## Dwarf Planets: Small but Special

Dwarf planets are unique and interesting members of our solar system! They are much smaller than regular planets, but they still orbit the Sun. Unlike the eight main planets, dwarf planets aren't big enough to clear other objects out of their path as they orbit. This is one reason why they're called "dwarf" planets.

Dwarf planets are round like planets and orbit the Sun, but they don't meet all the same rules that the larger planets do. Dwarf planets are smaller than planets but bigger than asteroids. Some well-known dwarf planets include Pluto, Eris, Haumea, Makemake, and Ceres.

Pluto used to be considered the ninth planet in our solar system until scientists decided it was actually a dwarf planet in 2006. Pluto is very cold and far from the Sun, located in an area of space called the Kuiper Belt. The Kuiper Belt is a region filled with icy objects and small planets beyond Neptune.

Eris is another dwarf planet that is even farther from the Sun than Pluto. It's one of the largest dwarf planets and also found in the Kuiper Belt.



Pluto

Haumea is a dwarf planet shaped like an oval or a squashed football! It spins very quickly, which causes its unusual shape.

Makemake is another icy dwarf planet in the Kuiper Belt, and it's a bit smaller than Pluto.

Ceres is the only dwarf planet in the asteroid belt, a region between Mars and Jupiter. Ceres was the first dwarf planet to be visited by a spacecraft.

To be a full-sized planet, an object has to meet three rules:

- It must orbit the Sun.
- It must be large enough to be round due to its own gravity.
- It must have cleared its path around the Sun, meaning it pushed away or pulled in nearby objects.

Dwarf planets meet the first two rules, but they don't clear their paths because they're not big enough. That's why they're called dwarf planets instead of regular planets.

Name:\_\_

Scientists have sent spacecraft to learn more about dwarf planets. The New Horizons spacecraft flew past Pluto in 2015 and sent back amazing pictures. Another spacecraft called Dawn explored Ceres and taught us more about what it's like on a dwarf planet.
Fun Facts About Dwarf Planets
Dwarf planets are much smaller than Earth.
Most dwarf planets are found in the Kuiper Belt, far from the Sun.
Some dwarf planets have their own moons, just like planets do.
1. What is the Kuiper belt?
2. What makes Ceres different from other dwarf planets?
3. What do dwarf planets not do that makes them not full-sized planets?