Activity: How Do We Clean Up an Oil Spill?

Summary
In this activity, students simulate an oil spill and test different materials' abilities to "clean" the oil spill.

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Name _____
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Data and Observations

Table 1: Freshwater and Simulated Ocean Water Observations

	Freshwater	Simulated Ocean Water
Noncontaminated		
Contaminated		
Paper towel		
Cotton ball		
Wash cloth		
String		
Nylon pot scrubber		
Sponge		
Styrofoam cup		

Garden peat moss		
Panty hose		
Aquarium net		
Saw dust		

Table 2: Observations of oil added to different soil substrates	
Soil	**Observations**
Fine sand	
Med. sand	
Coarse sand	
“Mud”	
Potting Soil	

AnalysisAnalysis

Based on your observations recorded above, answer the following questions:

1. How is fresh water/ocean different from tap water?
2. How would you pick up the oil-contaminated material in a "real" oil spill in fresh water/the ocean?
3. How would you dispose of the oil-contaminated material in a real oil spill?
4. Of the sorbents you tested, which one worked the fastest? The best?
5. What other materials could you use as sorbents?
6. Are the results of the experiment different when you use fresh water instead of an ocean?
7. Which soil absorbs the most oil?
8. Which soil repels the most oil?
9. Which soil would be the easiest to clean?
10. Which soil would be the hardest to clean?