

Name: _____

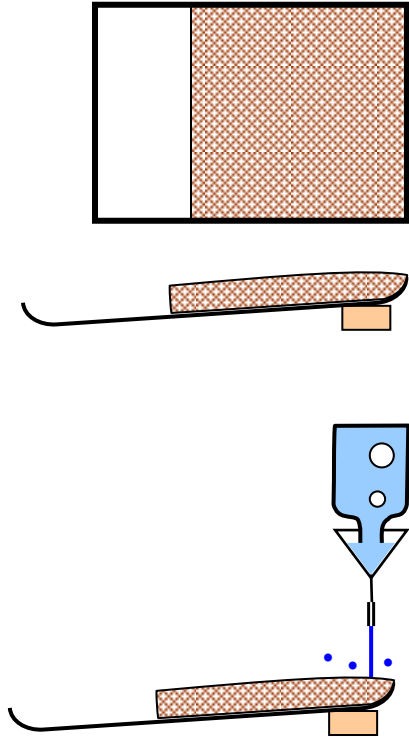
Stream Tray Activity

Put a layer of wet sand on the bottom of a tray.

Place the tray in a plastic tub and elevate the sandy end by placing it on a block.

Fit the stem of a funnel with a short piece of rubber tubing. Close the tubing with an adjustable clamp. Set up a stand to hold the funnel so that it drains into the headlands of the sandy tray.

You don't have to do this next part, but it's really neat if you have the equipment. Arrange additional clamps or brackets to hold a rigid bottle inverted above the funnel, so that the mouth of the bottle is below the mouth of the funnel. Place the funnel in the stand. Fill the bottle with water. Swiftly invert the bottle, pouring it into the funnel and securing it in its bracket. The bottle will drain until the water level in the funnel reaches the lip of the bottle. (Cool if it works.)



Adjust the clamp on the rubber tubing to admit a gradual flow of water. It will permit a lighter or heavier flow of water depending on its setting.

Where does the stream erode material?

Where does the stream deposit sediment?

Where do erosion and deposition occur when the stream's discharge changes?

- Lower discharge (dry spell):
- Increased discharge (flood):

Has your stream created an alluvial fan? If not, find conditions to make one. Describe the conditions and the fan.

Has your stream created a delta? If not, determine what conditions must be present to form one and set them up. Describe the conditions and the delta.

How does the delta change with time? Give it plenty of time. Provide the stream with more material to erode if necessary.

Has your stream developed a meander? If not, arrange the necessary conditions. (You may need to work at this.) Show me the meander. What conditions create the meander?

Does the meander change with time? In what ways does it change?

Can you find conditions to make a braided stream? What are they?

Can you find conditions to make a V-shaped valley? What are they?

When you are done, carefully drain as much of the water away from the sand as you can. Strain and collect the water in a bucket. Place the damp sand in a tub to dry. Remove all the sand from your tray and plastic tub before washing them. Do not allow any sand into the sink! Wash, rinse, and drain your tray and tub.