

Planets of Our Solar System

○ Composition of Our Solar System

- One Star: the *Sun*.
- Nine *Planets*, some of them with *Satellites* (Moons) and *Rings*.
- Many *Asteroids*.
- Many *Comets*.
- Lots of *Dust*.

○ Planets of Our Solar System

	Mercury	Venus	Earth	Mars	Jupiter	Saturn	Uranus	Neptune	Pluto
Mean Distance From Sun (Millions of Miles)	36.2	67.6	93.5	142.4	486	893	1,794	2,813	3,696
Period of Revolution	88 days	224.7 days	365.3 days	687 days	12 years	30 years	84 years	165 years	248 years
Equatorial Diameter (Miles)	2,800	7,563	7,973	4,246	89,375	75,335	31,949	30,958	1,421
Type	Rock	Rock	Rock	Rock	Gas	Gas	Gas	Gas	Rock
Moons	0	0	1	2	39	30	21	8	1
Visible with Naked Eye ?	yes	yes	yes	yes	yes	yes	no	no	no
Rings	0	0	0	0	3	1,000?	11	4	0
Rescaled Eq. Diameter (cm)	0.3	0.8	0.8	0.4	9.0	7.6	3.2	3.1	0.1
Rescaled Eq. Diameter (")	2/16	5/16	5/16	3/16	3 9/16	3	1 4/16	1 4/16	1/16

At the scale of the bottom row, the Sun would have a diameter of 87 cm (or 34.6 inches). Its actual diameter is close to 870,000 miles ! The scale used here is 1:1.6 billions ! This means that 1 cm on this scale corresponds to 1.6 billion cm (or 16,000 km) in reality.

○ Planets Around Other Stars

As of December 2002, the astronomers discovered 101 planets around 87 other stars. 11 of these stars have more than one planet orbiting around them.

○ Activities

Build your own planet: the diameter is given in centimeters and inches in the two bottom rows of the chart (e.g. 9 cm or 3" 9/16 for Jupiter). Use the ruler to give the correct size to your planet. Then, we'll compare the planets, and create small Solar Systems !