



DATA SHEET

SOLAR SYSTEM: CERES

Ceres is the largest object in the asteroid belt between Mars and Jupiter and the only dwarf planet located in the inner solar system. When NASA's Dawn arrived in 2015, Ceres became the first dwarf planet to receive a visit from a spacecraft. Ceres was regarded as a mere asteroid for many years.

However, Ceres is so much bigger and so different from its rocky neighbours that the International Astronomical Union classified it as a dwarf planet in 2006. Ceres is more similar to the terrestrial planets (Mercury, Venus, Earth and Mars) than its asteroid neighbours, but it is much less dense. Although Ceres has a similar layered internal structure to the terrestrial planets, it's not as crisply defined.

SOME FACTS ABOUT CERES

- 1 Ceres is 2.8 Astronomical Units (AU) from the Sun. (413 million km)
- 2 Ceres is described as an *embryonic planet*, which means it started to form but didn't complete the process. Jupiter's strong gravity prevented it from becoming a fully formed planet.
- 3 It takes light 22 minutes to travel from the Sun to Ceres.
- 4 Ceres has a very thin atmosphere, and there is evidence it contains water vapour. The vapour may be produced by ice volcanoes or by ice near the surface.
- 5 Ceres takes 1 682 Earth days, or 4.6 Earth years, to orbit the sun. Ceres completes one rotation on its axis every 9 hours.
- 6 The crust is rocky and dusty with large salt deposits (magnesium sulfate). Ceres is covered in countless small, young craters, but none are larger than 280 km in diameter.
- 7 Its axis of rotation is tilted just 4° with respect to the plane of its orbit around the sun. Ceres therefore spins nearly perfectly upright and doesn't experience seasons.