

**Warm-up questions - Waves**

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Questions: 9

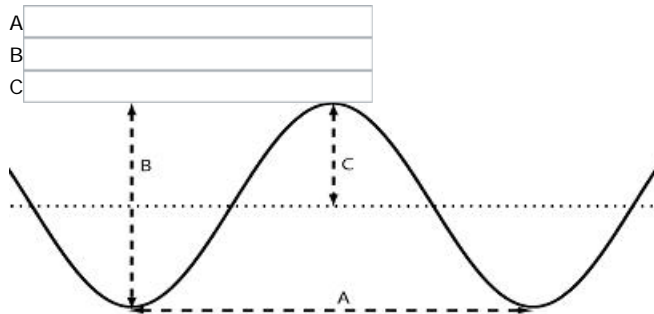
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Save All

Help

**1. Waves 1** (Points: 10)

Label the elements of the wave anatomy illustrated above:



Save Answer

**2. Waves 2** (Points: 10)

As surface waves travel across an ocean, they carry:

- 1. Matter
- 2. Energy
- 3. Both matter and energy
- 4. Neither energy or matter

Save Answer

**3. Waves 3** (Points: 10)

Although the period of a wave changes as waves approach the shore, the speed of the waves remains constant.

- True  False

Save Answer

**4. Waves 4** (Points: 10)

Current changes in sea level are attributed to:

- 1. the melting of glaciers
- 2. the warming, and subsequent expansion, of ocean water
- 3. the slow readjustment of land following the melt of the Laurentide ice sheet (10 000 years ago).
- 4. all of the above
- 5. none of the above; there is no evidence that sea level is changing.

Save Answer

**5. Waves 5** (Points: 10)

A Tsunami can be triggered by:

- 1. an earthquake
- 2. a volcanic eruption
- 3. underwater landslides
- 4. all of the above
- 5. none of the above

Save Answer

**6. Waves 6** (Points: 10)

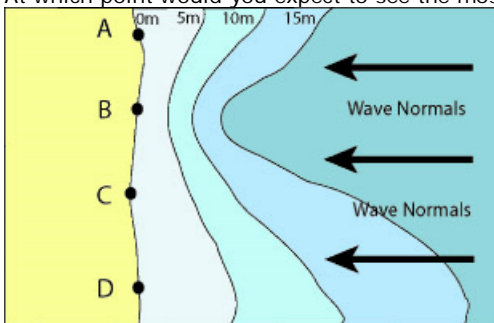
Which of the following waves has the most energy?

- 1. a wavelength of 10m, period of 10s, height of 2m.
- 2. wavelength of 20m, period of 50s, and height of 1m.
- 3. wavelength of 30m, period of 50s, and height of 2m
- 4. wavelength of 10m, period of 50s, and height of 3m
- 5. wavelength of 30m, period of 1 minute, and height of 2m.

Save Answer

**7. Waves 7** (Points: 10)

The attached figure shows a beach and ocean bathymetry (contours showing ocean depth) just offshore. Depth contours are labeled. At which point would you expect to see the most plunging breakers?

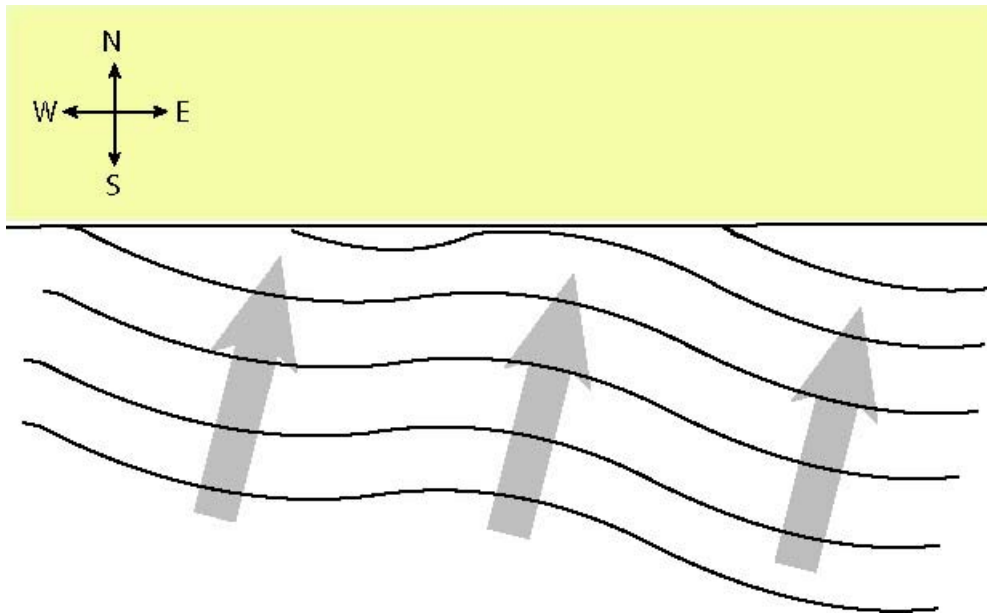


- 1. A
- 2. B
- 3. C
- 4. D
- 5. E

Save Answer

**8. Waves 8** (Points: 10)

The attached figure shows a beach and approaching waves (wave normals are grey arrows). Which in which direction will *littoral drift* occur?



- 1. East to West
- 2. West to East
- 3. North to South
- 4. South to North
- 5. Southwest to Northeast

Save Answer

**9. Waves 9** (Points: 20)

The Indian Ocean tsunami of 2004 was the deadliest in history. Triggered by an earthquake near Sumatra, the resulting wave impacted the entire ocean basin. Connect the following countries with the amount of time between the earthquake and the arrival of the tsunami wave.

**Column preview**

Somalia	7 hours
Eastern India	1 hour
The Maldives	4 hours
Myanmar	2 hours

**Matching pairs**

Somalia	- Select choice -
Eastern India	- Select choice -
The Maldives	- Select choice -
Myanmar	- Select choice -

Save Answer

**Finish** **Save All**

**Help**