

Creators & Destroyers

Week 1 Term 2
27th April, 2020
Classes P12 & P14



What are sudden geological changes? How do they affect Earth's surface?

Pompeii and Vesuvius

Note to parent

Science is a dynamic, collaborative and creative human endeavour arising from our desire to make sense of our world through exploring the unknown, investigating universal mysteries, making predictions and solving problems.

Through 'inquiry' we pose big questions that don't necessarily have one answer. We adopt an investigative approach to **teaching** and **learning** where students are provided with opportunities to investigate a problem, search for possible solutions, make observations, ask questions, test out ideas, and think creatively AND **use their intuition**.

Lessons 1 is designed to elicit any questions and find out what they think they know about volcanoes, a sudden geological change that can affect Earth's surface.

I am excited to share your child's science learning journey this term and look forward to viewing their work. Please trim and glue any resource sheets from this fortnight work into the 'Home Learning' booklet, then take a photo of all work and email it to me by Friday 8th May, 2020.

Claudine Green 😊

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Safety

Online safety and responsible use of internet

Resources

Video 'Deconstructing history: Pompeii

<http://www.history.com/topics/ancient-history/pompeii>

TASK 1: Pompeii

Watch the video 'Deconstructing history: Pompeii. Copy the following questions in your 'Home learning' booklet and answer them.

<http://www.history.com/topics/ancient-history/pompeii>

1. What do you think volcanoes are?
2. What do you think volcanoes look like?
3. How do you think volcanoes are created?
4. How often do you think they erupt? How much warning do you think people have before an eruption?

TASK 2: Iceland

Watch the video **Volcano's giant ash cloud threatens planes**. Copy the following questions in your 'Home learning' booklet and answer them.

<https://education.abc.net.au/home#!/media/31140/iceland-s-volcanic-eruption-2010>

1. Listen as the reporter explains why it is dangerous to fly into a cloud of ash. What is in the ash and what could it do to a plane?
2. Iceland is described as one of the most volcanically active places in the world. Why?
3. What impact did the eruption have on the Icelandic people?

TASK 3: Creators and Destroyers

Volcanoes are seen as both 'creators' and 'destroyers'. Why do you think they are seen this way? Fold a piece of paper in half and title one half CREATOR and the other DESTROYER. Now brainstorm all the things volcanoes create and all the things it destroys.

Extension:

Power Point: Volcanoes Where are they located?

Practise using longitude and latitude lines to find famous volcanoes.

If you like you can send me an email and tell me how many volcanoes you successfully found.

Creators & Destroyers

Week 2 Term 2
4th May, 2020
Classes P12 & P14



What are the effects of a volcanic eruption?

Eruptions!

Note to parent

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Resources

Weekly Volcanic Activity Report
https://volcano.si.edu/reports_weekly.cfm

Museum Victoria re-creation of Mount Vesuvius
<https://museumsvictoria.com.au/learning/ancient-roman-empire/recreation-of-vesuvius-erupting/>

Resource sheet 1: Volcanoes investigation planner

Resource sheet 2: An eyewitness' story

Resource sheet 3: World map PDF attached – please print

TASK 1: Volcanoes investigation planner

Over the next few weeks you will collect and represent data on current volcanic activity and look for patterns to allow you to answer the investigation question later in the term.

Go to https://volcano.si.edu/reports_weekly.cfm each week and record any new data on your printable world map.

You will notice that I have helped answer some of the questions already. Please add your questions or predictions to the table.

TASK 2: Mount Vesuvius erupting

Watch the video of Mount Vesuvius erupting and answer the questions in your 'home learning' book.

TASK 3: An eyewitness story

<http://www.gso.uri.edu/vesuvius/Plinys/PlinyY.html#>

Resource sheet 2: An eyewitness' story

Read 'An eyewitness' story' and watch (and listen to) a reading of the letters of 'Pliny the Younger' and answer the following questions in your 'home learning' book:

1. What was similar about the two recounts?
2. What was different about the two recounts? Why do you think that is?
3. What do you think were the key characteristics of the eruption?
4. Do you think all volcanoes would have the same types of eruptions? How might they be similar or different?

Volcanoes investigation planner

What is the question for investigation?

Where do volcanoes occur?

What are your current ideas?

How will you collect the data?

We will collect data from a weekly volcanic eruptions report from scientists monitoring volcanoes.

How will you present the data?

- 1. On a map showing the locations of volcanic eruptions*
- 2.*

RESULTS

What did you find out from the data? What patterns can you see?

My claim is:

My evidence is:

An eyewitness' story

Mount Vesuvius, on the west coast of Italy, erupted in 79 AD and destroyed the nearby city of Pompeii. A detailed account of the disaster was recorded by Pliny the Younger, who was just 18 years old and living in the town of Misenum, just 20 kilometres from Pompeii. He describes the events of the second day in a letter to his friend Tacitus.

... cloud of unusual size and appearance. ... The cloud was rising from a mountain—at such a distance we couldn't tell which, but afterwards learned that it was Vesuvius. I can best describe its shape by likening it to a pine tree. It rose into the sky on a very long 'trunk' from which spread some 'branches'. Some of the cloud was white, in other parts there were dark patches of dirt and ash.

The carts that we had ordered brought were moving in opposite directions, though the ground was perfectly flat, and they wouldn't stay in place even with their wheels blocked by stones. In addition, it seemed as though the sea was being sucked backwards, as if it were being pushed back by the shaking of the land. Certainly the shoreline moved outwards, and many sea creatures were left on dry sand. Behind us were frightening dark clouds, rent by lightning twisted and hurled, opening to reveal huge figures of flame. These were like lightning, but bigger ...

It wasn't long thereafter that the cloud stretched down to the ground and covered the sea ...

Now came the dust, though still thinly ... We had scarcely sat down when a darkness came that was not like a moonless or cloudy night, but more like the black of closed and unlighted rooms. You could hear women lamenting, children crying, men shouting ...

It grew lighter, though that seemed not a return of day, but a sign that the fire was approaching. The fire itself actually stopped some distance away, but darkness and ashes came again, a great weight of them. We stood up and shook the ash off again and again, otherwise we would have been covered with it and crushed by the weight ...

At last the cloud thinned out and dwindled to no more than smoke or fog. Soon there was real daylight. The sun was even shining, though with the lurid glow it has after an eclipse. The sight that met our still terrified eyes was a changed world, buried in ash-like snow.



About 2000 residents of Pompeii survived the initial eruption of Vesuvius. A second more powerful eruption the following morning killed everyone who had remained in the city. When rain mixed with the ash it formed a sort of concrete preserving the city and the bodies within it.

Reference: *The Destruction of Pompeii, 79 AD*, EyeWitness to History, www.eyewitness-to-history.com/pompeii.htm (1999).

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