Test Name: 2019-20 RCK12 Grade 3 Unit 4 Pre Assessment

Test Id: 510039 Date: 05/14/2019

The picture below shows the physical properties of four rocks in Tim's rock collection.



Tim adds a new rock to his rock collection. His new rock is round, black, bumpy, and has a hardness of 5. Which of the rocks in his collection is **most** like this new rock?

1.

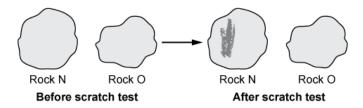
A. Rock W

B. Rock X

C. Rock Y

D. Rock Z

Beth is comparing Rock N and Rock O. She uses the scratch test to explore the properties of the rocks.



Why does Rock O leave a scratch on Rock N?

2.

A. Rock N is softer than Rock O.

B. Rock N is harder than Rock O.

C. Rock N is smooth, and Rock O is bumpy.

D. Rock N is bumpy, and Rock O is smooth.

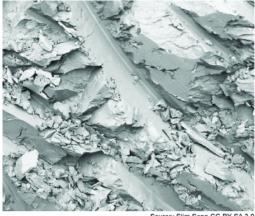
Which color is soil that contains a lot of matter from living organisms?

- 3.
- A. tan
- B. black
- C. red
- D. yellow

Which of the following best describes loam?

- 4.
- A. It does not hold water well.
- **B.** It does not have any nutrients.
- **C.** It has the most organic matter.
- **D.** It has a mixture of particle sizes.

Look at the picture of soil.



Source: Siim Sepp CC BY SA 3.0

What type of soil is this?

- 5.
- A. clay
- B. sand
- C. loam
- D. topsoil

The pictures show two rocks. Rock X is found beside a fast-moving river. Rock Y is pulled from the bottom of the river.



Pick **two** sentences that are true of the river.

6.

- A. The river can create new rocks.
- **B.** The river can join rocks together.
- **C.** The river can make rocks smaller.
- **D.** The river can add pieces to rocks.
- **E.** The river can make rocks smooth.

Why would scientists do a streak test on a rock?

7.

- A. to identify its hardness
- B. to identify its minerals
- C. to determine its weight
- **D.** to determine its texture

Which of the following is NOT used to identify a rock?

8.

- A. color
- B. weight
- C. shape
- D. streak

While on a hike, Keiko finds two rocks and makes a chart comparing their physical attributes.

| Rock 1 | Rock 2 |
|-------------------------|----------------|
| white with gray streaks | black and tan |
| rough | smooth |
| nonmetallic | nonmetallic |
| semitransparent | nontransparent |

Which question Keiko could ask to add another physical attribute of the rocks to her chart?

9.

- **A.** Where were the rocks found?
- **B.** Why are they multiple colors?
- **C.** How many rocks are like them?
- **D.** Can they be scratched by a nail?

Sophia visits her grandmother's house on the same beach every year. She notices the sand dunes on the beach are a different shape each time she visits. Which **best** describes why the shape of the sand dunes would change?

10.

- A. The sand dunes change shape from rain.
- **B.** The sand dunes change shape from snow.
- **C.** The sand dunes change shape from the wind coming off the water.
- **D.** The sand dunes change shape from shells and rocks piling on them.

