

1. Which is not a condition suitable for the formation of a tidal bore?

Cool example of one here, on the River

Severn! <https://www.youtube.com/watch?v=IKA39LQOIck>

Select one:

- a. Low lying river mouth
- b. Large Tidal Range
- c. Neap Tide
- d. Funnel shaped estuary

2. Which is the second most common cause of storm related death in the U.S.?

Select one:

- a. Hail
- b. Hurricane
- c. Tornado
- d. Flooding
- e. Lightning

3. Which statement best describes the change in sea level during the past 20,000 years?

Select one:

- a. Sea level rose slowly at first but is now rising more rapidly.
- b. Sea level has risen at a consistent rate of 11 mm/yr.
- c. Sea level was then about 120 meters lower than it is now.
- d. During the past 8,000 years, sea level has risen 60 meters.

4. Which of the following is a process that only leads to the net loss of sand from beaches (rather than replenishment or loss followed by replenishment)?

Select one:

- a. Rivers and streams flowing to the coast
- b. Erosion of coastal cliffs
- c. Longshore currents
- d. Rip currents

5. A smooth, gently sloping surface on the California coast positioned high above the beach but still covered with seashells and beach sand is called:

This feature is pictured below. (The golf courses were built thousands of years after it formed.)





Select one:

- a. beach face
- b. flood plain
- c. wave-cut platform
- d. marine terrace
- e. landslide toe

6. Which geologic feature is not related to sinkholes (i.e., can form due to similar processes)?

Select one:

- a. karst
- b. cave
- c. lake
- d. geyser

7. Why does the state of Florida have limestone as bedrock (a rock easily dissolved by water)?

Select one:

- a. sea level was higher during the last glacial minimum
- b. sea level was higher during the last glacial maxima
- c. sea level was lower during the last glacial minimum
- d. sea level was lower during the last glacial maxima

8. Which of the following is not a sign of a sinkhole?

Select one:

- a. cracking pavement and walls
- b. surface water flow that vanishes into the ground
- c. doors that shut tightly
- d. damage to home foundations

9. Arrange the following 6 steps necessary for a geyser eruption in correct order, from beginning to end:

https://www.youtube.com/watch?v=X4zA_YPCyHs

And, yikes! Beware...

https://www.youtube.com/watch?v=AygmNZ_FVtU

Continued heating from below warms the entire fluid until it finally boils

Answer 1

Choose...123456

Cooler shallow groundwater helps raise the water level in the conduit over time

Answer 2

Choose...123456

A subsurface conduit fills with superheated water that rises from passageways in the rock (fractures) below the conduit

Answer 3

Choose...123456

Siliceous sinter (a hydrothermal mineral) is deposited where the geyser reaches the ground surface and constricts the opening

Answer 4

Choose...123456

The cooler water and overall weight of the fluid inhibits boiling, thus pressure builds in the system

Answer 5

Choose...123456

Boiling reduces pressure for the system, and a phase change turns much of the water into a violent eruption of steam

Answer 6

Choose...123456

10. As you now know, the east coast of North America is a passive tectonic margin. Choose the best explanation for why a wave-cut terrace could feasibly be found along this coastline:

Select one:

- a. The east coast is submerging due to repeated earthquakes
- b. The east coast is emerging due to repeated earthquakes
- c. waves are actively eroding the edge of the continent
- d. A long time ago, sea level must have been lower than it is today
- e. A long time ago, sea level must have been higher than it is today