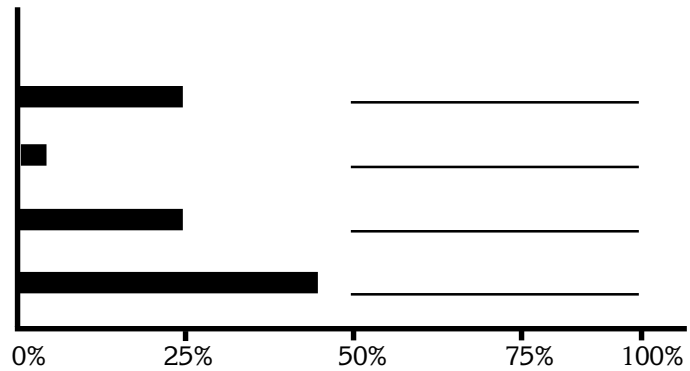
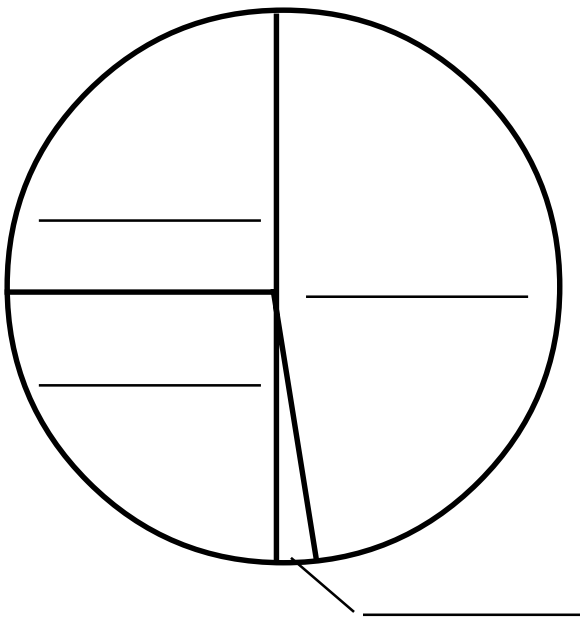


# What I Know About Soils!

Select the best answer for the following questions.

- Which of the following have a connection to the soil?
  - plants
  - animals
  - people
  - all of the above
- 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.



- An *average* soil is 50% water and air. What is the other 50% made of?  
 \_\_\_\_\_ and \_\_\_\_\_

- Match the letter to the correct profile description:
 

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

- Circle all the factors that create soil.  
 parent material    plants    animals    computers    cars    slope

- A soil that is hard when dry, but sticky when wet is mostly made of \_\_\_\_\_.
  - sand
  - silt
  - clay
  - 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 1930's        | it is a football game                    |
| farmers had to move             | Utah had it's own dust bowl              |
| they had no cars                | dust from topsoil covered many states    |
| weather was part of the problem | farmer 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        | increases the nutrients in the soil                         |
| allows soils to drain          | floats on water, but eventually gets soaked and holds water |
| is food for bacteria and fungi | 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                       | scientists have developed more productive plants |
| more sunlight today                    | new crop protection chemicals                    |
| new types of clay have been discovered | farmers know more about soil conservation        |