Year 6 – Distance Teaching and Learning – Topic

Week beginning: **29/06/2020**

Topic: **Extreme Earth – Natural disasters**

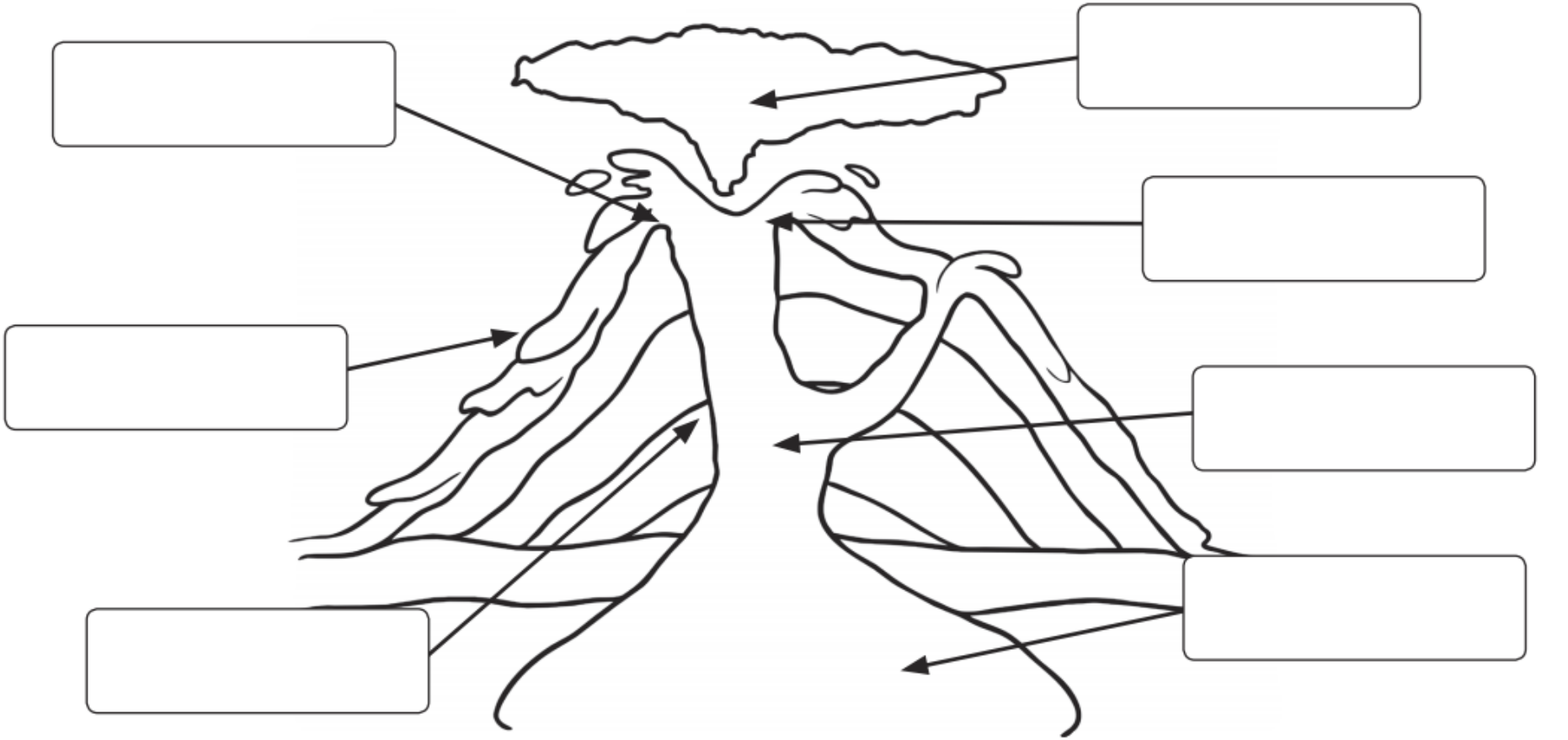
The following tasks can be completed in any order, but the given order is recommended. This week, our topic is going to focus on extreme earth – natural disasters. After learning a little about Mount Vesuvius and how it was destroyed Pompeii, this week we are going to continue to learn about how the earth can be destructive.

