

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. Use the table below to answer this question.

Soil Type	Texture
Sandy	Gritty and loose
Loam	Partly sticky and smooth
Clay	Very sticky, smooth with a plastic feeling

Eric squeezes some wet soil in his hand. It is not sticky and it falls apart. Which type of soil is this?

- A. sandy
- B. loam
- C. clay
- D. It cannot be determined.

2. Which part of an animal might form a fossil?

- A. brain
- B. bones
- C. eyes
- D. heart

3. The best soil in which to grow plants is

- A. forest soil.
- B. desert soil.
- C. beach soil.
- D. rocky soil.

4. When sand, silt, and mud are squeezed together, they form

- A. rocks.
- B. minerals.
- C. fossils.
- D. crystals.

5. Rocks break down to

- A. plants.
- B. cells.
- C. fossils.
- D. soil.

6. The remains of animals that lived millions of years ago are called

- A. rocks.
- B. minerals.
- C. shale.
- D. fossils.

7. If you found a rock with fossils in it, you would know that the rock was probably formed

- A. by a volcano.
  - B. beneath layers of other rock.
  - C. in a mountain area.
  - D. near Earth's center.
- 

8. Which property can BEST be used to identify a type of mineral?

- A. hardness
  - B. mass
  - C. size
  - D. temperature
- 

9. Sid has a rock collection. He found a new rock but he thinks he already has a rock of that kind. What should he do to find out?

- A. look in his collection for rocks of the same color
  - B. wait until he finds more rocks like the new one
  - C. draw a picture of the new rock
  - D. read a book about rocks
- 

10. Fossils help us learn about

- A. outer space.
  - B. life in the past.
  - C. the weather.
  - D. earthquakes.
- 

11. Which of these is a fossil?

- A. a large fish
  - B. a dinosaur bone
  - C. a young tree
  - D. a mouse
- 

12. Mrs. Dodge's class is studying minerals. To find the name of each mineral, the student must know

- A. the shape of the mineral.
  - B. the size of the mineral.
  - C. the color of the mark made on a tile.
  - D. the weight of the mineral.
- 

13. A fish fossil might form when a fish dies and

- A. is trapped in ice.
  - B. a volcano erupts.
  - C. river mud becomes rock.
  - D. is pressed into soft rock.
-

14. Which test is used to show the color of minerals found in certain rocks?

- A. scratch test
  - B. streak test
  - C. smell test
  - D. shininess test
- 

15. Sometimes fossil bones are found lying at the top of the sand in the desert. This tells us that

- A. the fossils were formed in the past year.
  - B. wind blew away the sand that covered the fossils.
  - C. fossils are lighter than sand, so they floated to the top.
  - D. deserts are so hot and dry that the fossils never got covered.
- 

16. Soil is a mix of materials. Which is NOT a part of soil in nature?

- A. dead plants
  - B. dead animals
  - C. rock pieces
  - D. plastic pieces
- 

17. Which mineral characteristic could be used to distinguish between talc and calcite?

- A. hardness
  - B. location
  - C. fracture
  - D. color
- 

18.

*Use the chart below to answer this question.*

Mineral	Hardness
galena	2-3
quartz	7
talc	1-2
garnet	7

Which two minerals from the chart above would MOST LIKELY scratch glass?

- A. galena and quartz
  - B. talc and garnet
  - C. galena and talc
  - D. quartz and garnet
- 

19. Which rock breaks up the fastest?

- A. rock deep underground
  - B. rock with small crystals
  - C. rock with fossils
  - D. rock that is easy to scratch
-

20. Donna wants to make something that looks like a fossil. Which should she do?

- A. wrap a leaf around a rock and freeze it
  - B. cover a seed with soil and water it
  - C. push a shell into clay and pull it out
  - D. mix sand with clay and let it dry
- 

21. Some rocks form when

- A. snow covers a mountain.
  - B. fertilizer is added to soil.
  - C. rocks melt underground and flow to the surface.
  - D. large, colored crystals form inside minerals.
- 

22. Tommy found a mineral and wants to know what kind it is. What is one thing Tommy can check to help figure it out?

- A. hardness
  - B. weight
  - C. temperature
  - D. length
- 

23. Eliza's science teacher gave her a sample of copper and silver. What will BEST help her identify which is copper and which is silver?

