1. Seismic waves that travel through the interior of the Earth and propagate by shear (movement perpendicular to propagation) are:
   a) P-waves   b) body-waves   c) tsunamis   d) S-waves   e) surface waves

2. The distance from a seismic recording station (seismograph) to an earthquake can generally be determined from:
   a) the time difference between body and surface wave arrival
   b) the time difference between P-wave and S-wave arrival
   c) the exact time of the surface wave arrival
   d) the direction of first movement of the S-wave arrival
   e) the magnitude of the P-waves.

3. The deepest earthquakes occur at a depth of about:
   a) 50km   b) 100km   c) 400km   d) 670km   e) 2900km.

4. Most earthquakes occur:
   a) at depths greater than 400km   b) at plate boundaries   c) at mid-ocean ridges
   d) in the central regions of plates   e) in the lower mantle.

5. The geographic point on the Earth's surface directly above the location of movement during an earthquake is known as the:
   a) transform   b) focus   c) joint   d) fault   e) epicenter.

6. The Earth's mantle is composed of:
   a) solid silicate   b) molten silicate   c) molten iron metal   d) solid iron metal   e) solid granite.

7. The Earth's magnetic field is caused by:
   a) permanent magnetization of magnetic minerals in the crust
   b) permanent magnetization of the solid iron core
   c) electrical and convection currents in the molten outer core
   d) the solar wind
   e) electrical currents in the mantle.

8. Plate motion is generally believed to be driven by:
   a) the solar wind   b) tidal drag of the moon   c) thermal convection in the solid mantle
   d) thermal convection in the outer core   e) thermal convection in the crust.

9. Ocean-ocean convergent boundaries of tectonic plates are commonly marked by:
   a) abyssal plains   b) deep trenches   c) submarine canyons   d) lines of sea-mounts
   e) central valleys of mid-ocean ridges

10. When oceanic crust collides with continental crust:
    a) the continental crust is subducted   b) subduction stops   c) a ridge forms
     d) the ocean crust is subducted   e) a rift will break up the continent.

11-16. Choose the example on the right that best matches the feature on the left:
11. Ocean-ocean convergent boundary   c) a) Coast of Oregon and Washington
12. Ocean-continent convergent boundary   a) b) East Pacific Rise
13. Continent-continent convergent boundary   e) c) Fiji-Tonga Trench
14. Ocean-ocean divergent boundary   b) d) San Andreas Fault
15. Transform boundary   d) e) The Alps
16. The continental crust is:
   a) thick (>30km), dense (r > 3.0), and old (>200 Myrs)
   b) thick (>30km), light (r << 3.0), and old (>200 Myrs)
   c) thin (<30km), light (r << 3.0), and young (<200 Myrs)
   d) thin (<<30km), dense (r > 3.0), and young (<<200 Myrs)
   e) thick (<<30km), light (r << 3.0), and young (<<200 Myrs).

17. The Canadian Shield is an example of a(n):
   a) orogenic belt  b) continent-continent collision zone  c) craton  
   d) accreted terrane  e) sedimentary basin.

18. The total amount of a mineral commodity (energy or mineral) that can be exploited, including both
discovered and undiscovered deposits, is known as the commodity
   a) resource  b) reserve  c) total deposit  d) repository  e) cumulate

19. Gases in the atmosphere that absorb infrared radiation but pass visible light are known as:
   a) inert gases  b) noble gases  c) greenhouse gases  d) diatomic gases  e) exotic gases

True or False:

30. The amount of CO₂ in the atmosphere has increased by about 15% in the past 40 years.
31. Carbon dioxide is a colorless, odorless, tasteless, poisonous gas.
32. Natural uranium contains less than one percent of the fissionable isotope, $^{235}$U.
33. Nuclear power reactors produce large amounts of greenhouse gases.
34. Most of the spent fuel from U.S. nuclear reactors is safely stored underground in Nevada.