



## Unit 5 - Planet Earth

Evaluation

Student Name \_\_\_\_\_

Class \_\_\_\_\_

35

Answer all of the questions on the Scantron ( Please **Do Not** make any marks in this test booklet )

1. Alfred Wegner's **Theory of Continental Drift** determined that the continents at one time all fit together to form one large super continent, called Pangaea.. His evidence was their interlocking shapes and ...
  - A. discovery of land bridges connecting the continents
  - B. different trees on different continents
  - C. lower ocean level with islands close together
  - D. similar fossil remains found on different continents
  
2. Daughter material and parent material refer to the *half-life* parts remaining, in the process of **radiometric dating**, to calculate the **absolute age of rocks**. If the daughter material is 75% and the parent material is 25%, the rock has undergone ...
  - A. 1 half-life
  - B. 2 half-lives
  - C. 3 half-lives
  - D. 4 half-lives
  
3. Minerals can be identified by using their **physical properties**. The property that identifies the way the mineral breaks is called its ...
  - A. cleavage
  - B. streak
  - C. colour
  - D. lustre
  
4. While Allison and Rachel were investigating the banks of the river, they discovered a large section that had been eroded away. They were actually observing **stratification**, which identifies ...
  - A. fossils embedded in the rock
  - B. visible layers of different soil types
  - C. soil minerals that have leached
  - D. petroleum traces in the soil
  
5. A fertile soil is one that can supply nutrients for plant growth. To identify the **different layers** in a particular type of soil, a geologist would look at the ...
  - A. organic components
  - B. mineral content
  - C. humus content
  - D. soil profile
  
6. **Weathering** can cause catastrophic changes all of a sudden. When water gets into cracks in rock and expands, the rock can break away. The *Frank Slide*, in the Crowsnest Pass, is an example of how this can happen. This form of weathering is called ...
  - A. winter weathering
  - B. frost wedging
  - C. gravitational thrust
  - D. solidification
  
7. On a field trip to the foothills, the students noticed a tree's roots growing through rock. This type of **weathering** is classified as ...
  - A. physical
  - B. biological
  - C. mechanical
  - D. chemical



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8. **Kidney stones** are examples of ....
- A. mineral deficiency
  - B. vitamin deficiency
  - C. lack of calcium in the bones
  - D. growing crystals in your body
9. When scientists discovered the ridges along the ocean floor, they also found lava coming out of the cracks. This **type of lava** is called ...
- A. pillow lava
  - B. ocean lava
  - C. saltwater lava
  - D. sea-floor lava
10. The **San Diego Zoo** is able to get early warnings of possible earthquakes because ...
- A. they have the best seismic equipment
  - B. animals can sense the start of an earthquake
  - C. scientists believe this area will be hit first
  - D. they are directly over the most active fault
11. Wegener proved that glaciers once existed in the southern hemisphere. He used this **glacial feature** to provide his evidence ...
- A. moraines found
  - B. erratics found
  - C. bedrock abrasions
  - D. ice caves
12. The pressure under the earth's crust can cause **tectonic plates** to move in different ways. A **fault** that causes these plates to move sideways is called a ...
- A. transform fault
  - B. reverse fault
  - C. normal fault
  - D. strike-slip fault
13. There are a number of **volcanoes** that border the outer edges of the pacific ocean and are known as ...
- A. Hell's Kitchen
  - B. Ring of Fire
  - C. Rapid Change Zone
  - D. Circle of Death
14. An earthquake or an erupting sea-floor volcano can cause a '**Tsunami**'. In Japanese it means ...
- A. lava flow
  - B. harbour wave
  - C. ash plume
  - D. shaking ground
15. When sedimentary rock is squeezed from the sides and is too brittle to fold, it can break and form into slabs that **move up and over** each other. This is an example of ...
- A. a diverging fault
  - B. folded layering
  - C. a sliding fault
  - D. a thrust fault
16. There are many different aspects and actions that geologists can test to accurately determine the age of a mountain. This aspect might be the best way for an **untrained** geologist to determine the age of a mountain.
- A. syncline
  - B. anticline
  - C. kinds of rocks
  - D. shape of peak
17. **Trilobites** are one of the most famous groups of fossils. They are now extinct. They lived in ...
- A. warm ocean water
  - B. fresh water lakes
  - C. Gobi Desert
  - D. Antarctic Tundra



