

OTHER COUNTRIES
TOPIC: Natural Disasters
TERM: Autumn 2



OVERVIEW:

This term, the topic will have a big geography focus where the children will learn about various natural disasters and will focus particularly on volcanoes, earthquakes and tsunamis. They will learn about the features of volcanoes and their formation as well as the features and key aspects of earthquakes. The children understand what an emergency is as well as why and how people around the world prepare for emergencies.

Books:

Natural Disasters DIY Survival Manual
(Main whole class text, 1 copy each)
 Escape from Pompeii by Christina Balit
 Flood by Alvaro F. Villa
 Street Beneath my Feet by Charlotte Guillain

Key concepts:

boundaries (continents, localities, nations) **cartography** (atlases, directions, distance, Equator, latitude, longitude, maps, scale, symbols) **change** (adaptation, sustainability) **climate** (climate change, climate zones, pollution, weather) **interdependence** (economy, trade) **movement** (migration, navigation, transport) **physical geography** (biomes, bodies of water, tectonics, topography) **resources** (energy, food supply, infrastructure) **settlements** (population, rural areas, urban areas)

Key skills:

Research, Describe, Observe
 Recognise (Name, Identify, Locate)
 Measure-Record-Present
 Understand (Explain, Interpret, Compare and Contrast)
 Conclude (Analyse, Opinion)
 Make Judgements (Debate, Evaluate, Predict)

Knowledge:

NATURAL DISASTERS

A disaster is a sudden accident which causes significant damage to the landscape or loss of life. They can be human disasters or naturally occurring disasters.

Types of Natural Disasters:

- Earthquakes:** When an earthquake occurs in the sea, the water is suddenly moved upwards, creating a huge volume of water which travels quickly towards land.
- Tsunamis:** A tsunami is a huge storm measuring up to 1000 miles across with winds reaching speeds of 75-200 mph.
- Volcanoes:** Volcanoes generally form on the boundaries of tectonic plates. Tectonic plates can move apart from each other (divergent), towards each other (convergent), or slide past each other (transform).
- Wildfires:** Common causes of wildfires include lightning, volcanic eruptions, heat waves, droughts, and climate change.
- Deforestation:** Deforestation is the removal of trees, which can lead to soil erosion, loss of habitat, and increased risk of flooding.
- Floods:** Floods can be caused by heavy rain, melting snow, or overflowing rivers.
- Industrial Accidents:** Oil spills in the sea can cause catastrophic damage to sea life. Nuclear radiation from nuclear power plants can contaminate large areas for many years.

Volcanoes & Earthquakes:

Volcanoes: A volcano is a mountain with a hole in the top called a crater. Magma (molten rock) comes out of the crater. Volcanoes can be active (erupting) or dormant (not erupting).

Earthquakes: An earthquake is a sudden movement of the Earth's crust. It is caused by the movement of tectonic plates. Earthquakes can be measured on the Richter scale.

Plate Tectonics: The Earth's crust is made up of several large pieces called tectonic plates. These plates move around the Earth. They can move apart, towards each other, or slide past each other.

Key Vocabulary:

- Active volcano
- Dormant volcano
- Crater
- Magma
- Lava
- Earthquake
- Tsunami
- Deforestation
- Flood
- Industrial accident

MOUNTAINS, VOLCANOES AND EARTHQUAKES

Mountains: Mountains are formed by the collision of tectonic plates. They can be formed by the folding of the Earth's crust or by the pushing together of tectonic plates.

Volcanoes: Volcanoes are formed by the movement of tectonic plates. They can be formed by the collision of tectonic plates or by the pushing together of tectonic plates.

