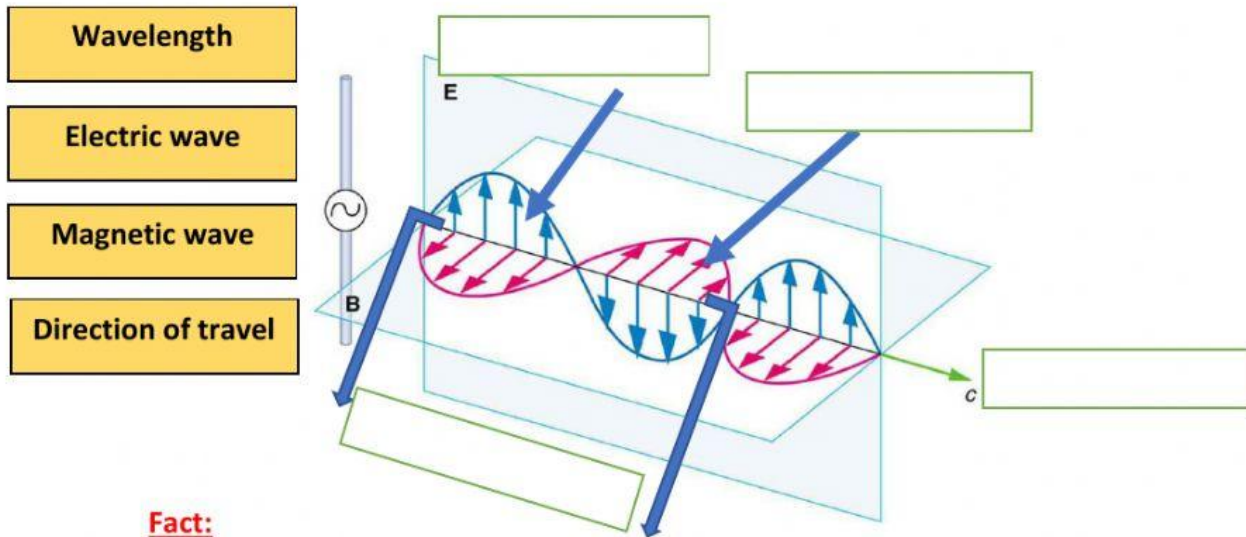


# Light

## Lesson 1: Where do Light waves come from?

- Light from the sun travels to earth:
  1. 150 million Km.
  2.  $8\frac{1}{3}$  minutes.
- Light is made of vibrating electrical and magnetic energy
- Energy travel as wave with frequency and amplitude called electromagnetic wave
- Light wave vibrates perpendicular to the direction of their motion.



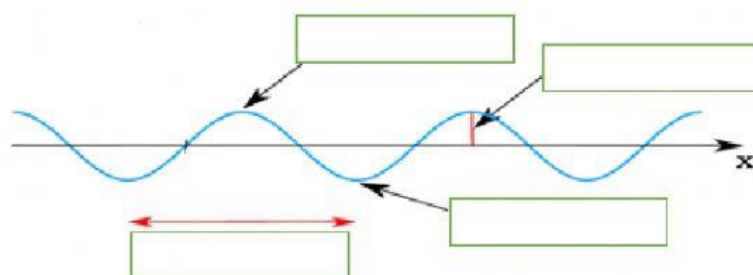
### Fact:

1. Light travel with or without medium.
2. Light travel in vacuum very fast at 300,000 km/s.
3. Light travel in transparent medium (air, water, glass) slower. In glass travels at 197,000 km/s.

**Wavelength:** is the distance between one peak and next in a wave.

**Speed of Wave** = wavelength X frequency

### Wave parts: drag and drop



Wavelength

amplitude

peak

dip