## Rain, Rain, Go Away! Acid Rain in Germany!

Every country on our planet faces environmental issues. Many of the environmental issues in Europe have come about because of poor practices in the past by local businesses. Industry has made many countries rich, but it has also had some terrible effects on the health of the Earth and people. In the first half of the 1900s, the former country of East Germany burned huge amounts of brown coal to produce electricity. When burned, brown coal gives off a gas called sulfur dioxide. This gas mixes with moisture in the air, so when it rains, the rain is contains dangerous chemicals such as sulfur dioxide.



## What are some effects of acid rain?



• Acid rain has taken a terrible toll on Germany's forests. Experts guess that more than 1/2 of Germany's trees have been damaged or killed.



• Acid rain pollutes/dirties-up rivers and lakes. Fish, as well as the plants and tiny organisms (fish food), are killed. No organisms (fish food) = fish have nothing to eat. \*Acid rain eats away at stonework buildings and statues. Experts say that some buildings and statues are wearing down at their surfaces. Some statues are hard to recognize.

## **Now What Happens?**

The acid rain in Germany is a concern for all Europeans and for people around the world. Brown coal is still Germany's main local source of energy, meeting 25% of the country's energy needs. Therefore, Germany has made strict changes and closed old, inefficient factories built before filters and safety features were required.



Germany's government has also put strict laws in place to reduce pollution. Factory owners are fined (have to pay) when they do not reduce the amount of sulfur dioxide their factories give off into the air. Cars must have a special converter added to filter the chemicals. The government is working to change over to less polluting fuels like natural gas and cleaner fuels. People are taking responsibility too by walking, riding bikes and mopeds, or taking the trains or subways to work. Today, improving the health of the Earth is a top issue in Germany.

In parts of Germany there are LEZ (limited emissions zones). Your car must be have inspection stickers showing how much emissions (pollutants) it puts out. Only certified cars can enter the LEZ zones. If you are caught without a sticker or if your sticker is not allowed, then you are fined.

THINK ABOUT OUR COUNTRY: What kind of government requirements does the United States have for car emissions? Do our cars have to have emissions testing? Stickers?