

# Meteor, Asteroid, Comet

## METEOR TERMINOLOGY

AMERICAN METEOR SOCIETY - [WWW.AMSMETEORS.ORG](http://WWW.AMSMETEORS.ORG)



**ASTEROID**  
A large rocky body in space  
larger than 10 meters

**COMET**  
A small body made of ice and dust that leaves a tail of gas and ice as it travels near the sun. Comet trails cause meteor showers when the Earth passes through them



**METEOROID**  
A small rocky body in space  
in size from microns to 10 meters

**METEOR SHOWERS**  
An event that occurs during  
the same time each year in  
which a number of meteors  
radiate from the same  
point in the night sky

**METEOR**  
The light emitted from a  
meteoroid as it enters  
the atmosphere

**FIREBALL**  
A meteor brighter  
than the planet venus

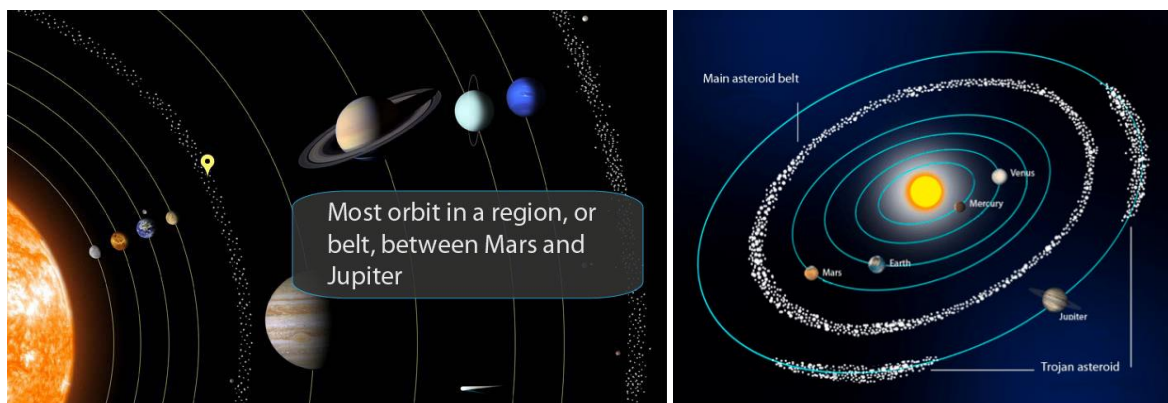
**BOLIDE**  
A large meteor that  
explodes in the atmosphere

**METEORITE**  
A fragment of a meteoroid or an  
asteroid that survives passage through  
the atmosphere and hits the ground



Types	Characteristics
<b>Meteoroid</b>	<ol style="list-style-type: none"> <li>1. Made of rocks/sands/metal</li> <li>2. Size is small as a grain</li> <li>3. Temperature at 0 Celsius</li> <li>4. Move freely in space and influence by planet's gravity and moon's gravity</li> <li>5. Travels at <math>42\text{kms}^{-1}</math></li> </ol>
<b>Asteroid</b>	<ol style="list-style-type: none"> <li>1. Size of 1 m to 1000km</li> <li>2. Made of metal and rocks</li> <li>3. Temperature approximately -73 Celsius</li> <li>4. Large asteroid is known as planetoid</li> <li>5. Made of metal and rocks</li> <li>6. Classify asteroid into 3 groups (Type C- Carbon, Type S – Silicate, Type M – metal and nickel)</li> </ol>
<b>Comet</b>	<ol style="list-style-type: none"> <li>1. Comet can reach the size of 400 thousands kilometres</li> <li>2. Made of gas and liquid with dust and rocks</li> <li>3. Travels around the Sun</li> <li>4. Speed from <math>10\text{kmh}^{-1}</math> to <math>70\text{kmh}^{-1}</math></li> </ol>

## Asteroid Position

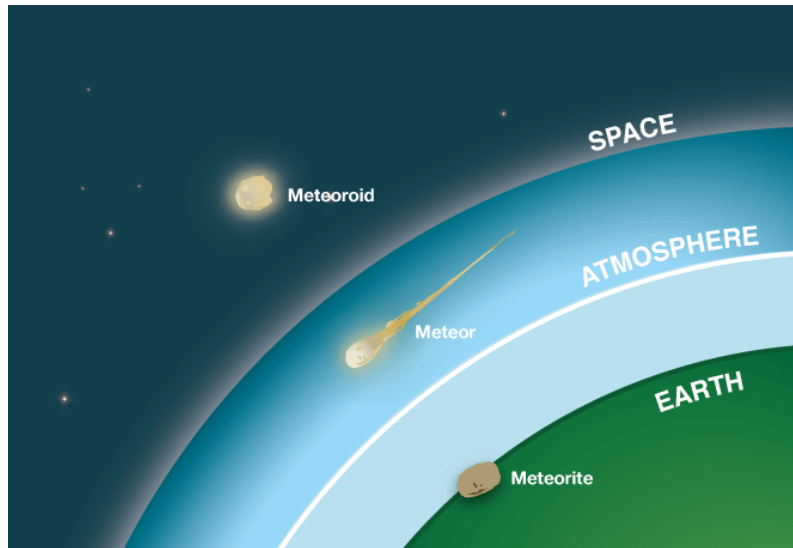


### Asteroid Belt

1. Main Asteroid Belt – Between Mars and Jupiter
2. Trojan Asteroid Belt – Follow the Jupiter's orbit
3. Kuiper Asteroid Belt- After our solar system

## Meteoroid

1. Travels freely without a proper orbit.
2. Normally Meteoroid is attracted to the gravitational pull of planets



Meteoroid – Floats freely in space

Meteor – When it enters our atmosphere and starts to burn

Meteorite – When meteor did not finish burning and falls to Earth and create a crater. Oh this is probably the theory how the Dinosaur was eradicated millions of years ago

## Comet

1. Travels around the Sun with its own orbit
2. Most of the Comet came from the Kuiper belt
3. The tail of the comet will always face away from the Sun

