

## Cometsandasteroids



## Comets

Comets are remnants from the early days of the solar system. They are found in the cold outer reaches of the solar system, behind the planet Neptune. There, millions of comets rotate their orbits. The diameter of a comet is several kilometres and they consist mainly of frozen water and carbon dioxide. It can happen that a comet deviates from its orbit and approaches the sun. Then the ice heats up and starts to evaporate. This dust and gas creates the coma, which creates the comet's tail.



## **Asteroids**

Asteroids are loose, coherent piles of debris that move in orbits around the sun. They can range in size from a few metres to 1,000 km. However, their own gravitational pull is not enough for them to become a planet. Most of these formations are found in the asteroid belt between Mars and Jupiter. Like comets, they date back to the formation of the solar system.



Meteorid

Meteoroids, meteors and meteorites – what is the difference?

We generally call **meteoroids** all celestial objects that are smaller than 25 metres.





Atmospheric light phenomena - e.g. when meteors, comets or asteroids enter the Earth's atmosphere - are called **meteors**. At an approximate height of 100 km, these bodies heat up when they enter the Earth's atmosphere and light up. We can then see them as bright trails in the night sky. Meteors are also known as shooting stars or fireballs.



Meteorit

Sometimes these chunks do not burn up completely and reach the earth. Then we call them **meteorites**.











