

Experiment title: Pollution

Grades: Kindergarten- 3rd grade

At a very early age your child is learning terms like “pollution”, “recycle”, “organic” and “Earth Friendly”. Because of this early, environmentally-conscious outlook, kids tend to look at our planet in a rather protective way.

This experiment helps your child become aware of what happens when pollution enters our air and water.

Research you will want to study up on what happens to vegetation when our air is polluted. Also you will want to research what causes Acid rain. You'll form your hypothesis from this research.



Materials list:

- 3 1 quart jars with lids
- Measuring cup
- 3 small potted green plants (They need to be the same.)
- Vinegar or lemon juice
- 6 labels or strips of masking tape.
- Pen or marker
- Spiral or composition notebook
- Pencil
- Crayons.

Procedure:

1. Before you begin the experiment, use your pen and the labels, or masking tape to label each jar and each plant. The first plant and jar should be labelled “A little acid”. The second Jar and plant should be labelled “A Lot of Acid”. The third jar and plant should be labelled “Plain water”.
2. Next you will need to mix the water for the plants. The vinegar, or lemon juice, is an acid just like the acid that gets in the rain drops from the pollution in the air.
3. Mix the water for the plant that will get “A little acid” by measuring $\frac{1}{4}$ cup of vinegar or lemon juice and placing it in the jar labelled “A little acid.” And fill the rest up with tap water.
4. For the plant receiving “A lot of Acid”, pour 1 cup of the vinegar or lemon juice into the jar and fill the rest with tap water.
5. For the plant receiving just plain water fill the jar with tap water.
6. This is the water you will use to water your three different plants. At this point all three of your plants should be green and healthy. You will want to make sure that all three of your plants receive the same amount of sunlight so have them all in the same place.
7. Water each plant (being sure to use about $\frac{1}{4}$ of the jar each time at the most.) with the water from the corresponding jar.
8. Every two or three days continue to water the 3 plants from the original jars. You can mix more water if you need to. Make sure to take notes of and discuss which plant looks best, and which

one looks the worse. You can take pictures to include on your display and draw pics and write notes in your science journal.

9. Water and observe the plants for at least 1 week. Throughout the experiment write down which changes you notice. Why do you think this is happening? Did the experiment fit your hypothesis? Your thoughts and observations will become part of your conclusion.