Camp Fire
MINNESOTA

My nature connection

OIL SPILL CHALLENGE

GRADES: 3+
TIME: 50-60 min.

THINKING ABOUT OIL SPILLS

What is an oil spill? It's an accidental release of oil into a body of water (sometimes land) from a tanker, offshore rig, or underwater pipelines.

ACTIVITY

INTRODUCTION

To start the setting, begin a discussion about the BP oil spill disaster of 2010. Pictures can help children connect to the real world and challenge their thoughts. This lesson includes supplementary photos and information regarding the BP Oil Spill that you can review as a family.

Each child will need to clean up "oil" from a simulated oil spill disaster that includes feathers or toy animals to represent marine life. The learning objective is to increase understanding of an oil spill disaster and environmental consequences.

SET-UP

Grab a bucket or fill your sink with water. Next, add some feathers and or plastic animal toys to the water. Next, mix the cocoa or kool-aid mix with the oil to create a simulation of oil. Finally, "spill" the oil into the water, making sure to drench the feathers and or plastic toys.

WHAT YOU'LL NEED
Cotton Balls
Container or Sink (fill with water)
Sponge
Vegetable Oil 1/2 Cup
Spoons
Dish Soap
Cocoa Powder or Kool Aid Powder (2 tbsp)
Fake Bird Feathers (5-10)
Plastic Animal Toys

SETTING
Somewhere that can get messy. Lay down towels or newspaper under container!

OIL SPILL CHALLENGE

First, start with this prompt:
"There has been a major oil spill in the Gulf of Mexico. Your engineering company has been tasked with cleaning up a major oil spill disaster. You can only use the provided materials to clean up all the oil from the feathers and from the water. Place all collected oil into the provided container."

Set a timer for 5-10 minutes

As a family, have some fun with it! Make sure everyone helps clean the oil from the feathers and water. The goal of this "challenge" is to show just how hard It Is to clean up oil from water. It takes a lot of team work and materials to clean up oil. Be sure to remind each other to keep a mental note.

If you struggle, remember that you can use the sponge up oil, or use a spoon to get oil off of the surface. For feathers, you can lie It on the newspaper or table and use the sponge with some dish soap to wipe off "oil."

CONNECTING WITH QUESTIONS

- How hard was it to clean up the oil?
- What worked to clean the "oil" up, and what didn't?
- How did this challenge make you feel?
- How can you do your part to help in taking care of our bodies of water?

TIP/NOTE:
Be sure to not get mixture on furniture or clothes, as It could stain. If child doesn't like messes, use gloves and apron to stay clean.

REMEMBER
All of the materials are non-toxic!

Oil spills leave lasting effects and are hard to clean up.

Marine biologists, scientists, and engineers are still studying the effect the BP Oil Spill had 10 years later.
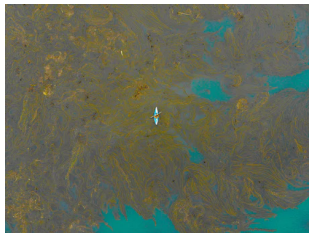
Oil and water DO NOT MIX! (the molecules are packed differently and water is more dense than oil).

- On April 20, 2010, an explosion at the site of a well caused the Deepwater Horizon Oil Spill (also known as the BP oil spill). The spill is considered one of the largest environmental disasters in American history.
- 16,000 miles of coastline were affected (Texas, Louisiana, Mississippi, Alabama, Florida)
- 800 million gallons of crude oil spilled into the Gulf of Mexico (60,000 gallons/day)
- The spill gushed for 87 days
- Over 30,000 people responded to the spill to help clean animals, shoreline, and water
- 6814 dead animals, including 6104 birds, 609 sea turtles, dolphins, other 100 mammals and one reptile were collected.

Aerial photo of BP oil spill

Birds covered in oil

ADDITIONAL RESOURCES

https://ocean.si.edu/conservation/pollution/gulf-oil-spill

https://youtu.be?MEb7nnMLcaA

TELL US WHAT YOU THINK!

take a short survey at:
campfiremn.org/mynatureconnection

or here:
Kids Survey - click here
Teachers/Parents Survey - click here