

Are Our Gas Stations Causing Soil Pollution?

By observing plant life, use this experiment as a basis for the Hypothesis on whether the presence of a gas station is creating soil pollution

MATERIALS NEEDED:

- * Tablespoon
- * Sterile lab dishes, small
- * Labeling tape
- * Marker
- * Water
- * Universal pH indicator and color table
- * Plastic zip-top bags
- * Plastic Dropper
- * Journal to record your results



EXPERIMENT PROCESS:

- *Collect 1 tablespoon of soil samples from the immediate area surrounding 4 different gas stations.
- *Store the samples in separate plastic bags and label each with the location where you collected them.
- *Collect 1 tablespoon soil samples from areas away from gas stations. Try to get soil samples from urban, suburban and countryside areas. For this experiment, the more samples you get, the better.
- *Put a pea-sized portion of each sample into a separate lab dish. Label the samples carefully.
- *Use the plastic dropper to add drops of water until the sample is barely covered with water.
- *Add 2 to 3 drops of universal pH indicator to each sample.
- *Observe your samples and use the color table that comes with the indicator to record the pH of each sample.

RESULTS:

The results of your test will depend on the environmental regulations of your state, city or town, and on how well gas stations comply. Newer gas stations should not have any effect on the soil, but older gas stations may have an effect.