

Figure 1.5: Asteroid

surface. These cast shadows on the moon's surface. Look at the full moon and observe these shadows.

Asteroids

Apart from the stars, planets and satellites, there are numerous tiny bodies which also move around the sun. These bodies are called *asteroids*. They are found between the orbits of Mars and Jupiter (Figure 1.2). Scientists are of the view that asteroids are parts of a planet which exploded many years back.

Meteoroids

The small pieces of rocks which move around the sun are called **meteoroids**. Sometimes these meteoroids come near the earth and tend to drop upon it. During this process due to friction with the air they get heated up and burn. It causes a flash of light. Sometimes, a meteor without being completely burnt, falls on the earth and creates a hollow.

Do you see a whitish broad band, like a white glowing path across the sky on a clear starry night? It is a cluster of millions of stars. This band is the *Milky Way* galaxy (Figure 1.6). Our solar system is a part of this galaxy. In ancient India, it was imagined to be a river of light flowing in the sky. Thus, it was named *Akash Ganga*. A **galaxy** is a huge system of billions of

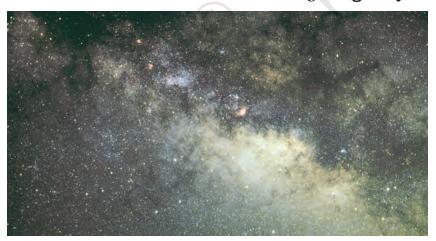


Figure 1.6: Milky Way

stars, and clouds of dust and gases. There are millions of such galaxies that make the **Universe**. It is difficult to imagine how big the universe is. Scientists are still trying to find out more and more about it. We are not certain about its size but we know that all of us – you and I belong to this universe.