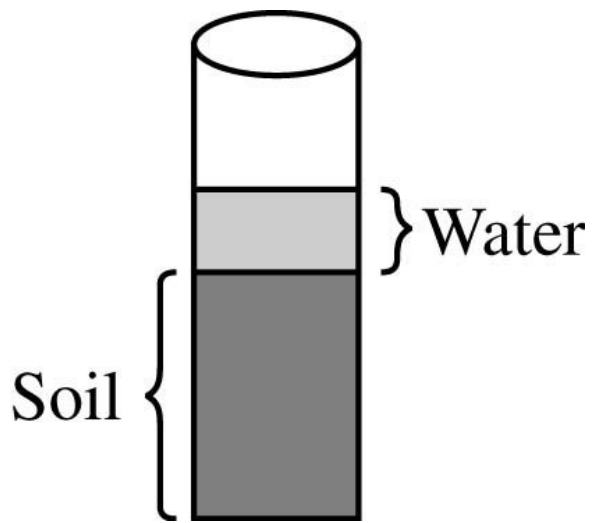


CISD Grade 4 Science Unit 04

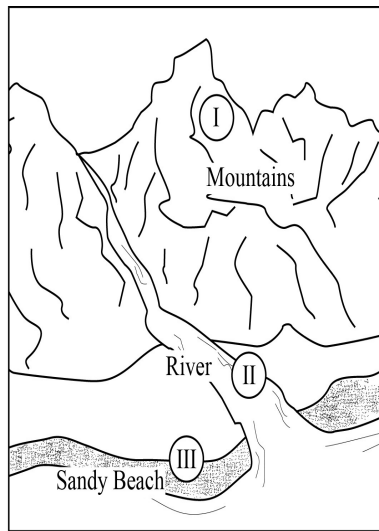
Some questions (c) 2012 by CSCOPE.

1



A student collected a soil sample and put it in a clear glass container. Then the student added 10 mL of water to the container. After two minutes, most of the water remained on top of the soil in the container. Which of the following BEST describes the soil in the container?

- A** The soil sample is mostly gravel.
- B** The soil sample is mostly clay.
- C** The soil sample is mostly sand.
- D** The soil sample is mostly silt.



The rocks that make up mountains are broken off during strong storms. The pieces are then moved by the rivers till they get to the beaches. Those pieces of rock settle down on the beaches as sand. Identify the process that is occurring at each of the three parts of the diagram.

- F** I. Deposition, II. Erosion, III. Weathering
- G** I. Deposition, II. Weathering, III. Erosion
- H** I. Weathering, II. Erosion, III. Deposition
- J** I. Erosion, II. Weathering, III. Deposition

3 The Earth's soils and minerals are changed by weathering over a long period of time. Which of the following is NOT a form of weathering?

- A** rocks rubbing against each other
- B** ice grinding the rocks
- C** acid rain falling on rocks
- D** soil moved by a flood

4 Susan is studying different types of soil. She is comparing clay, sand, gravel, and silt. In which soil type will Susan find the largest particles?

- F** gravel
- G** clay
- H** sand
- J** silt

- 5 When identifying the texture of a soil, you are looking at —
- A the kind of rock that lies underneath the soil
 - B the age of the soil
 - C the size of the grains and the amount of space between them
 - D the crops that the soil supports
- 6 The diagram below shows an area of land that changed over hundreds of years.



1760



1990

Which process changed the shape of the rock layers over time?

