Wetlands and Hurricanes

1 First, describe what the steam plume coming out of the kettle's spout looks like. Predict the effect on the steam plume when your teacher places different materials over the kettle's spout. Say why you think each prediction will happen.

Steam Plume Description: _____

Materials	Your Prediction	Why do you think this will happen?
Material #1		
Material #2		
Material #3		

2 Record the effect on this plume of the different materials over the kettle's spout.

Materials	Effect on the steam plume
Material #1	
Material #2	
Material #3	

3 Questions:
(Answer the following questions on a separate sheet of paper.)
- What kind of wetlands do the coarse-meshed materials represent?
- What kind of wetlands do the fine-meshed materials represent?
- Why did the fine-meshed materials weaken the steam plume?
- Why do healthy wetlands help protect a coastal area from hurricanes?

4 Hurricanes die out when they travel inland because, when over land, they are no longer supplied with the warm, energy-rich, moist ocean air. In this kettle hurricane model, what could you do to the model to represent what happens when a hurricane travels inland?

5 What are this model's strengths in representing hurricanes and the effect of wetlands? What are its limitations?