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- Tsunami
- Deforestation
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- Industrial accident

Assessment:

NATURAL DISASTERS

Mini-Quiz #1

Name: _____ Date: _____

1) What is caused when an earthquake erupts in the sea?
 a) tsunami
 b) volcano
 c) flood

2) What is given to broken stone, bricks and concrete caused by destruction?
 a) rubble
 b) tectonic plates
 c) eruption cloud

3) When was the Hindenburg Airship Bomber?
 a) 1935
 b) 1936
 c) 1937

4) Where is magma stored under a volcano?
 a) core
 b) crater
 c) chamber

5) What is causing oxygen to decrease on Earth?
 a) deforestation
 b) global warming
 c) industrial accidents

6) What can lightning and droughts cause?
 a) wildfires
 b) earthquakes
 c) hurricanes

7) What speeds can hurricanes reach?
 a) 75 mph
 b) 100 mph
 c) 200 mph

8) What word is used to describe when tectonic plates move apart?
 a) converge
 b) diverge
 c) transform

Total Score _____ out of 10

MOUNTAINS, VOLCANOES AND EARTHQUAKES

Mini-Quiz #1

Name: _____ Date: _____

1) What is formed when two tectonic plates converge and push themselves against?
 a) fold mountains
 b) fault block mountains
 c) dome mountains

2) How much do tectonic plates move per year?
 a) 1-10 cm
 b) 1-10 m
 c) 1-10 km

3) What is a volcano rock made the Earth called?
 a) ash
 b) magma
 c) lava

4) What is the core of the earth made of?
 a) gold and silver
 b) nickel and iron
 c) rock and soil

5) What is the tallest mountain range in the world?
 a) Alps
 b) Andes
 c) Himalayas

6) Which part of a volcano does the volcanic bomb erupt from?
 a) crater
 b) vent
 c) magma chamber

7) What is the opposite of an earthquake?
 a) the strongest part
 b) the weakest part
 c) the total area

8) What word is used to describe two plates move apart?
 a) converge
 b) diverge
 c) transform

Total Score _____ out of 10

New vocabulary:

avalanche, tectonic plates, drought, evacuation, floods, magnitude, monsoon, phenomenon, Richter scale, destruction, seismograph, tornado, earthquakes, parallel, tsunamis, hurricanes, volcanoes, boundaries, magma, erupt, converge, wildfires, eruptions, heat waves, droughts, climate change, volcanic bomb, ash, rock, gas, solidified, lava layers, significant, damage, warnings, damage assessment, restoration, construction, crust, mantle, molten rock, tremor, plates, liquid, lava, eruptions, igneous rock, sedimentary rock, metamorphic, Ring of Fire, shockwaves.

Knowledge:

Describe and understand key aspects of: physical geography, including: climate zones, volcanoes and earthquakes.

Focus 1:

Natural disasters

What are natural disasters?
What's the difference between natural and human disasters?
What is the earth made of?

Focus 2:

Volcanoes

How are volcanoes made?
Where in the world are volcanoes?
What happens when a volcano erupts?
How do volcanoes affect people's lives?
Are all volcanoes dangerous?
The eruption of Vesuvius in Pompeii

FOCUS 3:

Earthquakes

How does an earthquake occur?
What happens when an earthquake occurs?
How are earthquakes measured?
What is it like living in an earthquake zone?
How can we protect against earthquakes?

FOCUS 4:

Tsunamis

What is a tsunami?
How are tsunamis formed?
What causes tsunamis?

FOCUS 5:

Why and how do people around the world prepare for emergencies?

What is an emergency?
How can people be better prepared for an emergency in the home or at school?
What makes a situation serious or unsafe?
How do charities prepare for disasters?

ART:

Inspired by our topic – Natural Disasters

In Art lessons, the children will use their sketch books to explore their ideas, produce creative work and record their experiences. The children will discuss and explore volcanic artwork inspired by the work of artist Margaret Godfrey. Then the children will recreate their own piece of artwork in the style of Margaret Godfrey. This will help build their understanding of the structure of a volcano through creation of layered artwork.

National Curriculum:

- to create sketch books to record their observations and use them to review and revisit ideas
- to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay
- about great artists, architects and designers in history