

## DATA SHEET

## SOLAR SYSTEM: PLUTO

Pluto is a complex planetary body with mountains, valleys, plains, craters, and possibly, glaciers. Discovered in 1930, Pluto was long considered our solar system's ninth planet. But after the discovery of similar intriguing bodies deeper in the distant Kuiper Belt (eg. Makemake, Pluto was reclassified as a dwarf planet.

Pluto is orbited by five known satellites, the largest of which is Charon. Charon is approximately half the size of Pluto. Thereore, Pluto and Charon are often referred to as a *double planetary system*.

## **SOME FACTS ABOUT PLUTO**

- Pluto is 39 Astronomical Units (AU) from the Sun. (5.9 billion km)
- The Kuiper Belt is populated with thousands objects called Plutoids or transneptunian/Kuiper Belt objects, which formed early in the history of our solar system. The Kuiper belt extends out from 30 to 50 AU.
- It takes sunlight 5.5 hours to travel from the Sun to Pluto.
- From 1979 to 1999, Pluto was near perihelion, when it is closest to the Sun. During this time, Pluto was actually closer to the sun than Neptune.
- Craters as large as 260 km in diameter punctuate some areas of Pluto, with some showing signs of erosion and filling. Tectonic forces in action?
- One day on Pluto takes about 153 hours. Its axis of rotation is tilted 57 degrees with respect to the plane of its orbit around the sun, so it spins almost on its side. Pluto also exhibits a retrograde rotation; spinning from east to west like Venus and Uranus.
- Pluto is about two-thirds the diameter of Earth's moon and probably has a rocky core surrounded by a mantle of water ice. Interesting ices like methane and nitrogen frost coat its surface. Pluto's mass is about one-sixth that of Earth's moon.