Matter Of Trust
Join Eco - Enthusiast
for **Renewable Resources**

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Clean Wave of the Future

Overview:

- As a classroom, students and the teacher discuss causes, frequency, effects of, and cleanup methods of an oil spill.
- In groups, students make a typical natural fiber "boom." Then they test it against a store-bought synthetic version *or* against their own redesigned natural fiber boom. In either case, they must follow the steps of the scientific method.
- Groups write science reports.
- Groups present findings to the class.

Part 1: Handout and Classroom Discussion

1. Discuss oil spills: What are the sources of oil spills? How often do they occur? What are the environmental impacts of oil spills? How are oil spills cleaned up?
2. Watch the videos of hair/fur/waste fleece booms soaking up motor oil (or spend a day doing the classroom demo).
3. In a class, discuss the pros and cons of natural fiber booms. Compare with other oil spill cleanup methods. Discuss the social, economic, and logistical consequences of using booms made of waste fiber rather than synthetic materials.
4. Discuss/review the experimental design and the scientific method.

Part 2: Group Activity

1. In groups, students make a typical natural fiber boom (see handout).
2. They follow the steps of the scientific method to test the efficiency of the boom. They may test the typical natural fiber boom against a store-bought synthetic boom, "sock" or "pad"(available at auto-supply stores) *or* against their own redesigned natural fiber boom. Or they may test a new method of constructing natural fiber booms against the method demonstrated in our video.
3. Write science report, including Abstract, Introduction, Methods, Results, and Discussion/Conclusion.

Part 3: Presentations

1. Each group presents findings to the class.