

Ceres: One big rock!

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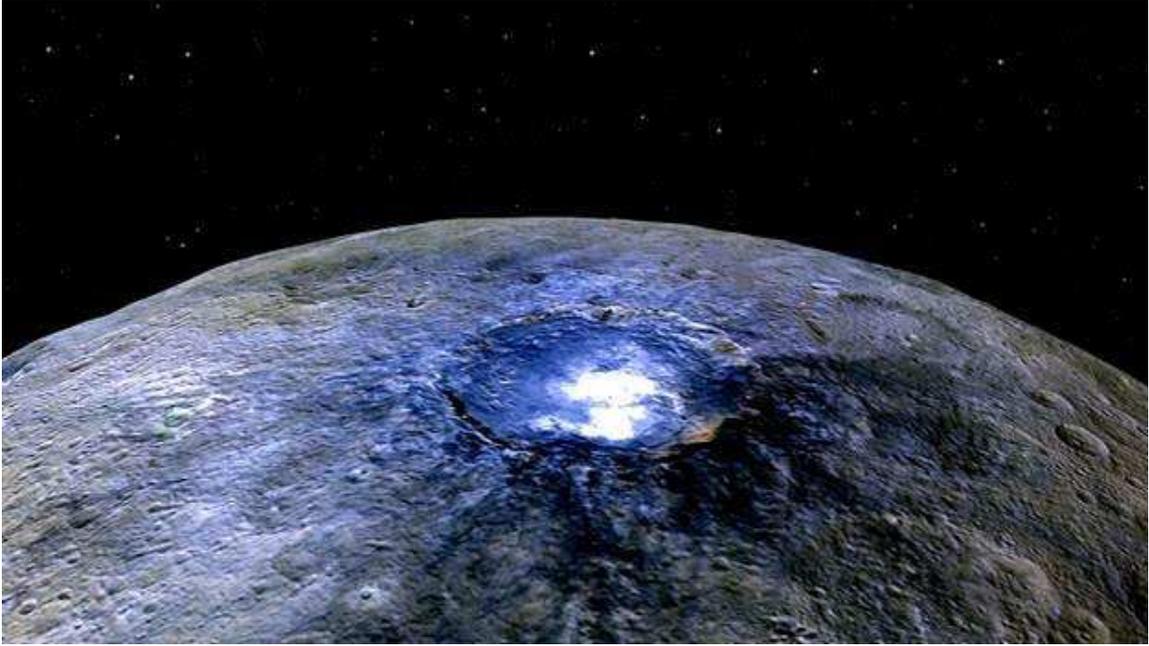
Dawn is when the sun rises and a new day begins. You might start thinking about breakfast too! But Dawn is also the name of an amazing spaceship. NASA named this spacecraft Dawn because its purpose is to help understand the beginning of the solar system.

You know there are eight planets, right? But there are many other objects in our solar system. There are moons and asteroids and sometimes a comet! We also share the solar system with *dwarf* planets. They're called dwarf but they are still pretty huge!

One of the five dwarf planets that we know about is named Ceres (sounds like 'series'). It's the biggest object between Mars and Jupiter. Ceres lives in the main asteroid belt. That's where millions of rocky objects called asteroids hang out and orbit the sun. No one had ever been to Ceres, so NASA had the idea to go and check it out. That idea became the Dawn spacecraft—making it the very first spacecraft to visit a dwarf planet.

The NASA engineers finished building Dawn in 2007 and launched her into space from Cape Canaveral in Florida. From there, Dawn started flying through space toward Ceres. Ceres is very, very far away—much farther than Mars. Dawn was able to get there thanks to her super-efficient engines. They don't use gasoline or even rocket fuel, they use xenon ions!

By going to Ceres in 2015 and studying it for a long time (over a year now), we hope that Dawn will teach us something about the history of our solar system. Then we might learn more about the dawn of Earth, where we live!



The dwarf planet Ceres as seen from the Dawn spacecraft. The bright area is the inside of a large crater.