

What I Know About Soils!

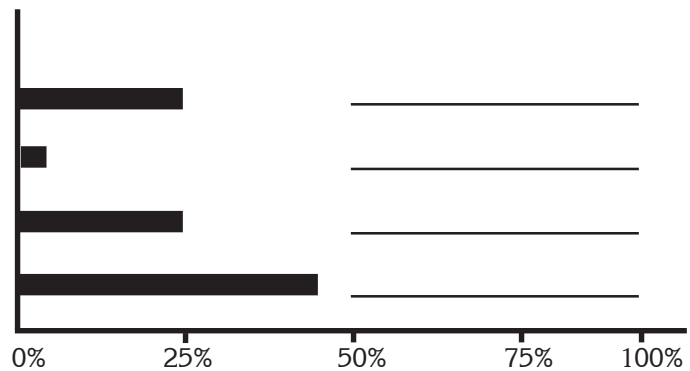
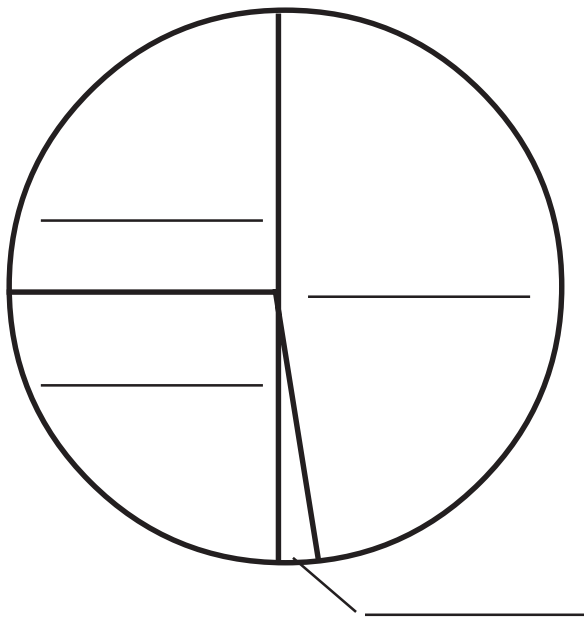
Select the best answer for the following questions.

1. Which of the following have a connection to the soil?

- a. plants
- b. animals
- c. people
- d. all of the above

2. An average soil is 45% mineral matter, 25% air, 25% water, and 5% organic matter.

Label the graphs on the lines provided below to show these percentages.



3. An average soil is 50% water and air. What is the other 50% made of?

_____ and _____

4. Match the letter to the correct profile description:

- | | | |
|--------------------|-------|--|
| a. topsoil | _____ | middle layer where some animals make their homes |
| b. subsoil | _____ | organic matter is found in this "live" zone. |
| c. parent material | _____ | broken up pieces of bedrock |

5. Circle all the factors that create soil.

parent material plants animals computers cars slope

6. A soil that is hard when dry, but sticky when wet is mostly made of _____.

- a. sand
- b. silt
- c. clay
- d. organic matter

7. Which is the largest particle?

- a. sand
- b. silt
- c. clay
- d. loam

8. A mixture of sand, silt, and clay is said to be _____.

- a. an organic soil
- b. mud
- c. a loam
- d. stirred up

9. Which soil would pack together in clods and allow little air and water into the soil?

- a. sandy loam
- b. silt loam
- c. clay loam
- d. gravel soil

10. Circle all the statements that are true about the Dust Bowl.

it was during the 1930s
farmers had to move
they had no cars
weather was part of the problem

it is a football game
Utah had its own dust bowl
dust from topsoil covered many states
farmers began to learn about conservation

11. If you were looking for a book on soil conservation the book with the most information would be...

- a. *The World of Water*
- b. *Methods for Controlling Erosion*
- c. *Weeds of Utah*
- d. *Vegetable Growing*

12. Circle all the statements that are true about organic matter.

it changes silt to sand
allows soils to drain
is food for bacteria and fungi

increases the nutrients in the soil
floats on water, but eventually gets soaked and holds water
makes soil more rocky

13. The texture of silt is smooth. Clay may feel smooth at first but becomes _____.

- a. gritty
- b. brittle
- c. loose
- d. sticky

14. Circle all the statements that are true about why farmers produce more today than 25 years ago.

better machinery
more sunlight today
new types of clay have been discovered

scientists have developed more productive plants
new crop protection chemicals
farmers know more about soil conservation

Answers to “What I know about soils!”

1. d
2. check labeling
3. mineral matter and organic matter
4. b, a, c
5. all *except* cars & computers
6. c
7. a
8. c
9. c
10. all *except* “it’s a football game” & “they had no cars”
11. b
12. all *except* “it changes silt to sand” & “makes soil more rocky”
13. d
14. all *except* “more sunlight” & “new types of clay discovered”