(5 inches)
(2.5 AU)--	asteroid belt (2.5 inch)
-	Mars (1.5 AU) (1.5 inch)
	Earth (1.0 AU) (1 inch)
	Venus (0.7 AU) (3/4 inch)
	Mercury (0.4 AU)(1/2 inch)

Now use your book to draw planet pictures, place them appropriate spots.

Part B- the Overhead Notes: Read ages 312-314 in text. Answer questions 1-3 form page 320 on notebook page 95

1. Planets can be seen because.....
2. The order of the planets is:.....
3. An AU is an astronomical Unit which is the average distance from the Earth to the Sun

1AU  $\approx$  93 million miles or  
1AU  $\approx$  150 million kilometers (149, 597, 870.691km)

Pattern:

The four inner planets: Mercury, Venus, Earth, and Mars have solid surfaces; AKA: the terrestrial planets.

The Jovian planets: Jupiter, Saturn, Uranus, and Neptune have thick, soupy atmospheres and no solid surface. AKA: the gas giants.

Pluto does not fit the pattern. Pluto is small & icy with little atmosphere.