

#### **What Are Mechanical Waves?**



What causes mechanical waves?





## **Types of Mechanical Waves**



What are the three main types of mechanical waves?





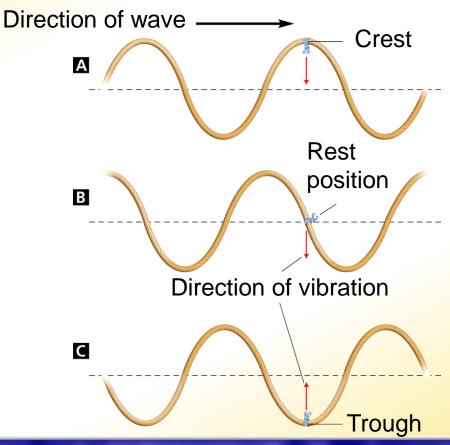


## **Types of Mechanical Waves**

A transverse wave causes-

**DOK Question:** 

Construct a word explanation of the below pictures.







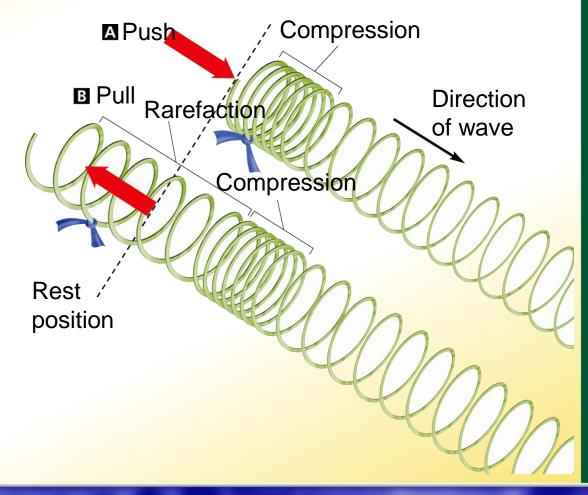


## **Types of Mechanical Waves**

- A. A compression-
- **B.** A rarefaction-

#### **DOK Question:**

Construct a word explanation of the below pictures.







## **Types of Mechanical Waves**

#### **Surface Waves**

A surface wave is-



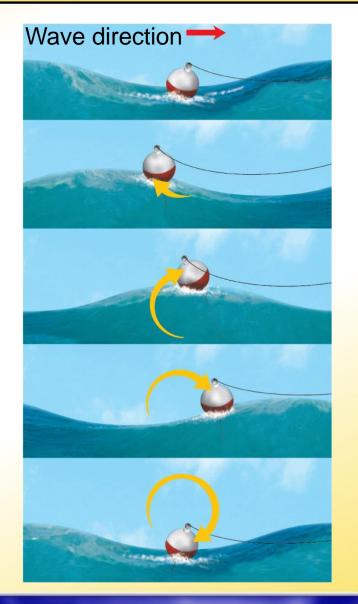


## **Types of Mechanical Waves**

As the ocean wave moves-

#### **DOK Question:**

Construct a word explanation of the below pictures.







## **Types of Mechanical Waves**

The bobber helps to visualize the motion of the medium.

- When a crest-
- The bobber also is-
- The two motions-





- A mechanical wave carries energy from one place to another through the
  - a. physical transfer of matter.
  - b. interaction of electromagnetic fields.
  - c. phase changes of a medium.
  - d. vibration of a medium.



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ANS: D





## **Assessment Questions**

- 2. In what type of wave is the vibration of the medium parallel to the direction in which the wave travels?
  - a. transverse wave
  - b. longitudinal wave
  - c. surface wave
  - d. rarefaction







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ANS: B





## **Assessment Questions**

- 3. An example of a transverse wave is a(n)
  - a. sound wave traveling through air.
  - b. ocean wave far from the shore.
  - c. ocean wave as it approaches the shore.
  - d. light wave traveling through space.





# **Assessment Questions**

- 3. An example of a transverse wave is a(n)
  - a. sound wave traveling through air.
  - b. ocean wave far from the shore.
  - c. ocean wave as it approaches the shore.
  - d. light wave traveling through space.

ANS: A





### **Assessment Questions**

 As a surface wave travels across water, molecules of water move in a circular pattern.

True False







 As a surface wave travels across water, molecules of water move in a circular pattern.

True False

ANS: T



