

Stream Table Lab

Name _____

Date _____

Purpose

To observe the ability of a stream to erode, transport, and deposit materials.

Rules of the stream table: *no water or sand outside of the table, no splashing, wash hands before and after using the stream table, and keep sand, soil, rocks, pebbles, etc, away from the sink.*

Key Words:

stream	evaporation
channel	condensation
braided stream	precipitation
meander	tributaries
landform	surface run-off
erosion	geomorphic
deposition	
sediment	

Materials:

stream table
sand
rocks or pebbles
water
container for pouring
water
Science notebook

Procedure

1. Prop up one end of the stream table to about 5 to 10 cm. Fill the raised end of the stream table with fine sand. Pick up the raised end and shake the stream table gently until the sand covers about the top two-thirds.
2. Begin pouring water, slowly and steadily from a watering can that is held slightly above the high end of the stream table.
3. Observe the small stream that is forming in the sand.
4. What happened to some of the sand as the water flowed over it?
5. Where did the sand go?
6. In your notebook make a detailed sketch of the landforms in the stream table. What are these landforms?

7. Would you characterize this as a meandering stream or a braided stream? Explain your answer.

8. Smooth the sand and use your finger to create a winding, meandering channel. Pour a steady trickle of water down this channel.

9. Are you able to see where erosion is occurring in the meandering stream? Where?

10. Are you able to see where deposition is occurring? Where?

11. Make a sketch of the meandering stream and label areas of erosion and deposition in your notebook.

12. Now find out what happens in a flood by pouring more water faster down the channel. Describe what happens to the channel and to the sand.

13. Make a sketch of the stream under flood conditions in your notebook.

14. Do you think the stream would look the same if the slope were steeper? Prop up the stream table to make the slope greater than before and pour water, slowly and steadily, from the watering can. Describe any differences you see in channel development or particle movement from the previous channels created at a shallower slope.

15. What would the landforms in the stream table look like if two or three watering containers made streams at the same time?

16. Find out by pouring water at the same time from two or three different watering containers. Do stream channels merge?
Are some channels abandoned?
Are flood conditions reached quickly or not at all?
Are the deposits at the mouths of the streams large or small?
Describe what you see and make a detailed sketch in your notebook.