

SPEED

DEFINITION: distance
traveled over a certain
period of time

UNITS: miles per hour (mph),
kilometers per hour (kph),
meters per second (mps)

We often note when something is moving faster or slower than something else. Speed is used interchangeably with velocity, but they are not the same. Speed measures distance over time, and velocity does this and adds direction. Therefore, two objects may have the same speeds but different velocities if they are moving in different directions.

COSMIC EXAMPLE

Cassiopeia A shockwave moving into interstellar medium: 10 million mph (16 million kph)

The supernova remnant Cassiopeia A has a shockwave from the explosion that destroyed the star moving into space at 10 million mph (16 million kph).



**SPEED
LIMIT
60**

EVERYDAY EXPERIENCE

Typical US speed
limit on highways:
60 mph (96 kph)

OLYMPIC EXAMPLE

Speed Skating: Skaters can move over ten times faster on ice than the average human walks. 35 mph (56 kph)

