

Topic 5 Economic Symbols of Germany

Lesson 3 What are the causes and effects of acid rain and pollution?

Lesson Objective

The student will interpret map and statistical data to examine the environmental impact of industrialization in Germany

Materials and Resources

- Transparency 30 “Product Map of Germany” (from: Topic 5, Lesson 1)
- Handout 16 “Acid Rain and Air Pollution in Germany”
- Worksheet 22 “Effects of Acid Rain”
- Transparency 33 “Important Industrial Areas and Location of Mineral Resources”

Strategies

The ongoing strain on the environment is one of the central problems to which government and private citizens alike must devote energy as well as money. Tell students they are scientists studying the effects of industrialization on the environment. Ask students to complete **Worksheet 22 “Effects of Acid Rain”** by consulting the diagram and background notes on **Handout 16 “Acid Rain and Air Pollution in Germany”**. Have each student team up with two or three others to speculate about the problems posed by this type of pollution for people living in the United States. Once the worksheet has been completed and the class has discussed the answers, tell them that they have an opportunity of visiting three sites in Germany where they believe acid rain might be most severe. Based on **Transparency 33 “Important Industrial Areas and Location of Mineral**

Resources” and **Transparency 30 (Topic 5, Lesson 1) “Product Map of Germany”**, students may identify the three regions most likely to have this type of environmental pollution. Have them write a short paragraph that explains why they chose a particular geographic area to study, using evidence from the consulted materials to support their decision. Student answers will vary but may include the following:

- Northern Germany near Hamburg because of extensive livestock and grain production and oil drilling.
- The south-central region near Frankfurt because of major industrial areas, grain production and vineyards.
- The Ruhr-Region, around Essen because of mining and industrial centers.