



How can we help people affected by crisis so we can make a positive difference to their lives?

Challenge Brief

- In order to be successful in this challenge you will need to:
- Research ways to help people in need
  - Create ways to raise funds/collect donations
  - Communicate effectively with professional fundraisers
  - Design and make remarkable products to support our chosen charity
  - Raise awareness using various mediums



Natural Disasters

A natural event such as a flood, earthquake, or hurricane that causes great damage or loss of life.

Charity

The voluntary giving of help, typically in the form of money, to those in need.



Human / physical geography

Physical geography looks at the natural processes of the Earth, such as climate and plate tectonics. Human geography looks at the impact and behaviour of people and how they relate to the physical world.



- How does living near a tectonic plate affect everyday life?
- What is the best material to make a shelter?
- Where do most natural disasters occur and why?
- What happened to the people of Pompeii?

Glossary

Tsunami	an unusually large sea wave produced by a seaquake or undersea volcanic eruption.
Hurricane	a violent wind that has a circular movement, especially in the West Atlantic Ocean
Earthquake	a sudden violent movement of the earth's surface, sometimes causing great damage
Tornado	a strong, dangerous wind that forms itself into an upside down spinning cone and is able to destroy buildings as
Wildfire	a fire that is burning strongly and out of control on an area of grass or bushes in the countryside
Biome	a region of the earth's surface and the particular combination of climate general type of weather), plants, and animals that are found in it
Structure	the way in which the parts of a system or object are arranged or organized, or a system arranged in this way
Evaluate	to judge or calculate the quality, importance, amount, or value of something
Mantle	the part of the earth that surrounds the central core
Core	the centre of a planet:
Dormant	Something that is dormant is not active or growing but has the ability to be active at a later time
Pyroclastic flow	consisting of or relating to small pieces of rock from a volcano
Eruption	an occasion when a volcano explodes, and flames and rocks come out of it
Tectonic Plates	one of the parts of the earth's surface that move in relation to each other
Insoluble	(of a substance) impossible to dissolve
Transparent	If a substance or object is transparent, you can see through it very clearly
Conductor	a substance that allows heat or electricity to go through it
Evaporate	to cause a liquid to change to a gas, especially by heating
Permeable	If a substance is permeable, it allows liquids or gases to go through it





## Natural crises— What happened in Pompeii in 79AD?

The eruption of Mount Vesuvius in 79 AD caused devastation to its surrounding area including the total destruction of the city Pompeii. People, animals and buildings were destroyed. The city of Pompeii was forgotten about until the mighty rediscovery in 1748.

## What major natural disaster occurred in 2011?

In 2011, a tsunami hit Japan by force, but many other countries on planet Earth were also affected.

## Are all crisis natural disasters?

In 1986 a disaster occurred that show that some crises are man-made. The city of Chernobyl was eradicated when a nuclear power plant exploded causing the city to be inhabitable (even to this day!). There has been long term effects that have vibrated through the world due to this tragedy.

## How is the Earth structures into different parts?

The structure of the earth is divided into four major components: **the crust, the mantle, the outer core, and the inner core.**

## What are mountains?

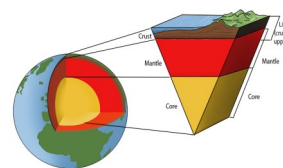
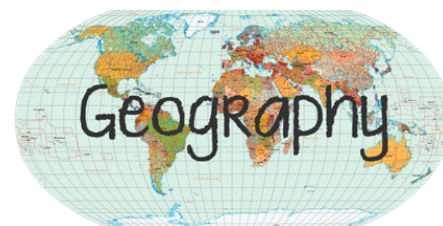
A mountain is **a landform that rises high above its surroundings.** Taller than a hill, it usually has steep slopes and a rounded or sharp peak. Mountains are rarely found alone.

## What are earthquakes?

An earthquake is **what happens when two blocks of the earth suddenly slip past one another.** The surface where they slip is called the fault or fault plane.

## What is a tectonic plate?

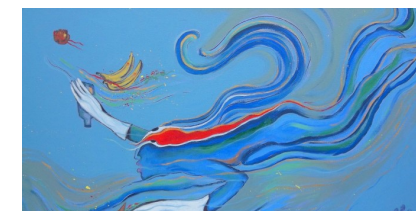
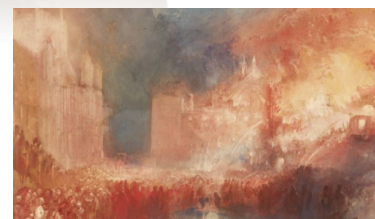
The Earth's surface is cracked into large pieces called tectonic plates. Tectonic plates slowly move, creating mountains, islands and even re-arranging continents.



## What is the Human Impact on crises?

**War is the biggest human impact to cause a crisis.**

**Can you think of a war that is happening at the moment? Do you know why it is happening?**



## What is art's role during times of crisis?

"During times of crisis," says Patrick Moore, director of The Andy Warhol Museum, "artists become conveyors of emotions that go beyond what can be read in textbooks or newspapers. Art plays a role, perhaps similar to religion, in that it **helps us understand things that are too big to understand.**"

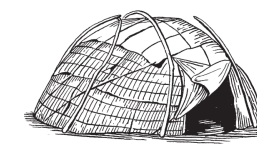


## What shelters can be used during a crisis?

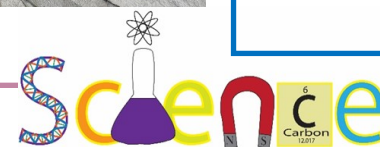
- Tents, tepee,
- Can you design and make your own shelter to assist in a crisis?
- Design-gather ideas from your knowledge gained, discuss materials to use, sketch and label designs
- Make-joining, assembling
- Evaluate- How well does it fit the brief? Would it be functional to protect someone? Is it strong enough to last?



tepee



wigwam



## Properties and Changes of Materials.

Different materials are used for particular jobs based on their properties: electrical conductivity, flexibility, hardness, insulators, magnetism, solubility, thermal conductivity

solid	liquid	gas
● rigid	● not rigid	● not rigid
● fixed shape	● no fixed shape	● no fixed shape
● fixed volume	● fixed volume	● no fixed volume
cannot be squashed	cannot be squashed	can be squashed



## Changes of Materials -



Key Knowledge		
Reversible changes, such as mixing and dissolving <b>solids</b> and <b>liquids</b> together, can be reversed by:		
<b>Sieving</b>  Smaller <b>materials</b> are able to fall through the holes in the sieve, separating them from larger particles.	<b>Filtering</b>  The <b>solid</b> particles will get caught in the filter paper but the <b>liquid</b> will be able to get through.	<b>Evaporating</b>  The <b>liquid</b> changes into a <b>gas</b> , leaving the <b>solid</b> particles behind.

## Changes of State



The **solid** melts.

The **liquid** freezes.

The **gas** condenses.

The **liquid** evaporates.



## Properties of Materials -