

**Science Lesson Plan****Grade Level:** 4**Fossil Fuel Activity****Purpose:**

This experiment is to demonstrate the creation of fossil fuels in the Earth's crust.

**Estimated Time:**

20-30 minutes

**Materials needed:**

- Empty water or pop bottle (one for each group)
- Alka-Seltzer or other anti-acids
- Balloons (one for each group)
- Water
- Worksheet (one for each student)

**Indiana State Guidelines:**

4.3.14 Explain that energy in fossil fuels comes from plants that grew long ago.

**Procedure for Experiment:**

After the students are divided into groups of three or four, have them read the worksheet and answer any questions they have. Next have them obtain an empty bottle, a balloon, and an Alka-Seltzer (one large one or two small ones). Have the groups fill their water bottles about two-thirds of the way full of water (the more water in, the better the experiment will work). Next, have the students stretch the balloons out, and blow them up a little. When the balloons have been stretched out, have one student hold the balloon, while another student is going to put the Alka-Seltzer into the bottle (large tablets may need to be broken in half). As soon as the students have dropped the tablet into the bottle, have another student put the deflated balloon over the opening of the bottle. The students should watch the Alka-Seltzer to see what happens to it, and what happens to the balloon. After the Alka-Seltzer is dissolved and the students have answered their questions, they can dump the water down the drain, and throw away the balloons and bottles.

**Follow Up:**

Explain to the students that as the Alka-Seltzer dissolved, it produced a gas that inflated the balloon. Tell them that this is similar to how buried plants and animals break down and create pockets of gas in the Earth. This is how the natural gas was formed that was found under the town of Eaton.