What is ACID RAIN? | Acid Rain | Dr Binocs Show | Kids Learning Video | Peekaboo Kidz

Questions and Answers

Factual Recall

Q: What causes acid rain?

A: Acid rain is caused when gases such as sulfur dioxide and nitrogen oxide react with the water and oxygen in the atmosphere and fall back to earth in the form of rain.

Q: What are the two main sources of gases that lead to acid rain?

A: Natural sources (e.g., rotting vegetation, erupting volcanoes) and human activities (e.g., burning fossil fuels, vehicle emissions, factory chemicals).

Q: What is the pH of normal rain?

A: pH 6 (slightly acidic due to dissolved carbon dioxide forming carbonic acid).

Q: What is the pH of acid rain?

A: pH 3 (significantly more acidic than normal rain).

Q: What happens when plants burn?

A: Sulfur atoms and carbon atoms in plants are released into the atmosphere as sulfur dioxide and carbon dioxide, which react with oxygen to form acid rain.

Q: What happens when nitrogen oxides are released into the atmosphere?

A: They react with oxygen and mix with rain water to form nitric acid, contributing to acid rain.

Analysis

Q: What are the effects of acid rain on aquatic environments?

A: Acid rain makes waters more acidic, leading to increased aluminum absorption from

the soil into lakes and rivers, making the water toxic for aquatic animals.

Q: How does acid rain affect forests?

A: Acid rain damages leaves and robs the soil of essential nutrients, making it difficult for trees to consume water and thrive.

Application

Q: What can we do to reduce acid rain?

A: Reduce the burning of fossil fuels and spread awareness about the issue.

Q: How does acid rain affect buildings and monuments?

A: Acid rain damages buildings and monuments, particularly those made of limestone and marble, due to the reaction between the acid and calcium carbonates in these materials.

