

1. What is the source of wave energy? How are waves formed in the ocean?
2. True or False: waves move through the water with a linear transport motion, and no sense of rotation.
3. Define wave base. How does wave base related to wavelength of a wave?
4. True or False: as wave base approaches the shoreline of a coast, the base of the wave slows in velocity while the top of the wave speeds up, resulting in a wave breaker.
5. What is a tsunami and what causes it?
6. What is the maximum speed of a tsunami?
7. True or False: earthquakes in Alaska can create tsunamis that cause destruction in Hawaii, 1000's of mile away.
8. Define the term "wave refraction"
9. True or False: waves converge together in open bay areas.
10. What is the source of beach sand along a shoreline?
11. True or False: all beach sediment is transported offshore by waves.
12. Define the term "longshore current", what causes it?
13. True or False: summer beaches are associated with low energy waves and gentle beach slopes, while in winter high energy waves erode beach sand offshore.
14. True or False: river dams result in increased sediment delivery to coastal areas and deltas.
15. True or False: humans are evil because they dam rivers.
16. True or False: sea walls reduce erosion, but also starve beaches for sediment.
17. Briefly list and discuss the issues associated with sediment supply, beach erosion and erosion prevention