“Earth’s Changing Surface”

Lesson 2 Analogy Chart

Lesson Focus Question: *What causes deltas to form?*

Part of model		Part of real world	They are alike because …
Sand, soil, and rocks			
Water as it runs out of the jug			
Water at the bottom of the stream table	**... is/are like ...**		

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Stream Model Observations

Directions

Part 1: Prepare the stream table and make initial observations.

a. Spread the earth materials—sand, soil, pebbles, and small rocks—all across your stream table so that it looks like the land on a hillside. Make sure you have a mix of different-size earth materials throughout.

b. Focus your attention on a few pieces of sand, 1 or 2 pebbles, and a larger rock that are all located together near the top of your stream table. Also, study the lower end of the stream table where the land meets the water.

   Predict: When the water starts running, what do you think will happen to the sand, pebbles, and rocks at the top of the stream table? What about the land near the bottom of the table?

I predict that…

Part 2: Start the flow of water and make observations.

a. Remove the golf tee and let water run through the earth materials.

b. Let about one-third of the water in the jug flow slowly through the earth materials and then replace the golf tee to stop the water.

c. Observe where the water moves in the stream model and where the earth materials move.

d. As a team, identify where earth materials are being taken away by water and where they end up on the stream table.

e. Repeat the water flowing one more time to see if you notice anything new or different.

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Draw a bird's-eye view of your stream table showing where materials were moved from one place to another. **Use labels** to communicate your observations.

Part 3: Analyze and interpret your observations.

Describe your observations using the questions below. What happened when you let water flow over sand, pebbles, and rocks? Be detailed and specific.

1. On your stream table, where are earth materials being taken away?

2. On your stream table, where are earth materials being built up?

3. How is your stream model like the Mississippi River and its delta? How is it different?

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