

Geography Home Learning Booklet

Year 7

A Dangerous World

Name _____

Tutor Group _____

Teacher _____

Given out: Monday 13 January Hand in: Monday 20 January

Parent/Carer Comment

Staff Comment

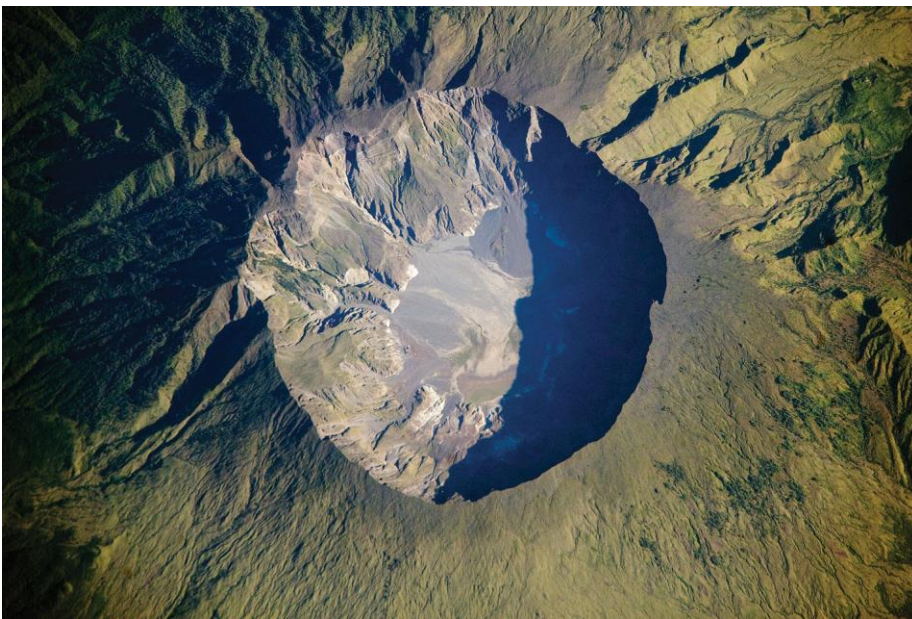
Target

What is the largest eruption in history?

The deadliest eruption in recorded history was the 1815 explosion of Mount Tambora in Indonesia. The blast was one of the most powerful ever documented and created a caldera—essentially a crater—4 miles across and more than 3,600 feet deep. A superheated plume of hot ash and gas shot 28 miles into the sky, producing numerous pyroclastic flows when it collapsed.

The eruption and its immediate dangers killed around 10,000 people. But that wasn't its only impact. The volcanic ash and gas injected into the atmosphere obscured the sun and increased the reflectivity of Earth, cooling its surface and causing what's known as the year without a summer. Starvation and disease during this time killed some 82,000 more people, and the gloomy conditions are often credited as the inspiration for gothic horror tales, such as Mary Shelley's *Frankenstein*.

Although there have been several big eruptions in recorded history, volcanic eruptions today are no more frequent than they were a decade or even a century ago. At least a dozen volcanoes erupt on any given day. As monitoring capacity for—and interest in—volcanic eruptions increases, coverage of the activity more frequently appears in the news and on social media. As Erik Klemetti, associate professor of geosciences at Denison University, writes in *The Washington Post*: “The world is not more volcanically active, we’re just more volcanically aware.”



Introduction - please read me!

Welcome to your Home Learning booklet for **Geography**. This booklet is focused on **earthquakes and volcanoes**. It's a good opportunity for you to show how good you are at independent learning.

