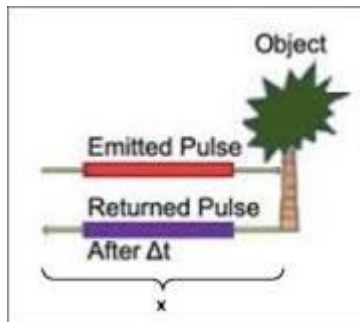


What are the advantages of cruise missiles over ballistic missiles?

Cruise missiles are self-guided and use multiple methods to accurately deliver their payload, including terrain mapping, global positioning systems (GPS) and inertial guidance, which uses motion sensors and gyroscopes to keep the missile on a pre-programmed flight path.

What is meant by time of flight?



Time of flight is the measurement of time taken to travel a distance in order to determine distance, speed, or properties of the medium. Time for a signal to reflect off an object is often measured to determine the object's location.

### **What are the different types of Indian Missiles?**

Ans. Given below are the different types of Indian Missiles:

- Surface-To-Air Missiles – SAM
- Air-to-air missiles AAM
- Surface-to-surface missiles
- Missile Defence (BMD)/Interceptor Missiles
- Cruise Missiles
- Submarine Launched Ballistic Missiles
- Anti-Tank Missiles

What happens during reentry?

During re-entry, the shuttle is going so fast, it compresses the air ahead of it. The compression of the air layers near the leading edges of the shuttle is quick, causing the temperature of the air to rise to as high as 3000 degrees Fahrenheit!

Differentiate between orbit and trajectory.

While a trajectory is a path traced by a moving body, an orbit is a trajectory that is periodically repeated. While the path followed by the motion of an artificial satellite around Earth is an orbit, the path followed by a launch vehicle is called the launch trajectory.