- F deposition
- G erosion
- H evaporation
- J faulting

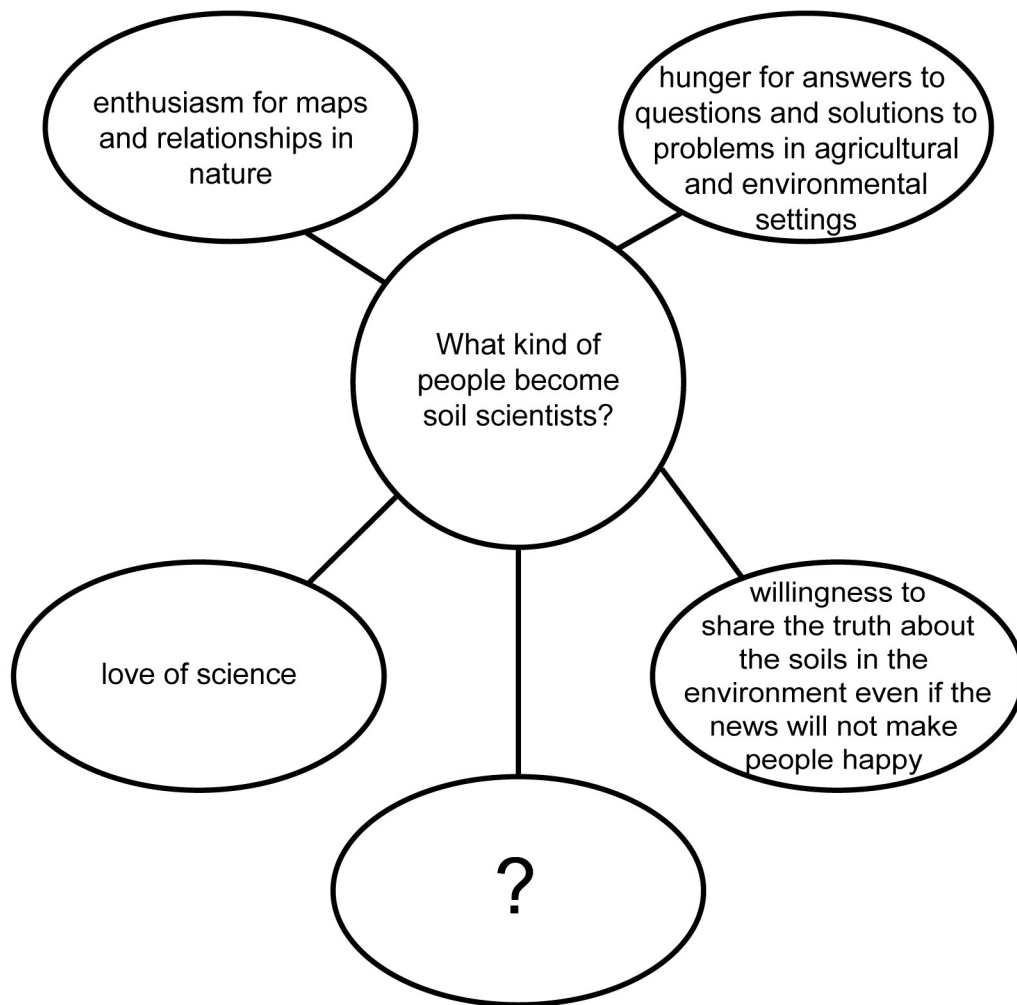
- 7** The beach on an island is covered by many small pebbles. Each pebble is about the size of a pencil eraser. How will ocean waves change these pebbles over time?
- A** The waves will wear the pebbles down, making them smaller.
 - B** The ocean water will soak into the pebbles, making them soggy.
 - C** The waves will get the pebbles wet, making them all stick together.
 - D** The ocean water will fill cracks in the pebbles, making them harder.
- 8** Which of the following BEST explains how a glacier changes the Earth's surface?
- F** evaporating
 - G** melting
 - H** scraping
 - J** burning

Use the following table for the next three questions.

Water Retention in Soils

Soil Type	Volume of Soil Used (mL)	Volume of Water Added (mL)	Volume of Water Retained (mL)
Gravel	400 mL	100 mL	10 mL
Sand	400 mL	100 mL	30 mL
Clay	400 mL	100 mL	80 mL
Silt	400 mL	100 mL	40 mL

- 9** Some plants require large amounts of water to survive. Cypress trees are an example of a plant that needs lots of water to survive. Based on the data table above, which type of soil would retain the most water and therefore be the BEST for growing Cypress trees?
- A** clay
 - B** sand
 - C** silt
 - D** gravel
- 10** The students compared their results after the investigation. They discovered that their results were similar, but not exact. What should the students do to increase the reliability of their results?
- F** use different amounts of water
 - G** use only one type of soil
 - H** complete the investigation more slowly
 - J** repeat the investigation several times
- 11** When conducting this laboratory investigation, what safety equipment should be used?
- A** goggles
 - B** goggles + gloves
 - C** gloves
 - D** aprons



Which phrase BEST completes the web?

- F** enjoy playing different characters and roles
- G** enjoy working outdoors
- H** interested in what happens inside the human brain
- J** interested in computers and researching online

13 Why would a home builder have to understand weathering?