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18. When an organism is buried under many layers of sediment, pressure and heat build up, leaving a thin film of carbon residue forming the outline of the organism on the rock surface. This **residue** is called ...
- A. carbonaceous film
  - B. carbon-dated remains
  - C. petrified residue
  - D. trace fossil residue
19. **Metamorphic** rock is formed as a result of ...
- A. rapidly decreasing temperatures
  - B. extreme temperature fluctuations
  - C. lower pressure and moisture
  - D. high temperature and pressure
20. **Cubic, tetragonal, hexagonal, orthorhombic, monoclinic and triclinic** describe systems of ...
- A. mineral hardness
  - B. synthetic models
  - C. cleavage types
  - D. crystal structure
21. **Synthetic crystals** are manufactured for such things as electronic circuits, credit cards, machines, medicines and communication devices, because natural crystals ...
- A. are too expensive
  - B. are rare
  - C. are too soft
  - D. have impurities
22. Advances in technology, like the magnetometer, led scientists to develop the **theory of sea-floor spreading** because of the....
- A. behavioural patterns of whales
  - B. radar and sonar waves
  - C. magnetic variations at the surface
  - D. magnet reversals on the ocean floor
23. Seismologists use a special machine that measures earthquakes. The fastest of all three types of **seismic waves** are the p waves. They are called ...
- A. principal waves
  - B. pretty waves
  - C. pin waves
  - D. primary waves
24. An earthquake in Japan registers on a **seismograph** in Winnipeg, Manitoba. This occurs because ...
- A. seismographs anywhere will record all earthquakes
  - B. the earth's crust is solid, allowing the surface waves to be recorded anywhere
  - C. the inner core of the earth is liquid
  - D. the outer core of the earth is liquid
25. The **source of an earthquake** can be determined by recording the interval time between the p waves and s waves. Where the earthquake starts from is called the ...
- A. foci
  - B. focus
  - C. shadow zone
  - D. epicenter
26. **Vesuvius** has been a dormant volcano since 1944, but is due for a major eruption. An added danger, besides the major build-up of magma beneath the peak is the discovery of a rock ...
- A. bulge
  - B. plume
  - C. vent
  - D. plug



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27. When **older rock ends up on top of younger rock** the type of mountains formed are called ...  
A. thrust mountains  
B. fault mountains  
C. block mountains  
D. fault block mountains
28. Mountain formations that undergo **more than one process** are called ...  
A. transform  
B. compound  
C. multi-faulted  
D. complex
29. When older rock ends up on top of younger rock the **type of mountains** formed are called ...  
A. thrust mountains  
B. fault mountains  
C. block mountains  
D. fault block mountains
30. The **preserved remains** (even the soft parts) of a plant or animal can most likely be found in ...  
A. Burgess Shale  
B. sediment  
C. gemstones  
D. amber
31. An important discovery in Glacier National Park, Montana, provided evidence that **dinosaurs were related to birds**. The 14 year-old boy found a ...  
A. Velociraptor  
B. Trilobite  
C. Albertosaurus  
D. Bambiraptor
32. When an organism is buried under many layers of sediment, pressure and heat build up, leaving a thin film of **carbon residue** forming the outline of the organism on the rock surface. This residue is called ...  
A. petrified residue  
B. trace fossil residue  
C. carbon-dated remains  
D. carbonaceous film
33. When an organism falls into soft sediment, its hard parts dissolve, leaving **a cavity** called a ...  
A. cast  
B. trace layer  
C. chamber  
D. mould
34. According to the **Geologic Time Scale**, dinosaurs appeared in this period.  
A. Permian  
B. Cretaceous  
C. Jurassic  
D. Triassic
35. Most drilling operations would not be possible unless these types of **drills** were used.  
A. carbon  
B. forged steel  
C. tungsten  
D. diamond