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For ages 10+



The World Disasters Series

# Earthquakes, Volcanoes and Tsunamis

## Book I

Revised and Updated

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## Background Information:

# *Disasters*

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A disaster is a large scale, uncontrollable catastrophe that can cause human loss, suffering, displacement and chaos, both economic and social. Disasters have been occurring since the beginning of time and are categorised as either natural or man-made. Other disasters, known as personal disasters, usually cause pain and suffering and/or loss to individuals.

### *Some examples of natural disasters include:*

#### **○ Weather related disasters**

Tropical cyclones, lightning, tornadoes, hurricanes, drought and floods.

#### **○ Geological events**

Earthquakes, tsunamis, volcanic eruptions, fires, avalanches and landslides.

### *Some examples of man-made disasters include:*

#### **○ Aviation disasters**

Crashes, explosions, ground collisions.

#### **○ Nuclear disasters**

Contamination, explosions (Chernobyl).

#### **○ Maritime disasters**

Shipwrecks, collisions, oil spills.

#### **○ Chemical disasters**

Oil spills, gas leaks.

#### **○ Other man-made disasters**

Train collisions and derailing, bus collisions, building collapse, bridge collapse, disease outbreak.

### *Some examples of personal disasters include:*

Death of a family member, home burning down, theft of personal belongings, car accident, disease.

# Finding Out About Disasters

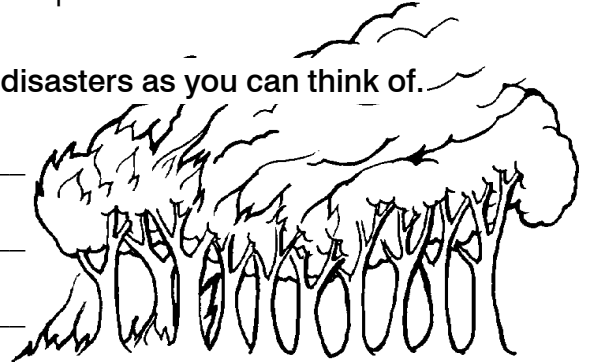
- **Disasters happen around the world at any time of the day or night. Some disasters include:** ●floods, ●cyclones, ●fires, ●earthquakes ...

- ☐ Continue this list adding as many different types of disasters as you can think of.

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- ☐ Discuss your list with your partner.

In your own words make up a definition of what constitutes a disaster.

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- ☐ Explain the difference between a **natural disaster** and a **man-made disaster**.

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- ☐ Organise the types of disasters from your list at the top of the page under these headings:

## Natural Disasters

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## Man-Made Disasters

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- ☐ You, or someone you know, may have experienced a personal disaster.  
Provide a brief outline of it.

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## Background Information:



# Disaster Watch:

People find out about disasters through a variety of media. Television and radio channels present news broadcasts, while the Internet is also a good source for up-to-the-minute information.

Newspapers provide articles, pictures and other information although it is sometimes easier to find more recent information via the television and Internet, as newspapers cannot be updated once they are printed.

Local disasters are more likely to be reported in local newspapers, while national and international disasters are more likely to be found in national newspapers. A large local disaster such as a tropical cyclone or flood destroying a town, is likely to be reported internationally depending on the amount of devastation the disaster causes.

### *Examples of recent international disasters (both natural and man-made) include:*

- In August, 2005, Hurricane Katrina devastated the gulf coast of the United States over a 160 km region. The storm surge caused severe and catastrophic damage in the states of Mississippi, Louisiana and Florida. At least 1,830 people lost their lives and many cities were 80% flooded and left without power for several days. The disaster has cost over \$US 81 billion and has been the most damaging and expensive natural disaster in the history of the United States.
- On December 26, 2004, an undersea earthquake took place in the Indian Ocean off the west coast of Sumatra in Indonesia. The earthquake registered a massive 9.3 on the Richter scale and triggered a series of devastating tsunamis that spread throughout the region, killing large numbers of people living in coastal communities across South and Southeast Asia. The areas affected included parts of Indonesia, Sri Lanka, India, and Thailand. At least 275 000 people died with thousands of others missing.
- On 17 August, 1999, an earthquake registering 7.4 on the Richter scale devastated the city of Izmit and the surrounding areas in Turkey. Approximately 16 000 people were killed, 27 500 were injured and more than 54 000 buildings were destroyed. Over 1000 aftershocks were felt in the area.
- In Taiwan, September, 1999, an earthquake measuring 7.6 on the Richter scale killed at least 1720 people and trapped 3000 in the rubble of collapsed buildings. Approximately 2000 aftershocks were felt, some as strong as 6.8 on the Richter scale.
- The train crash in West Bengal, India which left hundreds dead when two trains crashed in a head on collision on August 2, 1999.
- The canyoning disaster in Switzerland, which claimed the lives of 21 young adventurers, occurred on July 27, 1999.
- The tsunami in Papua New Guinea that occurred on July 17, 1998 resulted in the deaths of approximately 5000 people.
- The Thredbo landslide in which 18 people lost their lives (July 30, 1997).
- The collapse of the Maccabiah bridge in Israel where four people were killed (July 14, 1997).
- The TWA Flight 800 explosion July 17, 1996 which killed 230 people.
- The volcanic eruption of Mount Pinatubo in June 19, 1991 eruption affected more than 249 000 families or about 1.18 million people, including 847 deaths, 184 injuries and 23 missing.

# Disaster Watch

- Over the next few weeks collect information on any disasters that happen around the world. Create a wall chart or collect the articles in a scrap book. Use newspapers, magazines and the Internet as sources of information.

- ☐ Record each disaster in the table below and classify it according to its location. Make a tally of the newspaper articles related to each disaster.

<i>Local</i>	<i>National</i>	<i>International</i>
<i>Tally</i> ►	<i>Tally</i> ►	<i>Tally</i> ►

○ What type of disaster was most frequently reported? \_\_\_\_\_

○ Why do you think this was the case? \_\_\_\_\_

- ☐ On the world map below use different colours to show the different types of disasters.

<input type="checkbox"/> Cyclone	<input type="checkbox"/> Volcano	<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> Earthquake	<input type="checkbox"/> Flood	<input type="checkbox"/> _____	<input type="checkbox"/> _____



○ Which of these disasters do you consider to be the most devastating? \_\_\_\_\_

○ Give reasons for your answer. \_\_\_\_\_