

Name \_\_\_\_\_

### Interactive Rivers

Please go to [http://www.classzone.com/books/earth\\_science/terc/navigation/chapter13.cfm](http://www.classzone.com/books/earth_science/terc/navigation/chapter13.cfm) and follow directions/answer questions below.

Go to "How Does Stream Flow Change over Time?"

1. Look at the pictures and give their location in the U.S.

Glen Canyon Dam \_\_\_\_\_ Santa Cruz River \_\_\_\_\_

Beltz Lake \_\_\_\_\_ "Snow capped Mountains" \_\_\_\_\_

2. The amount of water flowing in a river is called the \_\_\_\_\_. Discharge is usually reported as the number of \_\_\_\_\_ passing a point each second, abbreviated as cfs (cubic feet per second).
3. And "4", What are the factors that cause the change in discharge?

Rillito Creek, AZ \_\_\_\_\_ Mississippi and Wisconsin Rivers \_\_\_\_\_

Colorado River \_\_\_\_\_

4. See above
5. What do the spikes in the graph indicate? \_\_\_\_\_

List the date and amount of discharge for the two highest peaks on the graph.

\_\_\_\_\_

6. List the date and amount of precipitation for the two highest peaks on the graph.

\_\_\_\_\_

7. Record the amount and dates of the five discharge spikes and amount and dates of the seven precipitation spikes. What do you notice about the timing of the peaks of discharge and rainfall?

\_\_\_\_\_

\_\_\_\_\_

8. What do you notice about the timing of the peaks of discharge and temperature variation starting in March? What do you conclude from this relationship? What other data might you need to confirm your hypothesis?

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9. What do you notice about the timing of the peaks of discharge and rainfall? What do you conclude from this relationship?

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What relationship exists between temperature and discharge? What do you conclude from this relationship?

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What do you think is responsible for the regular shape of the discharge peaks? Speculate on the cause of the major discharge peak at the end of March.

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10. Write a summary describing the factors that affected the discharge of Hubbard Brook in February, 2000. Refer to specific peaks on the graphs.
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**Exit out to the main title screen again and please click on “What Controls the Shape of a Delta?”**

1. Deltas are important areas for agriculture, fishing, and vital \_\_\_\_\_ reserves. Deltas are also areas rich in wildlife, especially migratory birds. The term delta was first applied in 450 BC by the Greek historian Herodotus, who thought that sedimentary deposits at the mouth of the Nile River resembled an inverted \_\_\_\_\_—delta ( $\Delta$ ).
2. Delta shape is controlled by the \_\_\_\_\_ of the river, the type and amount of \_\_\_\_\_ it carries, and the \_\_\_\_\_ associated with waves and currents in the basin where sediments are deposited. In this investigation, you'll consider three processes related to delta formation—river discharge, waves, and tides—and infer which process is dominant in controlling the shape of a delta.

What animal part does the Mississippi River delta resemble according to the diagram?

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What is the Nile River Delta dominated by? \_\_\_\_\_

What type of deltas have characteristic lobes perpendicular to shoreline? \_\_\_\_\_

Where in the world is there an example? \_\_\_\_\_

3. Identify the delta as wave-, river, or tide-dominated.

Fraser: \_\_\_\_\_ Gurupi: \_\_\_\_\_ Niger: \_\_\_\_\_

Rhone: \_\_\_\_\_ Tigris-Euphrates: \_\_\_\_\_ Selenga: \_\_\_\_\_