



Oil Spill Clean-Up!

The energy we use to power and manufacture our lives often comes from burning petroleum, also known as crude oil. Petroleum can spill into surrounding ecosystems while being refined or transported, with devastating effects. In this activity, you will simulate an oil spill and create your own strategy for cleaning it up.

Materials

Oil Spill worksheet (page 3)
Large plastic tub
Water
3-4 tablespoons olive oil
Habitat items:
rocks or clay
sticks
moss, lettuce, or other plants
feathers, furry fabric, or toy animals

Clean-up tools:
12" pieces of string
sponges
cotton balls
spoons
dish detergent
optional: eyedroppers
Optional: paper towels

Directions

1. **Print** the Oil Spill worksheet (page 3)
2. **Create your habitat:**
 - a. **Place** rocks or clay in the plastic tub to form an island tall enough that it will be partly out of the water when the tub is filled.
 - b. **Add** "plants" (sticks, lettuce, moss, etc) and "animals" (feathers and fake fur). Some can be on the island you made, but most should be in the water.
3. **Fill your tub** with a couple inches of water.



4. **Pour** the olive oil over your island, water, and habitat items to simulate an oil spill. Often, spills occur in the ocean from ships or underwater pipes and the oil is brought to shore by waves and currents.
5. **Observe and record** what you notice on your Oil Spill worksheet. How is each material reacting with the oil?
6. **Use** each cleaning supply item to remove or separate oil from the rocks, water, and habitat items. What do you notice?
7. **Record** how each cleaning tool works on your worksheet. Were some methods and cleaning supplies better to clean certain materials than others? Did what worked for rocks also work for feathers?
8. **Imagine** that instead of craft materials, oil spilled onto the fur and feathers of real animals. Oil can ruin fur's ability to keep an animal warm and undo the feather's ability to be waterproof, exposing animals to harsh elements. Whales and dolphins can accidentally breathe in oil when coming to the surface, and many other animals, including sea turtles, may accidentally eat or drink the oil. What other effects might there be of both the spill and the cleanup? At this time, burning fossil fuels like crude oil is still the primary way to make and power many things in our daily lives, from making plastic products to fueling cars. What can we, as humans, do to avoid these problems in the future?



Slippery Shores: Oil Spill Worksheet

Name: _____

Use this table to record how the habitat materials interact with the oil.

Material	Water	Rock	Feather	Stick	Fur	Plants
Reaction with Oil						

Use this table to evaluate each of the cleaning tools.

Cleaning Tool	Pros	Cons	What habitat material does it clean the best?	What effect does it have on the environment?
String				
Sponge				
Cotton Ball				
Spoon				
Dish Soap				
Eyedropper				