

ESSENTIAL UPDATES

Pluto, the Dwarf Planet

If you woke up one morning in August, 2006, and sensed something was different about the world around you, you were absolutely right.

The International Astronomical Union (IAU), wrapping up its meeting in Prague, Czech Republic, solved one of the most hotly-debated topics in the cosmos. It approved a specific definition that gives our solar system eight planets, instead of the nine most of us were familiar with. That means Pluto is no longer a planet!

It all started when scientists at Caltech announced that they had discovered 2003 UB313, a dwarf planet nicknamed Xena. Ceres, the largest known asteroid, was also placed in the dwarf planet category. But calling Xena a dwarf planet caused problems, because it happens to be larger and farther away than Pluto! That's when many astronomers decided that it was time to figure out what really is a planet, once and for all.

Here's what they did. The IAU decided that, to be called a planet, an object must have three traits. It must:

- Orbit the sun
- Be massive enough that its own gravity pulls it into a nearly round shape
- Be dominant enough to clear away objects in its neighborhood

When Pluto was discovered in 1930, some questioned whether it was really a planet of just a big chunk of ice. Now, the IAU guidelines state that to be admitted to the dwarf planet category, an object only needs to have two of those traits. It must:

- Orbit the sun
- Have a nearly round shape

And no, moons don't count as dwarf planets.

What's to become of the other objects in our solar system neighborhood, the ones that are not planets, not dwarf planets and not moons? The organization has decided that most asteroids, comets and other small objects will be called "small solar-system bodies." Besides Pluto, Ceres and 2003 UB313, the astronomical union has a dozen potential dwarf planets on its watch-list.