

Reading Selection

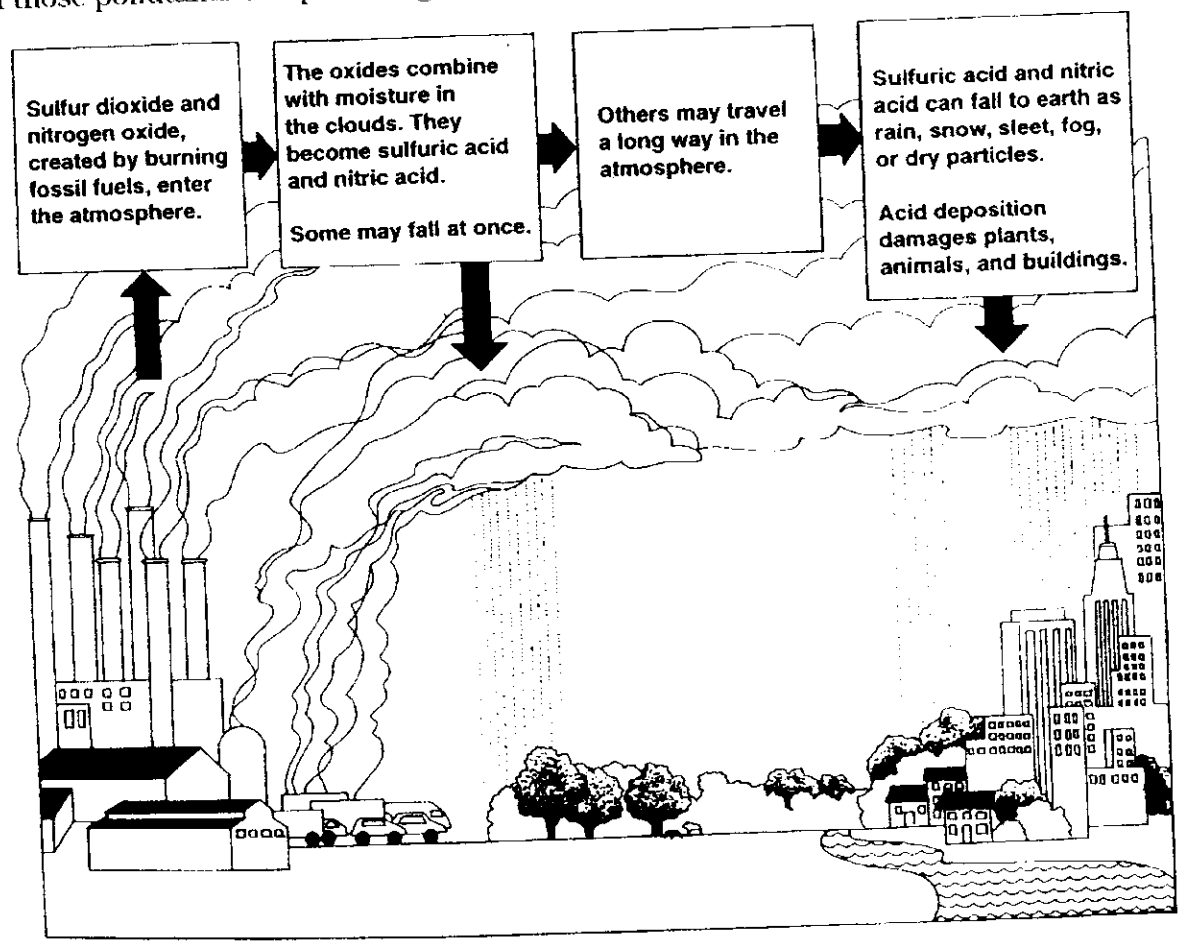
The Story behind Acid Rain

There is a lot of talk these days about acid rain. Do you know what acid rain is? Do you know if humans are involved in causing it?

The problem begins when we burn coal, oil, and gas, which are called **fossil fuels**. We burn these fuels in our cars, homes, or factories. Burning fuels release sulfur and nitrogen, which chemically combine with oxygen in the air. In this new combined form, the chemicals are known as **sulfur dioxide** and **nitrogen oxide**. Sulfur dioxide and nitrogen oxide are harmful to the environment and are called **pollutants**. (A pollutant is anything that can harm living organisms when too much of it is released into an ecosystem.) Both of those pollutants escape through

smokestacks, chimneys, and tailpipes and climb skyward as the fuel burns. Over 20 million tons of each of these two pollutants move into the atmosphere each year.

Sometimes these pollutants fall to the earth with dry particles, such as dust. Other times these pollutants become trapped by moisture in the clouds. When these pollutants chemically combine with water, they form new chemicals called **acids**. As you can see in the illustration, these acids (**sulfuric acid** and **nitric acid**) fall to earth in rain, snow, sleet, hail, or fog. This is polluted rain, called **acid rain** or **acid deposition**. Acid deposition can damage plants, animals, and buildings.



How acid rain is formed