

**6<sup>th</sup> Grade Science 1<sup>st</sup> Semester Mid-Term Assessment**  
**Eagles Landing Middle School**

**Directions:** DO NOT WRITE ON THIS TEST! Write in the letter of the correct answer on your answer document.

**Unit 1: Natural Resources**

1. (S6E5b) The properties of a mineral depend on \_\_\_\_\_.
  - a. The type of mineral
  - b. The number of minerals
  - c. The size of the mineral
  - d. All of the above
2. (S6E5b) An example of a property of a mineral is \_\_\_\_\_.
  - a. How common it is
  - b. How it reacts with acid
  - c. Where it is found
  - d. How much it costs
3. (S6E5j) Which alternative source of energy uses falling water (dams) to create electricity?
  - a. Geothermal
  - b. solar
  - c. hydroelectric
  - d. wind farms
4. (S6E5j) Geothermal energy is possible when there is \_\_\_\_\_.
  - a. Wind
  - b. coal
  - c. oil.
  - D. magma
5. (S6E6b) Which of the following is made from or uses a nonrenewable resource?
  - a. Newspaper
  - b. Cotton shirt
  - c. Aluminum baseball bat
  - d. Fish
6. (S6E6b) Which product is made from a renewable resource?
  - a. A newspaper
  - b. aluminum baseball bat
  - c. gasoline
  - d. jewelry

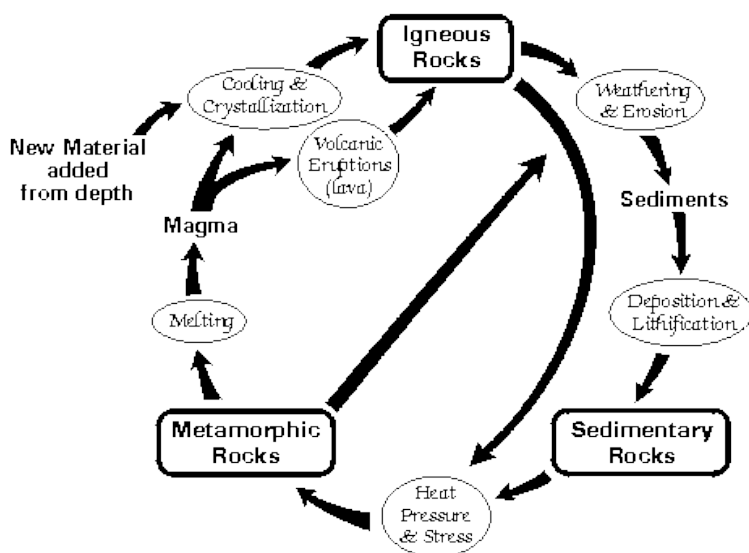
**Unit 2: Rocks & Minerals**

7. (S6E5b) Moh's scale is used to test a mineral's \_\_\_\_\_.
  - a. Magnetism
  - b. Color
  - c. Hardness
  - d. Reaction with acid
8. (S6E5c) Which one of the following words is used to classify rocks based on how they form?
  - a. Igneous
  - b. Mineral
  - c. Granite
  - d. Transparent
9. (S6E5c) Igneous rocks form from
  - a. Layers of sediment being cemented together
  - b. Heat and pressure causing types of rocks to change form
  - c. Cooling magma
  - d. All of the above
10. (S6E5c) Sedimentary rocks form from
  - a. Layers of sediment being cemented together
  - b. Heat and pressure causing types of rocks to change form
  - c. Cooling magma
  - d. All of the above
11. (S6E5c) Metamorphic rocks form from
  - a. Layers of sediment being cemented together
  - b. Heat and pressure causing types of rocks to change form
  - c. Cooling magma
  - d. All of the above
12. (S6E5c) Which of the following is a metamorphic rock?
  - a. Granite
  - b. limestone
  - c. sandstone
  - d. marble

13. (S6E5c) Which kind of rock forms from material that has been weathered, eroded, and deposited?
- Igneous
  - Metamorphic
  - Sedimentary
  - lava
14. (S6E5d) Which of the following statements is TRUE?
- All minerals are made of rocks.
  - Rocks and minerals are the same.
  - All rocks are made of minerals.
  - All of the above
15. (S6E5d) Which of the following statements is TRUE?
- Rocks can break down into sediments
  - Rocks can change from sedimentary to metamorphic
  - New rocks form over time
  - All of the above
16. (S6E5d) Which type of rock is MOST LIKELY to contain fossils?
- Metamorphic
  - Sedimentary
  - Igneous
  - All rocks can have fossils

Use the diagram below to answer questions 17-19.

## The Rock Cycle



17. The rock cycle describes how rocks:
- Change over time
  - Are destroyed
  - form
  - all of the above
18. In order for a metamorphic rock to become an igneous rock, it must
- Melt and cool
  - Undergo heat and pressure
  - weather and erode
  - become sediment
19. A rock that has been weathered and eroded becomes \_\_\_\_\_.
- Magma
  - Igneous
  - sediment
  - metamorphic

### Unit 3: W.E.D.

20. (S6E5f) Slump, Creep, Rockslide, & Mudflow are all examples of erosion caused by
- Water
  - Gravity
  - Ice
  - Wind

21. (S6E5f) What shape do glacier-created valleys have?
- V-shape
  - L-shape
  - U-shape
  - C-shape
22. (S6E5f) Which term is an example of a feature created as a result of deposition?
- Cirque
  - U-shaped valley
  - Gully
  - Dune
23. (S6E5f) Where would you expect to find the **MOST** fertile soil?
- on top of a mountain
  - at the mouth of a river
  - on a sand dune
  - on the side of a canyon
24. (S6E5i) How do humans contribute or add to the erosion of Earth's surface?
- Deforestation
  - Construction
  - farming
  - all of the above
25. (S6E5j) A windbreak helps conserve
- Soil
  - Water
  - Trees
  - Air
26. (S6E5d) What causes a sand dune to move from one place to another?
- Wind
  - Waves
  - tides
  - running water
27. (S6E5d) Which is the **BEST** definition of weathering?
- settling of earth materials when water slows down
  - swelling of earth materials as they soak up water
  - cracking of rocks from wind, water, plants, or animals
  - transport of earth materials by wind, water, or ice

#### Unit 4: Soil

Use the chart below to answer questions 28 & 29.