The video **Year 6 Topic – S2 Week 5 – Video Task 3** will tell you more about **Task 3** and show you what it could look like.

Task 1	Task 2	Task 3	Task 4	Task 5
We have recently learned about Mount Vesuvius, but do you know how a volcano works? Do you know the parts of a volcano? Today that is what you are going to be looking at. Watch the video below https://www.youtube.com/watch?v=QlqNRlLaIu4 Using the diagram below, or drawing you own, and label the parts of the volcano. There is a word bank at the bottom of the page to help you remember all the parts.	Look at the videos on this link which give you plenty of reasons why people may live near volcanoes or on volcanic islands https://www.bbc.co.uk/bitesize/topics/z849q6f/articles/zd9cxyc Also have a look at the information about Iceland below. Iceland is a volcanic island which has many tourist attractions. Use all of this information to create a leaflet to persuade people to move to a building development, which is located next to a volcano. In this leaflet you will need to think about the benefits of living next to or near a volcano, such as the natural wonders of Geyseurs, the fertile land etc. This leaflet will need to be biased, so remember you want people to move to this development meaning you will only be sharing the good things about living near a volcano.	Today you are going to make your own or watch a volcanic eruption. Video: https://www.youtube.com/watch?v=9b_gltKtERY You will need: Washing up liquid Vinegar A plastic cup Bicarbonate of soda Red food colouring You could build a paper mache volcano and put the cup inside it for extra effect! 1. Fill your cup just over half full with water, add 3 teaspoons of bicarbonate of soda and give it a good stir until most of the bicarbonate of soda dissolves. 2. Add two drops of red food colouring and a good squirt of washing up liquid into the cup and once again give it a stir. 3. Make sure your volcano is in the kitchen or outside (or somewhere you don't mind making a mess). 4. Quickly pour in just under a quarter of a cup of vinegar and enjoy your very own volcanic eruption! Write a paragraph to describe what happened. Don't forget to use varied sentence types and starters. Do you know what happened scientifically? Try to explain what you think happened.	You are going to be designing your own earthquake-proof building. First you need to know the effects of earthquakes and what they look like. Watch the video below, which explains how the tectonic plates can cause earthquakes. You will see what it looks like when an earthquake happens, which you will need to consider when you design your own earthquake-proof building. https://www.youtube.com/watch?v=e7ho6z32yyo Things you need to consider: how will your building withstand the earth shaking? What is special about your building that if the earth cracks underneath your building, it will still stand? What if an earthquake creates a tsunami? Can your building withstand that?	Tsunamis can be a result of an earthquake. Watch the video https://www.youtube.com/watch?v=Wx9vPv-T51I and read the information on Year 6 Topic – S2 Week 5 – Tsunami information. Create an acrostic poem. This is where you use the letters of tsunami to create a poem about tsunamis. Make you poem as colourful and creative as you can. Here is an example of an acrostic poem for the sun: **S**ometimes when we go to the beach, I will get sun burn. **U**sually if I put Sun block on my skin I will not burn. **N**oon is when I'm really prone to burning.

Task 1

Look at this diagram of the inside of a volcano. Label the diagram with the missing words from the bottom of the sheet.



main vent	lava flow	conduit	magma reservoir
ash cloud	crater	layers of ash and solidified lava	

Task 4

Design an Earthquake-Proof Building

Study the buildings below. How might their shape and structure help them in an earthquake?

The Transamerica Pyramid - San Francisco

The Yokohama Landmark Tower - Japan

A Japanese Pagoda

Beijing National Stadium

How to Strengthen a Building

Use this box to make notes to help you create your earthquake-proof building.

- Shape (what shapes could prevent the building from twisting?)
- Walls (what could you use to strengthen your walls?)
- Base (how could you make your building more stable? How could your building absorb the shock waves?)
- Other (think about how you could protect your building's windows, gas and electricity supply.)

Use this list of features to help you make your notes:

- Deep foundations
- X-shape supports
- Emergency shut off switches
- Thin walls with steel bars
- Sprinkler system
- Shock absorbers
- Shutters on windows