

Natural disasters

AWARENESS

Activity 1: Activate students' prior knowledge about extreme natural events.

Ask: What do you already know about extreme natural events? Have students brainstorm a list of extreme natural events around the world, such as:

- ▶ avalanches or landslides
- ▶ earthquakes
- ▶ bushfires
- ▶ flooding or drought
- ▶ cyclones
- ▶ tornadoes
- ▶ volcanoes
- ▶ tsunami
- ▶ severe thunderstorms, hail

Ask: What type is most likely to happen in our area?

Then look at the photo gallery of extreme natural events.

As you look at each photo, ask students if they or their families have ever experienced any of these conditions.

Invite volunteers to share their experiences.

Ask: How did you protect yourself? How do you think you could have been better prepared?

Activity 2: Have pairs write descriptions of extreme natural events.

1. Have pairs write descriptions of extreme natural events.
2. Divide students into pairs.
3. Show students photographs of natural disasters on the National Geographic Natural Disasters web page, <http://environment.nationalgeographic.com/environment/natural-disasters/>.
4. For each image, ask pairs to write two captions to describe the event the image shows.
5. Have pairs share their captions as you look at each photo as a class. As you look at each photo, ask:
 - ▶ What makes this event "extreme"?
 - ▶ What could be dangerous about this event?

Activity 3: Discuss how extreme natural events are the same and different

After students have looked at all of the photos, ask:

- ▶ How are some of the events the same?
- ▶ How are some of the events different?
- ▶ What effects on our lives could all of them have?

For example, students may point out that cyclones, tornadoes and thunderstorms all have strong winds and rain.

Avalanches and blizzards both have very cold weather. Ask: Which extreme natural event do you think is most dangerous? Why? What about for us here in Cairns?

Curriculum links

10-12	Science	ACSES005: Introduction to Earth systems Science Inquiry Skills	Interpret a range of scientific and media texts and evaluate processes, claims and conclusions by considering the quality of available evidence; use reasoning to construct scientific arguments
		ACSES098: Science Understanding; the cause and impacts of Earth hazards	Earth hazards result from the interactions of Earth systems and can threaten life, health, property or the environment; their occurrence may not be prevented but their effect can be mitigated
		ACSES099: Science understanding: the cause and impacts of Earth hazards	Plate tectonic processes generate earthquakes, volcanic eruptions and tsunamis; the occurrence of those events affects other Earth processes and interactions (eg ash clouds influence global weather)
		ACSES101: Science understanding: the cause and impacts of Earth hazards	Major weather system generate cyclones, flood events and droughts; the occurrence of these events affects other Earth processes and interactions (for example, habitat destruction and ecosystem regeneration)
		ACSES102: Science understanding: The cause and impact of Earth hazards	Human activities, including land clearing, can contribute to the frequency, magnitude and intensity of some natural hazards (for example drought, flood, bushfire, landslides) at local and regional scales
		ACSES103: Science understanding: The cause and impact of Earth hazards	The impact of natural hazards on organisms, including humans, and ecosystems depends on the location, magnitude and intensity of the hazard, and the configuration of Earth materials influencing the hazard (for example biomass, substrate)
	Geography	ACHGE012: Geographical Knowledge and Understanding Overview of natural and ecological hazards	An overview of the nature of natural hazards (atmospheric, hydrological and geomorphic) and ecological hazards
		ACHGE013: Geographical Knowledge and Understanding Overview of natural and ecological hazards	The concept of risk as applied to natural and ecological hazards
		ACHGE014: Geographical Knowledge and Understanding Overview of natural and ecological hazards	The temporal and spatial distribution, randomness, magnitude, frequency and scale of spatial impact of natural and ecological hazards at a global scale
		ACHGE015: Geographical Knowledge and Understanding Overview of natural and ecological hazards	The role of spatial technologies in the study of natural and ecological hazards

Experiment

Classroom resources provided by Cairns Regional Council

