

Mini-Wetland: A Model Filter System

STATION #5

Directions:

1. Predict what will happen to the dirty water as it flows through the system.
2. Turn the bottle (top half, without cap) upside down to make a funnel.
3. Line the funnel with a filter paper and then layer pieces of sponge, sand, pebbles and soil.
4. Nestle this filled funnel inside the bottom half of the cut away bottle.
5. In the pail, place one cup of water and 1 tablespoons of soil. Mix together.
6. Pour this solution into the funnel top.
7. Allow the water to filter through the top bottle into the bottom bottle.

Think about...

- What happened to the water after it filtered?
- Would the results be similar if food coloring was added to the soil-water mixture?
- How does this model represent the estuary?
- How does the estuary help prevent pollution from entering the ocean?



Purpose: Follow step by step directions to make a model and identify how it compares to an estuary.

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Needed Materials:

- 2-1 liter plastic bottles for each model, cut top third off one bottle, and bottom third off of other.
- Sand
- Soil
- Sponges
- Filter paper
- Pail for mixing water and soil
- 1 cup capacity measuring cup
- Water
- Container or place to dispose of discarded soil, sand, pebbles, water, filters

Post-note: At this station we had, Lewis Wilcox, a representative from our local water treatment center to explain how our area household water is treated.