

SUGGESTED SKILL

 *Scientific Experiments*

4.B

Identify a research method, design, and/or measure used.



AVAILABLE RESOURCES

- Classroom Resource > [AP Environmental Science Teacher's Guide](#)
- External Resource > [Environmental Literacy Council's AP Environmental Science Course Material](#)

TOPIC 7.7
Acid Rain

Required Course Content

ENDURING UNDERSTANDING

STB-2

Human activities have physical, chemical, and biological consequences for the atmosphere.

LEARNING OBJECTIVE

STB-2.H

Describe acid deposition.

ESSENTIAL KNOWLEDGE

STB-2.H.1

Acid rain and deposition is due to nitrogen oxides and sulfur oxides from anthropogenic and natural sources in the atmosphere.

STB-2.H.2

Nitric oxides that cause acid deposition come from motor vehicles and coal-burning power plants. Sulfur dioxides that cause acid deposition come from coal-burning power plants.

STB-2.I

Describe the effects of acid deposition on the environment.

STB-2.I.1

Acid deposition mainly affects communities that are downwind from coal-burning power plants.

STB-2.I.2

Acid rain and deposition can lead to the acidification of soils and bodies of water and corrosion of human-made structures.

STB-2.I.3

Regional differences in soils and bedrock affect the impact that acid deposition has on the region—such as limestone bedrock's ability to neutralize the effect of acid rain on lakes and ponds.