Waves, Waves, Waves! Quiz

True or False
1. The wavelength (of a sinusoidal wave) is the distance from one crest to the next crest.

2. In a standing wave, the nodes move up and down.

3. P-waves (primary) and S-waves (secondary) are examples of surface waves.

4. P-waves can travel in any type of material (solids, liquids, and gases).

Multiple Choice
5. Two types of seismic waves are ____________________________ waves.
   a. standing and sinusoidal  
   b. light and sound  
   c. body and surface  
   d. pressure and primary

6. Engineers use a _____________ to test the response of structures to verify their seismic performance.
   a. conductor  
   b. spectrograph  
   c. centrifuge  
   d. shake table

7. A wave with a high frequency will have a _____________ wavelength.
   a. long  
   b. short

8. At a location 10 km from the epicenter of an earthquake, the first type of seismic wave to arrive will be a ________________.
   a. P-wave  
   b. S-wave  
   c. Rayleigh wave  
   d. Love wave