## Speed of Light

In outer space, where there are no air particles, the speed of light is $299,792,458$ meters per second. That is approximately 186,000 miles per second!

## DID YOU KNOW

The starlight we see in the night sky is actually tens of hundreds of years old! Although their light travels very fast across the vacuum of space, the stars are so far away that their light takes many years to reach Earth. On Earth, light travels much faster than sound.


In fact, the sun's light takes 8 minutes to reach us on Earth. In theory, if the sun were to go out, we wouldn't know until 8 minutes after it happened.

On average, the length of time it takes light to go from:


Moon to Earth:
1.3 seconds


Earth to Sun:
8.33 minutes

## THNK ABOUT IT:

Why do we count the seconds in between the lighting flash and the sound of the thunder?


