

Volcanoes

Second Level

This learning journey is inspired by episode one of the BBC documentary 'A Perfect Planet'. This episode focuses on volcanoes, how they affect life on Earth and their link to climate change and the balance of carbon dioxide in the atmosphere. There are recommended video clips to show from the documentary in your classroom, however the activities can work without this resource.



Learning Outcomes

I can describe the physical processes of a natural disaster and discuss its impact on people and the landscape.

SOC 2-07b

I can discuss the environmental impact of human activity and suggest ways in which we can live in a more environmentally-responsible way.

SOC 2-08a

Using what I know about the features of different types of texts, I can find, select and sort information from a variety of sources and use this for different purposes.

LIT 2-14a

1. Introduction

Documentary clip: <https://www.bbc.co.uk/programmes/p091vjyc>

Meet Kayla Iacvino a real volcanologist and learn a little about volcanos by making your own in the classroom:

https://fc8b1823-210a-485b-b2b1-337f4abade3b.filesusr.com/ugd/32ec29_bf3459661e0548059c77522cf008ce54.pdf?index=true

2. What are volcanoes?

So we know what volcanoes are, but what do they look like inside? Find out by doing our volcano worksheet: https://fc8b1823-210a-485b-b2b1-337f4abade3b.filesusr.com/ugd/32ec29_20e1ffc496ea43d0997e9b2e10d285c1.pdf?index=true

Now find out about plate tectonics and why volcanoes from: https://fc8b1823-210a-485b-b2b1-337f4abade3b.filesusr.com/ugd/32ec29_b5e9dca7cc8940f3942678d93c43362c.pdf

3. The Savannah Grasslands

Documentary clip: <https://www.bbc.co.uk/iplayer/episode/p08xc2v8/a-perfect-planet-series-1-1-volcano> Minute 43.48- 45.45

The Savannah grasslands are some of the most diverse ecosystems in the world and one of the many places where volcanoes provide the nutrients to allow this abundance of life. Read more about the geology of this area:

<https://www.flipsnack.com/dynamicearth/geology-of-the-serengeti/full-view.html>

Water is also essential for life in the Serengeti to thrive. Learn about how water is important in these grasslands and build your own watering hole for your playground.

<https://www.flipsnack.com/dynamicearth/tropical-savannah-climate/full-view.html>

4. Climate Chaos

Documentary clip: <https://www.bbc.co.uk/iplayer/episode/p08xc2v8/a-perfect-planet-series-1-1-volcano> Minute 48.36- 50.24

Although carbon dioxide is naturally occurring on Earth, human action have added far greater amounts of CO₂ into our atmosphere. This is called the greenhouse effect and is explained here:

<https://www.youtube.com/watch?v=jjj2lBi2YiQ&feature=youtu.be>

Human actions can either cause climate change or help to mitigate them. Play our source or sink game to explore where CO₂ and other greenhouse gasses are made by humans and what we can do to create more climate sinks

<https://www.flipsnack.com/dynamicearth/sourk-or-sink/full-view.html>