

## Little Energizers

## **ENGINEERS AT WORK:** HOW DO WE RETRIEVE CRUDE OIL?

## YOU WILL NEED:

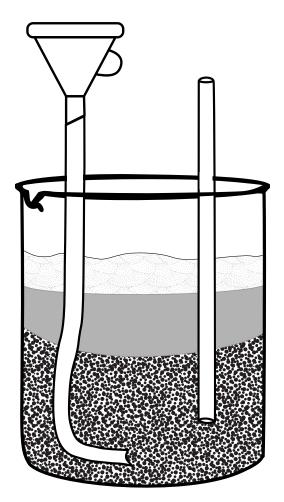
- 1 small funnel with attached tube (like <u>this</u>)
- 1 tall glass container or beaker
- 1 straw (can be plastic, tin, paper, etc.)
- Gravel to fill the conatiner baout 2/3 full

## INSTRUCTIONS:

- 1. Place the funnel and tube inside of the glass container with the funnel resting outside of the container.
- 2. Fill the container about 2/3 full of gravel, making sure that the gravel surrounds the tubing.
- 3. Insert the plastic straw into the gravel to represent the drilling hole.
- 4. Tightly pack the clay on top of the gravel and around the straw, making sure that it seals the edges of the glass container.
- 5. Pour the sand on top of the clay to represent the Earth's crust.
- 6. Slowly pour the dyed water, which represents the oil, into the funnel.

Watch as the liquid fills the empty spaces in the gravel. As you pour, the liquid will begin to spill over through the straw. This is how engineers dig for oil!

- A fist-sized mound of clay or Play-Dough
- 1/2 cup of sand
  - 4 cups of water Optional: Dye the water with food coloring to make it more easily visible.



For a video demonstration, visit: <u>https://www.youtube.com/watch?v=xCuy3I-ZfjY</u>