## The impacts of a natural disaster

Discuss or write down some of the potential impacts of a natural disaster on the people affected.
Examples might include: - loss of life or limb

## - need for shelter

- lack of food or water
- need for medical care
- loss of income
- disruption to education



## 2. Washine line activity

1. Label the locations in the map
2. Organise the events in a chronological order 3. Organise the events from the cards into a sequence or continuum of which they feel would have had the greatest impact on people.

## oog lassroom

 learn more about Rachel's experience in Nepal in later sessions.Rachel wrote an article about the first few days after the earthquake had struck. She was fortunate to survive, but we will discover more about that later too.

## Discussion questions

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- Think about how you might feel if you were caught up in a natural disaster - how might you have been affected? How might you want to help others?

We slept in our clothes for several nights after the earthquake. I was wary when taking a shower or going to the loo! I was on edge all the time! A quick rinse in the shower and clothes nearby to grab, and get dressed quickly, all the time saying in your head, 'please don't start shaking now...' and then a sense of utter relief when you're dressed again and feeling ready to run! Utterly exhausting, and I quickly went down with a cold.

In the days following the earthquake it was hard to know what to do with ourselves. We felt pretty useless, and the growing pile of plastic water bottles and rubbish in our room became a visible reminder of this, and the fact that we were draining resources. I had a bad cold, and as much as I wanted to help load rice and lentils on to trucks to take into Gorkha and neighbouring districts with Paddle Nepal and co. I wasn't strong enough to lift most of the sacks, and I didn't want to pass the cold on to those who were going to be heading out to do physically and emotionally demanding emergency relief work. My way of helping became writing blogs, and answering questions from a few teachers back home.

## It made me fully appreciate how trained personnel are so valuable in managing relief response, and how everyone involved needs to 'bring

 something to the table. I could imagine that many people might flock to Nepal to help in the aid operation, and, although well-meaning, may actually start to be a drain on resources rather than being an asset. It's a tricky one to explain, given that local businesses were crying out for tourists now that most of Pokhara had cleared out!Classify these events into three main types of natural hazards:

1. Hydro-meteorological,
2. climatological
3. geophysical.

## Definitions

- Hydro-meteorological refers to short-term weather hazards, particularly those relating to water.
- Climatological hazards are longer term, such as drought.
- Geophysical refers to natural process involving the earth's surface.


## April 2015 Nepal earthquake

A major earthquake causes damage in a region near the capital. Buildings collapse, over 8,000 people are killed and more than 22,000 are injured.

## January 2015 North American blizzard

Snow emergency declared in six states and thousands of cancelled flights, also known as winter storm Juno.

## 2014-16

## California drought

Record breaking drought causes problems with water supply, and wildfires break out.

## October 2015

## Drought in Ethiopia

Crop failures are the result of below average rainfall, and over 8 million people need food assistance. Children suffer severe malnutrition.

## November 2013 Typhoon Haiyan

Over 6,000 people were killed, and more than 4 million people were made homeless by a strong storm which hit the Philippines. Recovery is still ongoing.

## May 2015 <br> Heatwave in India

Record breaking temperatures of almost 120 degrees Fahrenheit affect the city of Hyderabad. 2,000 people die as a result of problems caused by heat.

## April 2014 <br> Chile earthquake

A huge earthquake of 8.2 magnitude hits Chile, triggering a tsunami, but only a handful of fatalities are recorded.

## May 2014

Afghanistan landslide

A huge landslide hits the village of Abi Barik in NE Afghanistan, killing hundreds of people.

## September 2014 Iceland volcano

The Bardarbunga volcano starts erupting in Iceland. Unlike the Eyjafjallajokull volcano in 2010, there is no disruption to flights. The eruption lasts several months.

## October 2014 Eruption in Japan

A sudden eruption of Mount Ontake in central Japan occurs as a group of walkers are near the summit. 54 people were confirmed as being killed by the localised eruption.

## November 2015

 Indian rainfallThe 'rains of the century' flood the city of Chennai in India. Around 400 people are killed, and crops are damaged. Humanitarian aid is provided in large quantities.

## Hazard classification guide

| Meteorological | Hydrological | Climatological | Geophysical <br> Events |
| :--- | :--- | :--- | :--- |
| Events | Events | (Tectonic) Events |  |


| Storms, including <br> tropical storms, <br> mid latitude <br> depressions | Flooding, including <br> flash floods, river <br> flooding and storm <br> surge |
| :--- | :--- | :--- | :--- | Drought $\quad$ Earthquake $\quad$ Volcanic eruption


| Lightning strike, or |  | Wildfire, triggered |
| :--- | :--- | :--- | | Mass movement |
| :--- |
| local hailstorm |
| associated with |
| convection |$\quad$ Subsidence $\quad$| e.g. landslide or |
| :--- | :--- |
| rockfall |

## Which are hazards?

- Cyclone Yasi roars into Brisbane, Queensland, Australia. 2011 thousands in shelter, 60 scared backpackers, 175000 homes with no electricity.
- A hurricane passes over a remote, unpopulated region. 2011 no deaths
- Boscastle flood,UK. 2004. no deaths 100 homes and 5 caravans destroyed
- Eruption of Iceland's remote Grimsvotn volcano, does not affect airlines. 2011
- The Asian tsunami 2004. 226000 deaths plus disease and damage
- Civil war in Sudan, last 20 years approx 2 million died from subsequent famine
- Drought in Somalia 2011 UN warns of possible 750000 deaths
- Drought in south east of England 2011 no human deaths. People cannot wash cars or water gardens
- Earthquake in Pakistan 2005 74,698 deaths
- Earthquake in Japan 2011 exceeds 18,000 deaths and huge damage including a nuclear power station

Why are there more deaths in Africa, when more people are affected in Asia?

Worldmapper
Disasters are hard to define but refer to level of impact either to peoples' lives, homes or community, and that many factors influence this

## Disaster definition:

In the past it has been suggested that a hazard becomes a disaster if more than 20 people are killed and/or it costs more than $\$ 20$ million in damages. Discuss the impact for an earthquake could be greater in Haiti than New Zealand. Level of development, resources, location and accessibility, politics etc are all factors affecting a disaster's impact.

