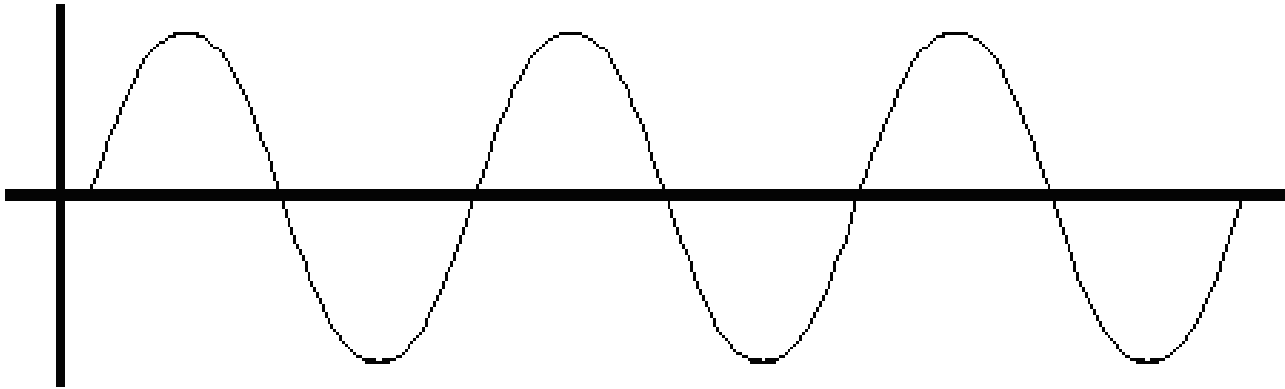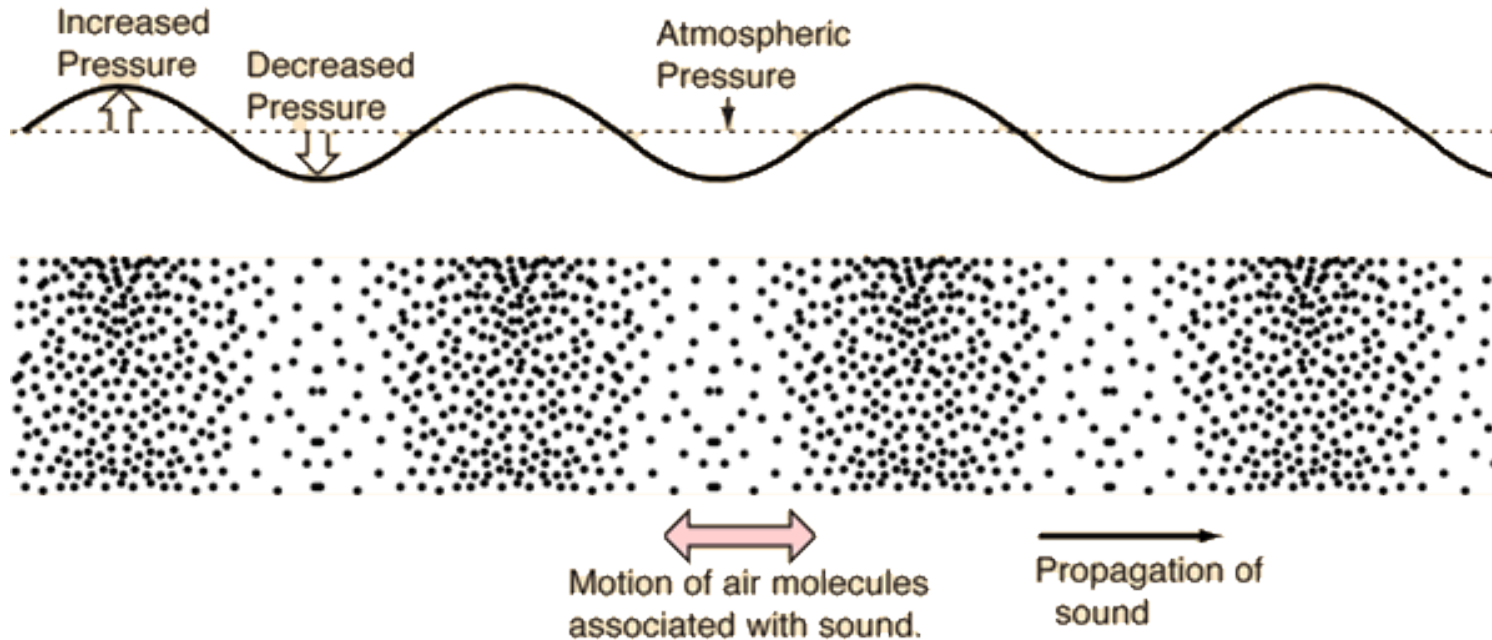# Wave Characteristics

Mr. Drouet

Objectives

- Define terms to describe periodic waves:
  - Amplitude
  - Wavelength
  - Frequency
- Determine whether points on consecutive waves are in phase.

