INVESTIGATION DIRECTIONS

Lesson Focus Questions: Where does the soil and rock in a delta come from, and where does it go? Does the rock and soil ever change?

While doing investigations A, B, and C, think about how they might help you answer the Lesson Focus Questions.

INVESTIGATION A
Find the pictures of a tree growing out of a crack in a boulder.
☐ Talk about the pictures that were taken in 1999 and in 2014. What differences do you see?
In your science notebook
1) Describe what has happened to the tree and the boulder in the years between 1999 and 2014.
2) Predict what will happen to the boulder in another 50 years. Explain why you think so.
INVESTIGATION B
☐ Look at the two cans of soda. One can is frozen and the other is not.
☐ Talk about how the frozen soda can is different from the soda can that is not frozen.
In your science notebook
3) Why was the frozen soda can deformed? What will happen to the can when the soda inside thaws?
4) Describe what you think happens over time when water freezes and then thaws in a crack in a rock.
INVESTIGATION C
Find the small plastic bottle and the bag of rocks.
Count the rocks. Write this number in your science notebook.
Place the rocks in the plastic bottle. Put the top on the bottle. Shake the jug vigorously for 2 minutes while holding the cap on the bottle. Pour out the rocks and count them. Write this number in your science notebook.
In your science notebook
5) Describe what differences occurred to the rocks after the jug was shook.
6) Thinking back on what happened to the rocks in the bottle, explain what might happen to a large

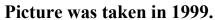
piece of rock that rolls down a mountain slope.

"Earth's Changing Surface" Lesson 5 Analogy Chart

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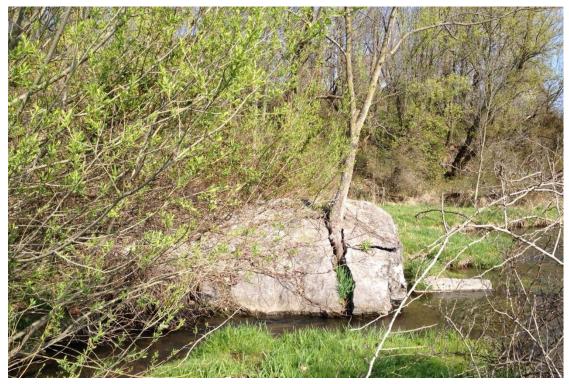
Part of model		Part of real world	Process:
Soda can			
Soda in the can			
Frozen soda in the can	is/are like		
Pictures of a tree	e root growin		

Tree in Rock Photos





Picture was taken in 2014.



photos courtesy of Dr. Christopher Woltemade; adapted from RESPeCT ©2014 CPP and BSCS Science Learning

Soda Cans Photo



Two soda cans. The soda can on the right was left in the freezer.