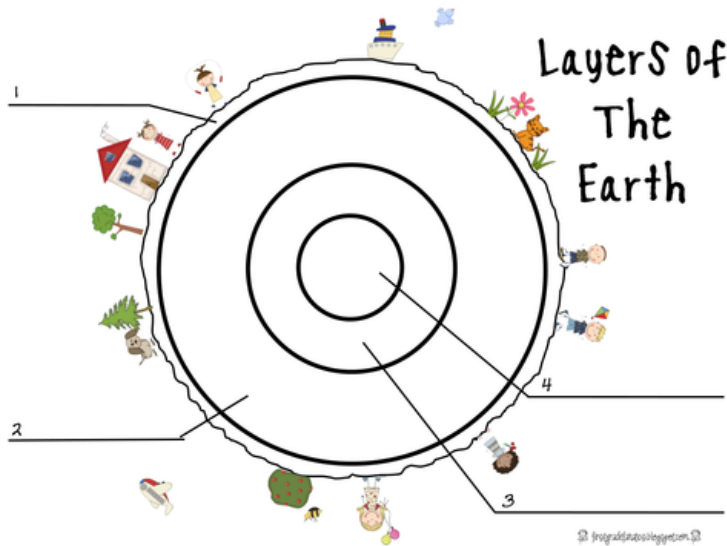
There are 6 main tasks for you to try your best to complete. We do expect you to finish the booklet but also to finish it well and to try your hardest. You can use the after-school help sessions on Tues, Wed & Thurs 3-4pm, ask teachers, or even work together as a family if you find it difficult to do everything well on your own. You might also need to use an Atlas from home/Internet to do one of the tasks.

Remember the booklet should take you 5 hours to complete.
Work hard and enjoy your learning.

Task 1 - Structure of the Earth



1. Label the layers of the earth on the diagram below.



2. Research one fact about each layer

The _____ layer is interesting because.....

The _____ layer is interesting because.....

The _____ layer is interesting because.....

The _____ layer is interesting because.....

Extension questions

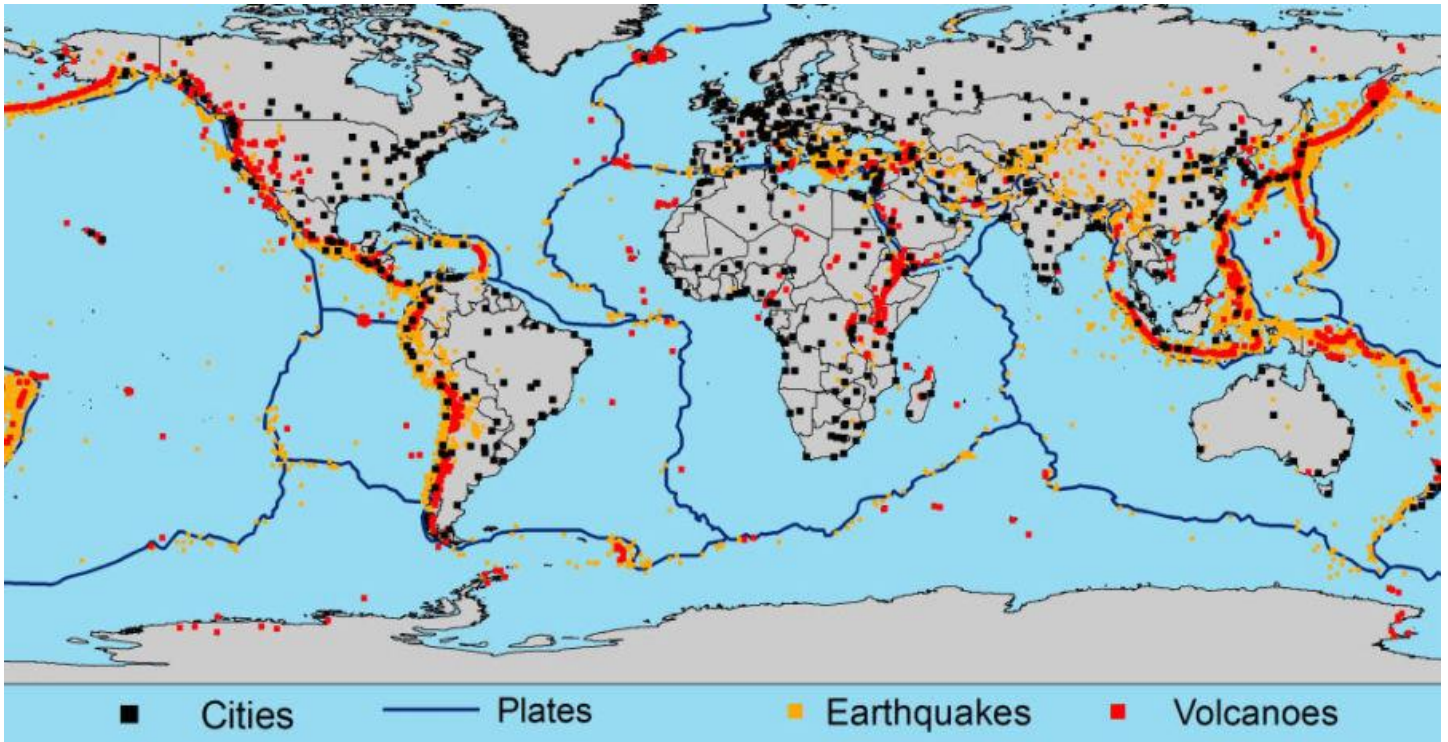
1. How thick is the crust? _____
2. How wide is the mantle? _____
3. Which part of the core is liquid? _____
4. What is the outer core made of? _____ and _____
5. How wide is the inner core? _____
6. Add up all the distances and work out how far it is from the surface of the earth to the centre core. (You can use a calculator)