Transverse Wave Characteristics

- Label the following:
- Crest
- Trough
- Amplitude
- Wavelength (λ)
- Period
- Frequency

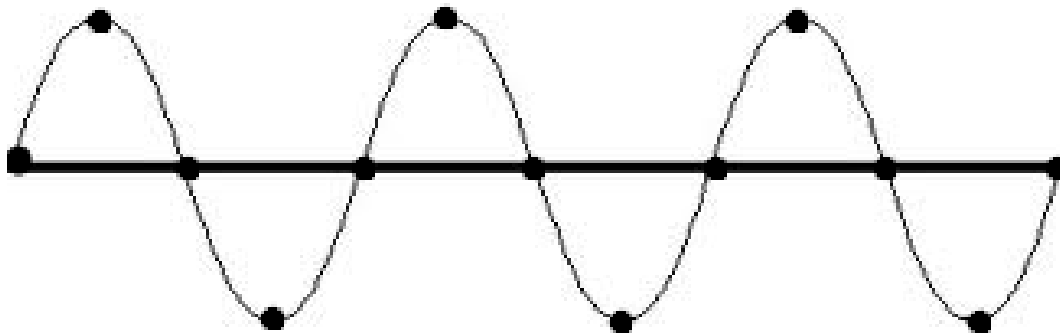# Longitudinal Wave Characteristics

Increased Pressure | Decreased Pressure | Atmospheric Pressure

Motion of air molecules associated with sound.

Propagation of sound

- Compression
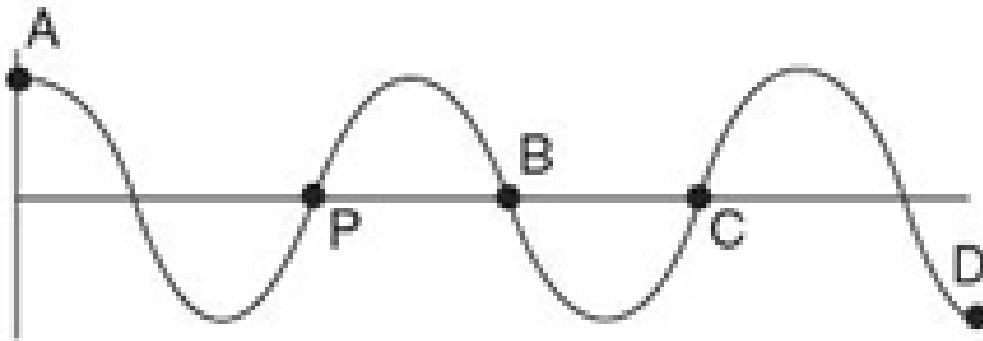- Rarefaction
- Amplitude
- Wavelength

Sample Question 1

- The diagram represents a transverse wave. The wavelength of the wave is equal to the distance between which points?
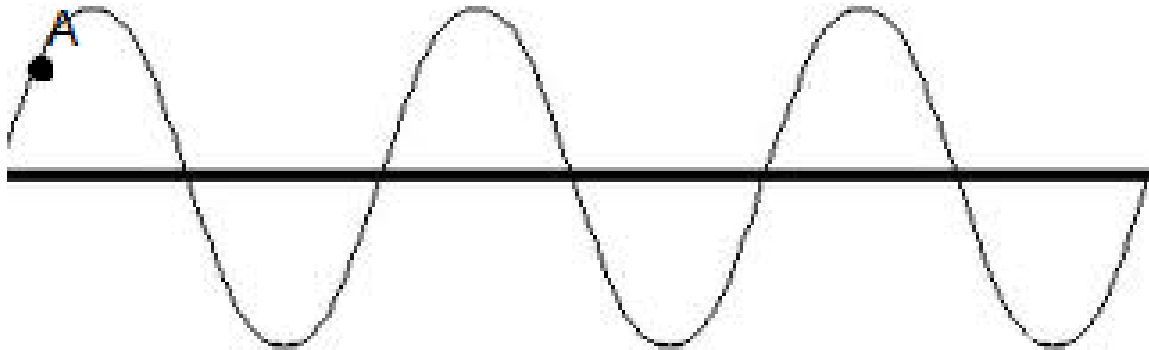
Sample Question 2

The diagram represents a periodic wave. Which point on the wave is in phase with point P?

Sample Question 3

- The diagram below represents a transverse wave moving on a uniform rope with point A labeled. On the diagram, mark an X at the point on the wave that is 180° out of phase with point A.
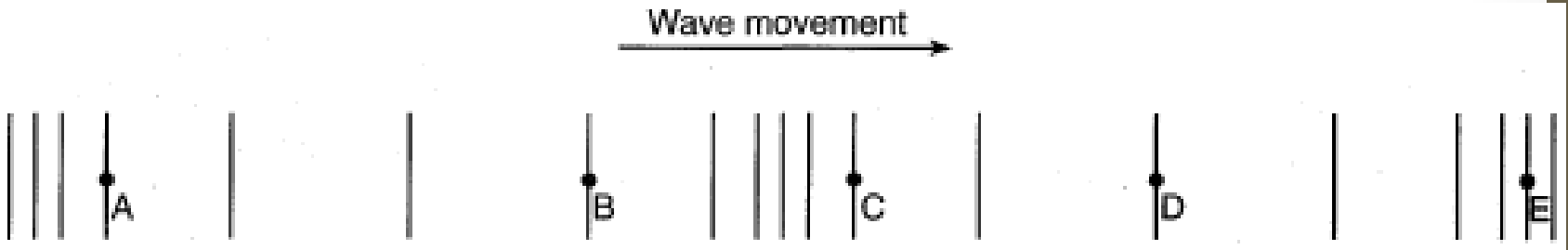
Sample Question 4

- A periodic wave is produced by a vibrating tuning fork. The amplitude of the wave would be greater if the tuning fork were

a) Struck more softly

b) Struck harder

c) Replaced by a lower frequency tuning fork

d) Replaced by a higher frequency tuning fork

Sample Question 5

- A longitudinal wave moves to the right through a uniform medium.

- A. Points A, B, C, D, and E represent the positions of particles of the medium. What is the direction of the motion of the particles at position C as the wave moves to the right?

- B. Between which two points on the wave could you measure a complete wavelength?