1) All of the following phrases below describe science:
   a) Science is the ability to formulate ideas.
   b) Science is the study of nature using observation and deductive reasoning.
   c) Science is the method used to test an idea.
   d) Science will assume answers based on preconceived ideas.

2) Science is:
   a) not equal to truth
   b) a method to search for truth
   c) doubting new theories
   d) all of the above.

3) The most important part of the scientific method is:
   a) creating a theory
   b) making observations
   c) starting controversy
   d) creating a law

4) Which part of the earth is made up of mainly iron?
   a) mantle
   b) crust
   c) core
   d) none of these

5) In what order are the layers of the earth (from the middle out):
   a) Mantle, inner core, Crust, outer core
   b) inner core, outer core, Mantle, Crust
   c) Crust, inner core, outer core, mantle
   d) inner core, Mantle, outer core, Crust

6) The distance from the center of the earth to the crust is:
   a) 400km
   b) 670km
   c) 6370km
   d) 3000km

7) Which of the following is not one of the four main components of Earth?
   a) Fe
   b) C
   c) O
   d) Si

8) Which of the following is not one of the four main components of Earth?
   A) iron
   B) Silicon
   C) Oxygen
   D) Nitrogen

9) Which of the following does not describe the earth's core?
   a) The outer core is liquid.
   b) The core is approximately 1/4 the radius of the earth.
   c) The core is made of Fe.
   d) The core is approximately 1/8 the volume of the earth.
   e) All of the above describe the earth's core.

10) Scientists have calculated Earth to be ______ billion years old by meteorites.
    a) 9
    b) 4.5
    c) 7
    d) 3.5
    e) 2

11) The theory of plate tectonics was originally proposed by:
    A) a Geologist
    B) a Meteorologist
    C) an Astronomer
    D) a Seismologist

12) Which of these is not evidence for Plate Tectonics?
    a) The direction glaciers are moving
    b) the location of glaciers
    c) how the continents fit together
    d) global warming

13) If you have a mountain that has been reduced in height by 2 km, how many km of rock must have been eroded away (or how much has the thickness of that piece of crust been reduced)?
    a.) 2 km
    b.) 8 km
    c.) 16 km
    d.) 24 km
    e.) none of the above

14) While mapping the ocean floor, scientists found:
    a) fossils
    b) a buried submarine
    c) mountain chains parallel to the shape of the continents
    d) none of the above

15) There is evidence that glaciers used to exist in what is now the tropics
    A) True
    B) False

16) If you heat rock above curie temperature, it loses its magnetic field.
    a) True
    b) False

17) Magnetic mapping can measure the rate of seafloor spreading.
    a) True
    b) False

18) Which of the following is NOT evidence for Plate Tectonics?
    a) mountains
    b) continuity of mountains
    c) glacial evidence
    d) arriere isostacy
    e) the fit of the continents

19) Earthquakes and Volcanoes are mostly located at:
    a) along tectonic plate margins
    b) under the Earth's crust
    c) on the ocean floor

20) What finally brought about the acceptance of plate tectonics in the scientific community?
a) The continuity of mountain ranges.
b) Same rock units and similar fossils found in distant continents.
c) The magnetic mapping of the ocean floor.
d) Glacier evidence in the tropics.
e) The "fit" of the continents.

21) Sediment thickness is:
   a) thickest near the ridge and thinnest away from the ridge
   b) evenly thick everywhere in the oceans
   c) thinnest near the ridge and thickest away from the ridge
   d) has no pattern

22) The oldest ocean crust is:
   a) 200 million years old
   b) 50 million years old
   c) 350 million years old
   d) 500 million years old

23) The spreading centers in the middle of the ocean where new crust forms is called what?
   a) seafloor strips
   b) platelet drifts
   c) GPS
   d) ridge