

Asteroids!

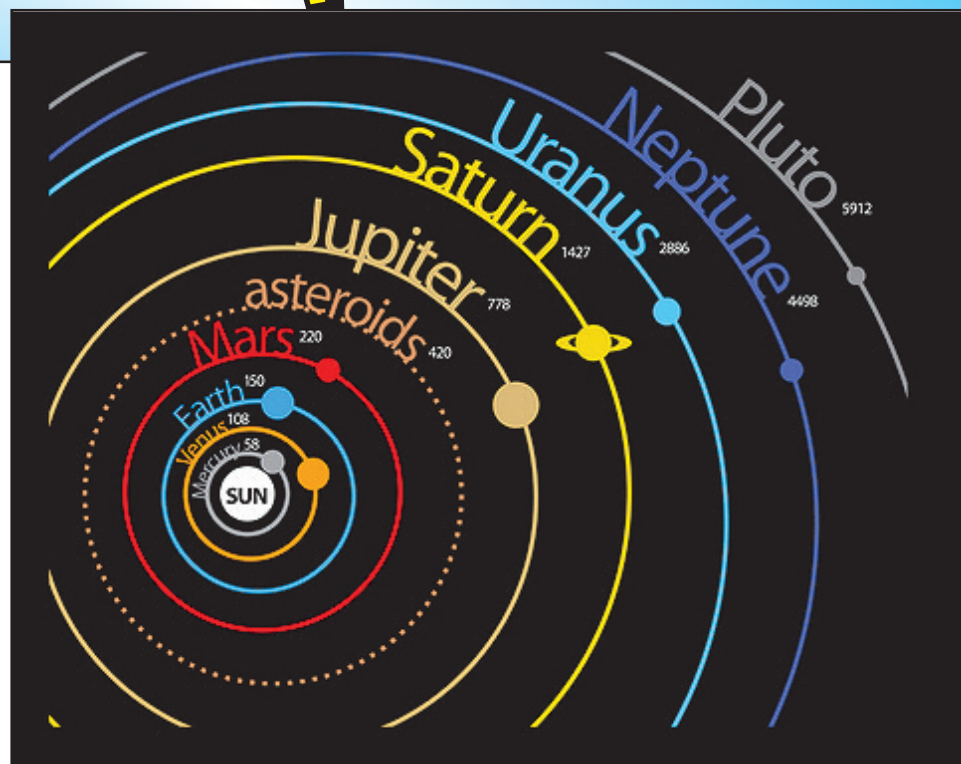
An asteroid is one among millions of small solar bodies which revolve around the sun every day. They consist of rocks, metals and they can also contain organic compounds. Asteroids are concentrated mainly in the region known as the asteroid belt which lies between the orbits of Mars and Jupiter. They can be as very large in diameter or can be just as small as a grain of sand. They are neither big enough to be called planets nor are they as small as comets. The asteroid belt is divided into an inner belt and an outer belt. The inner belt, which is made up of asteroids that are within 250 million miles of the sun, contains asteroids that are made of metals. The outer belt consists of rocky asteroids.

On January 1, 1801, Giuseppe Piazzi discovered the first asteroid which he thought at first was a comet. He named this asteroid Ceres, after the Sicilian Goddess of grain. It is now, since 2006 considered a dwarf planet, along with Pluto, Eris, Makemake and Haumea. Soon, other large asteroids like Pallas, Juno and Vista were discovered. By the end of the 19th century, several hundred asteroids have been discovered.

According to present day astronomers, asteroids are debris left behind by the formation of the Solar System that could not come together to form a planet because of the effect of Jupiter's gravitational pull.

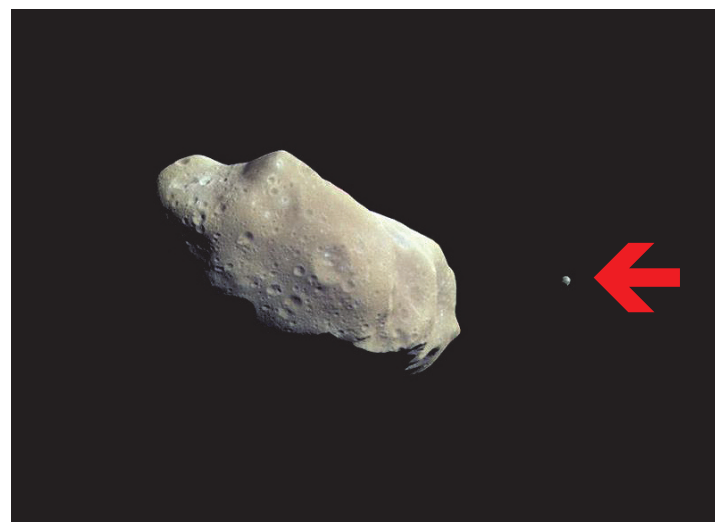
Asteroids have been hitting the Earth for millions of years. However, due to the friction with Earth's atmosphere most of the asteroids get burnt up. The asteroids that enter the Earth's atmosphere are called meteors, while the ones that get burnt and appear as shooting stars are called meteorites. The largest crater caused by an asteroid hit is the Chicxulub Crater in Mexico that is approximately 111 miles in diameter. The largest evidence of an asteroid hit is in the Vredefort Crater in South Africa that is approximately 186 miles in diameter. It is believed by many scientists and researchers that an asteroid impact was the cause behind the extinction of the dinosaurs around 65 million years ago.

Did you know that asteroids have moons? The reason as to why an asteroid is often confused with a planet is because like planets, they too have their own moons. In 1993, a spacecraft



discovered that the asteroid 243 Ida has its own moon!

The asteroids which are situated close to earth are known as near-earth asteroids. There are three types of near-earth asteroids, termed as the Amors, the Apollos and the Atens.



243 Ida and its moon Dactyl. Dactyl is the first satellite of an asteroid to be discovered