



Model a Marsh

Procedure

- 1. Use Models** Work with a partner. Use clay to form a smooth, gentle slope that covers about one-third of a rectangular pan. The clay should be highest at the edge of the pan and slant downward toward the middle. The clay slope models land that surrounds a marsh. Sprinkle 2 spoonfuls of sand over the clay to represent topsoil and any harmful materials in topsoil. **Safety:** Wear goggles.
- 2. Measure** Use scissors to cut a damp sponge to fit in the space in the middle of the pan. Leave one end of the pan empty. The sponges model a marsh. The empty end of the pan represents a bay near the marsh. **Safety:** Be careful when using scissors to cut the sponge.
- 3. Observe** Slowly pour about 100 mL of water over the clay. Watch how the water moves. Keep pouring until water begins to fill the empty end of the pan. Observe and record what happens as the water moves over the slope, through the marsh, and into the bay.

Name _____ Date _____

Conclusion

1. **Infer** How does a marsh act as a filter?

2. **Hypothesize** How do you think this “filter” helps living things in the bay?

Experiment Model what would happen to the bay if there were no marsh. Replace the sponge in your pan with more modeling clay. Add more sand and pour water over the clay. What happens to the sand?

Guided Inquiry
