

10

Natural Disasters

Lesson Plan

Contents

- ▶ What are natural disasters?
- ▶ Floods
- ▶ Droughts
- ▶ Earthquakes
- ▶ Cyclones
- ▶ Managing natural disasters

Objectives

- ▶ Learning what natural disasters are: their various forms.
- ▶ Why do they occur?
- ▶ Are human beings responsible for causing or aggravating them in any way?
- ▶ Dangers of natural disasters.
- ▶ How to manage them: as an individual, as a community.

Teacher's Aids

- ▶ The internet, films, film clips, etc., are useful to show students the magnitude of natural disasters.
- ▶ Point out places on the map/globe where natural disasters have occurred: islands that will soon vanish due to rise of the sea level – Samoa, etc.; places where tsunamis have occurred – Japan, India, Indonesia; places where cyclones have occurred – USA, the Pacific Islands; floods – Europe, India, Bangladesh, China, etc.; earthquakes – India, Nepal, Chile, Pakistan, Afghanistan, China, etc.

Tips for Teacher

- ▶ Make the topic interesting, talking about other kinds of natural disasters too: Forest fires in the USA, India and Australia; volcanic eruptions in South America.
- ▶ Differentiate between natural and man-made disasters; and explain how natural disasters are sometimes aggravated by man's activities and thoughtlessness.
- ▶ Tell students about disaster management, which is now a full-time career too.

/// Gear Up and Background

- ▶ See the picture and discuss: what does 'CAUTION' mean here?
- ▶ What does 'contamination' mean?
- ▶ Do you think this caution refers to a possible natural disaster or a man-made situation?
- ▶ Is there any area in or near your house or school where you think 'CAUTION' should be written or which is 'contaminated'? Why?
- ▶ Read and explain the lesson: its background and the different disasters that occur around the world.
- ▶ Other natural disasters such as volcanic eruptions, forest fires and typhoons can also be discussed.

/// Floods

- ▶ What are floods?
- ▶ Causes of floods: rainfall, bad drainage, river overflow, melting of ice, tsunamis, earthquakes, cyclones, etc.
- ▶ Damage caused by floods to people, animals, property and environment.
- ▶ Precautions: flood warnings; water and provisions; plastic bags for food and clothes; boiled water, fresh food; switch off electricity; contact government agencies.

/// Droughts

- ▶ What is a drought?
- ▶ Causes of drought: lack of rainfall, irrigation, absence of natural sources of water.
- ▶ Damage caused by drought to people, animals, property and environment.
- ▶ Precautions: save water; rainwater harvesting; drip irrigation; dry farming; plant more trees.

/// Earthquakes

- ▶ What are earthquakes?
- ▶ Forecasting systems – seismology. Use of seismograph and readings on the Richter scale.
- ▶ Causes of earthquakes: movement of land, tremors, volcanic activity.
- ▶ Damage caused by earthquakes to people, animals, property and environment.
- ▶ Precautions : move to an open area; close to walls, under a heavy table or bed; away from windows, mirrors, ceiling fans, trees, electric poles, wires, etc.; use stairs, not lift; don't sit in vehicles.

/// Tsunami

- ▶ What is a tsunami?
- ▶ Causes of tsunami: underwater earthquake or volcanic eruption.

- ▶ Damage caused by tsunami to people, animals, property and environment.
- ▶ Precautions: move to higher ground; don't go near sea; instal warning system; seek help from government agencies.

/// Cyclones

- ▶ What is a cyclone?
- ▶ Causes of a cyclone: winds blowing at high speed.
- ▶ Damage caused by cyclones to people, animals, property and environment.
- ▶ Precautions: weather reports; move to safety; store food; check gas leakage; avoid flood water; be cautious of snakes; dry the electrical appliances; don't go near the sea; go out only after area is cleared and declared safe.