Task 2 - Where do volcanoes and earthquakes happen?



Below is a map showing the volcanoes and earthquakes that happened in one year, together with major cities and plate boundaries.



Describe the **pattern** of volcanoes and earthquakes (remember to use as much information as you can from the map as well as your own knowledge).

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Extension question

Can you explain why the volcanoes and earthquakes happen here?



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Task 3 - What effects do volcanoes have?



1. Give one idea about how PEOPLE might be affected after a volcanic eruption

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.....
.....

2. Give one idea about how the ENVIRONMENT might be affected after a volcanic eruption

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.....
.....

3. Give one idea about how the ECONOMY might be affected after a volcanic eruption

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4. Research a specific volcanic eruption and list some of the effects. If you can, categorise these effects into SOCIAL, ENVIRONMENTAL and ECONOMIC.

Name of volcanic eruption.....

Date of volcanic eruption.....

Effects:

Task 4 - What effects do earthquakes have?



1. Give one idea about how PEOPLE might be affected after an earthquake

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2. Give one idea about how the ENVIRONMENT (nature) might be affected after an earthquake

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3. Give one idea about how the ECONOMY (businesses) might be affected after an earthquake

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.....

4. Research a specific earthquake and list some of the effects. If you can, categorise these effects into SOCIAL (people), ENVIRONMENTAL and ECONOMIC.

Name of earthquake (place).....

Date of earthquake.....

Effects:

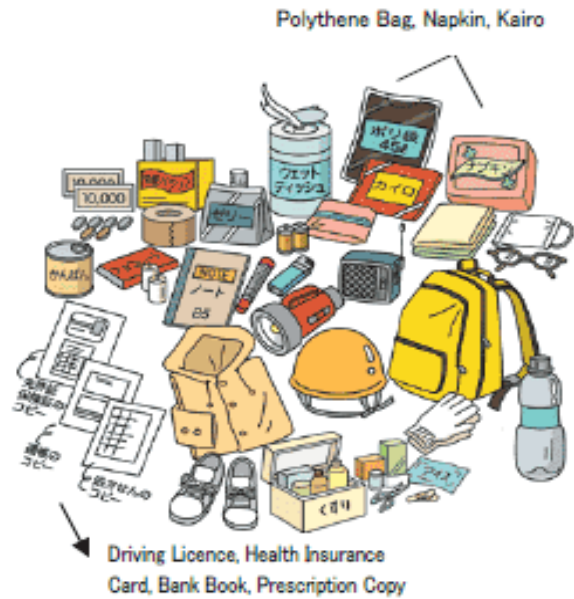
Extension question:

Are the effects of volcanic eruptions and earthquakes similar?

Why / why not?



Task 6 - How could we cope with earthquakes?



Use the images above to come up with a plan for a city or country at risk from earthquakes to save as many lives as possible. Use the space below to show me your plan.