

Disasters!

Nuclear Explosion at Chernobyl

On April 28, 1986, engineer Cliff Robinson arrived at Sweden's Forsmark nuclear power plant. He was startled when a radiation detector went off as he entered his office. When he checked the radiation levels on his clothing, he could not believe his eyes. "My first thought," said Robinson, "was that a war had broken out and that somebody had blown up a nuclear bomb." What Forsmark had detected was a radioactive cloud from the city of Chernobyl—site of a Soviet nuclear power plant nearly 800 miles away.

One of Chernobyl's nuclear reactors had exploded, spewing radioactive dust across the region. It took two days for Soviet officials to admit that the explosion had occurred. The blast killed 31 people. No one is certain what toll accident-related diseases will take on the region's population in the future.

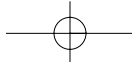
The Spread of Radiation from Chernobyl



Workers test radiation levels from a helicopter.

After the explosion, hundreds of thousands of workers helped in cleanup operations. Many were exposed to radiation and required emergency medical treatment.

The radioactive cloud from Chernobyl eventually spread over the entire Northern Hemisphere.



Serious health problems, such as thyroid cancer, have increased dramatically among children since the accident at Chernobyl.

A close-up of the damage at Chernobyl's Unit 4 reactor (left). The color image below shows the concrete and steel "sarcophagus," or enclosure, later built around the contaminated reactor.



GeoActivity

PLANNING A PRESENTATION

With a partner, use the Internet to research Chernobyl today. Plan a **multimedia presentation** about the disaster's legacy.

- Design charts, graphs, and maps that show the disaster's impact on public health and the environment.
- Include personal stories from individuals whose lives have been affected by the explosion.



RESEARCH LINKS
CLASSZONE.COM

GeoData

DAMAGE REPORT

- The Chernobyl plant is located about 80 miles north of Kiev, Ukraine's capital.
- The plant once employed nearly 9,200 people.
- On April 26, 1986, a poorly planned safety experiment led to the explosion at Chernobyl, which was made worse by a faulty reactor design.
- The reactor explosion was the world's worst civilian nuclear accident.
- The explosion contaminated around 100,000 square miles of land in Ukraine, Russia, and Belarus.
- Officials evacuated and resettled approximately 250,000 people from different towns around Chernobyl.
- Chernobyl continued to produce electricity until December 15, 2000, when officials finally shut down its last operating reactor.
- Costs related to the disaster have been estimated at over \$300 billion.