- A. color and luster
  - B. where they are found
  - C. type of rock they come from
  - D. type of mines in which they are found
- 

24. Students are conducting an experiment with rocks. What is the BEST way for them to measure the volume of the rocks?

- A. Lay them on a scale.
  - B. Place them next to a ruler.
  - C. Put them in a graduate cylinder of water.
  - D. Trace them on a piece of paper.
-

25. Use the picture of a fossil below to answer this question.



Which of the following is MOST like the fossil?



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26.

Sara found something on the ground. It was heavy, and had many colors. When Sara hit the object with a hammer, it did not break. She could also see two different kinds of crystals in the object.

What did Sara find?

- A. a rock
  - B. a fossil
  - C. a mineral
  - D. some sand
- 

27.

A teacher holds up an example of a rock for a class to observe. Which of these characteristics is the class MOST LIKELY to observe?

- A. It is all the same color.
  - B. It is multicolored with jagged edges.
  - C. It has shiny, flat sides that reflect light.
  - D. It has angled sides and a repeated shape.
-

28.

Which object will MOST likely contain a fossil?

- A. a leaf
  - B. an atom
  - C. a rock
  - D. a mineral
- 

29.

Carl had two minerals that looked a lot alike. They were the same color and texture. What property would help Carl figure out if the two minerals were the same?

- A. size
  - B. shape
  - C. weight
  - D. hardness
- 

30.

Mike took a road trip. During the trip, Mike noticed the ground began to look red. Which type of soil was Mike MOST LIKELY looking at?

- A. clay
  - B. loam
  - C. sand
  - D. humus
- 

31.

During science class, students spread out soil samples on their desk. They had three samples: sand, potting soil, and clay. Which is a characteristic the students could have observed?

- A. All three had the same size particles.
  - B. The sand and clay looked exactly alike.
  - C. All three were the same color and texture.
  - D. Each sample was a different color and texture.
- 

32.

Rocks found in rivers are often smooth. Why is this?

- A. animals in the river smooth down the rocks for shelter
  - B. water flows over the rocks and wears away the rough edges
  - C. water chills the rocks causing the rocks to freeze into smooth shapes
  - D. wind near rivers is strong enough to blow away the rocks rough edges
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33.

After a hurricane the size of the affected beach is not as large. Which answer explains the reason why this happens?

- A. the ocean level is higher
  - B. the pollution covers the sand
  - C. erosion of sand by wind and rain
  - D. hurricane rain water covers the sand
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34.

During science, Mrs. Gray's students dug in the ground and placed some soil in a large jar. They added water and shook the jar. The next day, three different soils had formed layers. The layer with large, light colored grains settled on the bottom. Which type of material was this?

- A. clay
  - B. loam
  - C. sand
  - D. silt
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35. Which of these carries away the most soil?

- A. Fires
- B. Floods
- C. Earthquakes
- D. Volcanoes

**Answer Key**

1. A) sandy
2. B) bones
3. A) forest soil.
4. A) rocks.
5. D) soil.
6. D) fossils.
7. B) beneath layers of other rock.
8. A) hardness
9. A) look in his collection for rocks of the same color
10. B) life in the past.
11. B) a dinosaur bone
12. C) the color of the mark made on a tile.
13. C) river mud becomes rock.
14. B) streak test
15. B) wind blew away the sand that covered the fossils.
16. D) plastic pieces
17. A) hardness
18. D) quartz and garnet
19. D) rock that is easy to scratch
20. C) push a shell into clay and pull it out
21. C) rocks melt underground and flow to the surface.
22. A) hardness
23. A) color and luster
24. C) Put them in a graduate cylinder of water.
25. B) 

- 26. A) a rock
- 27. B) It is multicolored with jagged edges.
- 28. C) a rock
- 29. D) hardness
- 30. A) clay
- 31. D) Each sample was a different color and texture.
- 32. B) water flows over the rocks and wears away the rough edges
- 33. C) erosion of sand by wind and rain
- 34. C) sand
- 35. B) Floods