Plant #	Liters of Water	Plant Appearance
1	2	dry, yellow leaves
2	3	limp, leaves dropping
3	5	green, healthy
4	7	green, healthy

28. (S6CS3d) Which plant(s) is/are NOT receiving enough water to help them grow?
- Plant 1 & 2
  - Plant 3
  - Plants 3 & 4
  - Plants 1 & 4
29. (S6CS3d) What will a plant look like that only receives 2 liters of water per week?
- limp, leaves dropping
  - green, healthy
  - dry, yellow leaves
  - dead
30. (S6E5h) Beginning at the surface of the earth, what is the correct order of soil layers?
- Topsoil, subsoil, parent material, bedrock
  - Topsoil, parent material, bedrock, subsoil
  - Subsoil, topsoil, parent material, bedrock
  - Topsoil, subsoil, bedrock, parent material

31. (S6E5h) Which soil horizon often has a dark color because of the presence of humus?
- E horizon
  - B horizon
  - C horizon
  - A horizon
32. (S6E5h) As minerals in soil are dissolved by acids, they are carried from the A horizon to the B horizon by the process of
- Oxidation
  - Leaching
  - Mechanical erosion
  - Humus
33. (S6E5j) What is done to reduce soil erosion on steep slopes?
- No-till farming
  - Terracing
  - Contour farming
  - Grazing
34. (S6E5i) What factors such as human activity contributed to the Dust Bowl of the 1930s?
- Drought and strong winds
  - Farmers cleared the land for farming.
  - Planting the same crops every year caused the soil to lose its nutrients.
  - All of the above
35. (S6CS6c) According to the table below, which horizon in this soil has the **lowest** percentage of silt?

Texture Data for a Soil Profile			
Horizon	Percent		
	Sand	Silt	Clay
A	16.2	54.4	29.4
B	10.5	50.2	39.3
C	31.4	48.4	20.2
R (bedrock)	31.7	50.1	18.2

- A horizon
- B horizon
- C horizon
- R horizon

### Unit 3: Inside the Earth

36. (S6E5a) What are the two main elements found in Earth's crust?
- Iron & magnesium
  - Silicon & oxygen
  - Iron & nickel
  - Silicon & iron
37. (S6E5a) What are the two main elements found in Earth's core?
- Iron & magnesium
  - Silicon & oxygen
  - Iron & nickel
  - Silicon & iron
38. (S6E5a) A convection current of magma is made up of
- A rising more dense liquid and a sinking less dense liquid
  - A rising less dense liquid and a sinking more dense liquid
  - Liquids of the same density
  - Solids of different densities
39. (S6E5a) In general, how does the temperature AND density of material in Earth's layers change with depth?
- It increases with depth
  - Density decreases with depth
  - density does not change with depth
  - density increases, then decreases
40. (S6E5a) In Earth's crust, what type of rock is found under the oceans?
- Granite
  - Basalt
  - granite on top; basalt underneath
  - Pumice

41. (S6E5a) The thickest layer of the Earth is the  
a. Crust                      b. mantle                      c. outer core                      d. inner core
42. (S6E5e) What was Alfred Wegener's theory?  
a. The continents have always been where they are now  
b. Today's continents were once part of a single land mass that split apart.  
c. The continents are made of rock.  
d. The continents will one day join to form a single continent.
43. (S6E5g) What can fossils reveal about Earth's past?  
a. Only changes in Earth's climates over time  
b. Only changes in Earth's surface features over time  
c. Changes in Earth's climates and surface features over time  
d. Present climates and surface features of Earth
44. (S6E5g) A fossil of a tropical plant was found on Antarctica. What can you conclude about these findings?  
a. Antarctica must have been closer to the equator at one time.  
b. Tropical plants were carried to Antarctica through researchers.  
c. Tropical plants could have never survived on Antarctica. Data must be incorrect.  
d. Antarctica experienced a heat wave at one time in history.
45. (S6E5g) Which of the following is the best evidence that Earth's continents were once in vastly different positions than they are today?  
a. Penguins are found only in the Southern Hemisphere  
b. Fossils of tropical plants are found in Antarctica.  
c. Volcanoes encircle the Pacific Ocean.  
d. Major rivers form deltas from continental erosion.

Short Answer: Choose 2 of the following questions to answer on the back of your answer document. Please write the number of the question you choose.

46. (S6E6h) Tyler added some soil from his backyard into a test tube with water. He shook the test tube in order to mix the soil. When the soil settled, he noticed that it had separated into layers.
- a.) Using the information you now know about the particle sizes of weathered rock found in soil, draw a diagram that shows how the water would separate the soil. Label the diagram with the proper ingredients of soil.
- b.) Explain why the components of soil would separate in this manner when water is added.
47. Explain how the cooling rate of an igneous rock determines the size of the minerals within it.
48. Examine the city information below. Decide which method of producing energy would BEST be used in an area such as this. You may not use fossil fuels. Defend your decision with evidence.
- Frontier City is located next to the desert. Average weather conditions for the area are: mostly sunny, very little wind, and very little rain.*
49. Draw a diagram of the Earth. Label each layer INCLUDING the lithosphere and asthenosphere.