



Home learning

We will learn...

- About volcanos (what are they?).
- The names and the function of their parts.
- How and why volcanos are originated.
- The consequences of a volcano eruption.
- To work in a team.
- To solve problems that we may encounter.

Connections

Related ideas that we need to know before we start.

Did you know?

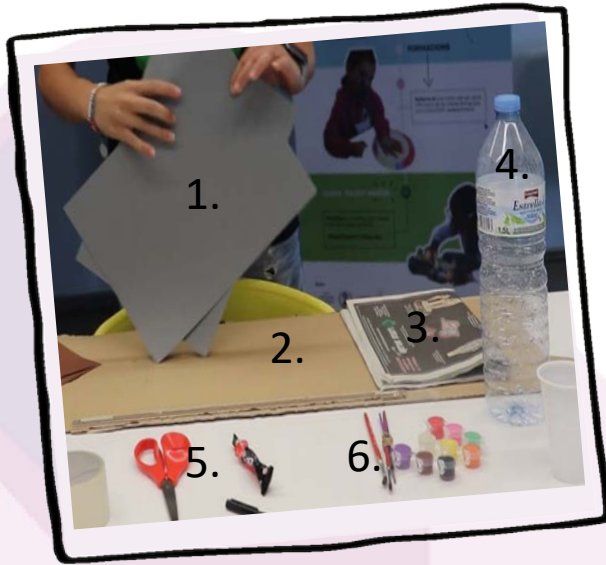
The Ring of Fire: also referred to as the Circum-Pacific Belt, is a path along the Pacific Ocean characterized by active volcanoes and frequent earthquakes. Most of the Earth's volcanoes and earthquakes take place along it (National Geographic, resource library).

You have been learning about the layers of the earth and the tectonic plates; in this capsule, you are going to find out about volcanoes while making a model and simulating an eruption.



Get ready!

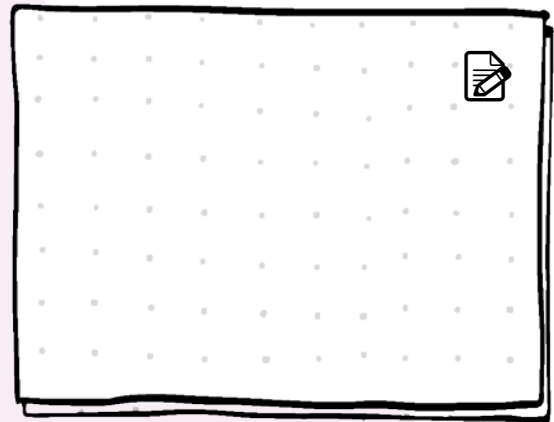
Grab all the required materials and equipment to start.



Materials

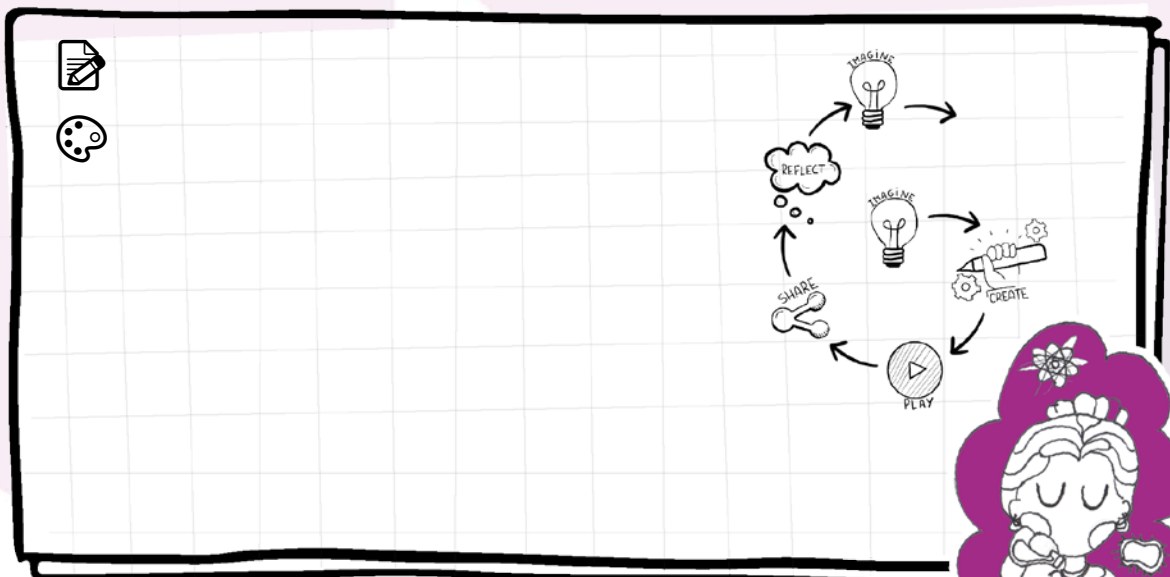
- 1. Colour paper
- 2. Cardboard
- 3. Newspaper
- 4. A plastic bottle
- 5. Glue/tape, colour paper, scissors
- 6. Paint and brushes
- Soda and vinegar
- Digital device with internet access

Are you missing a material?
For which one could you replace it?
Will you use others for sound effects?
Write them down.



Imagine

How do you imagine the inside of a volcano? Draw it and try to label its parts.



Let's create!

Follow the instructions and ask for an adult supervision or help when needed.

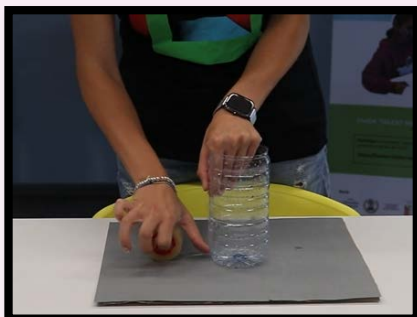
1- Scan the QR code to follow the step-by-step video.



2- Using the scissors, cut a shape of your choice out of cardboard to make the base of your volcano model.

3- Paint your model base or wrap it with colour paper to make it look like the **top earth crust layers**.

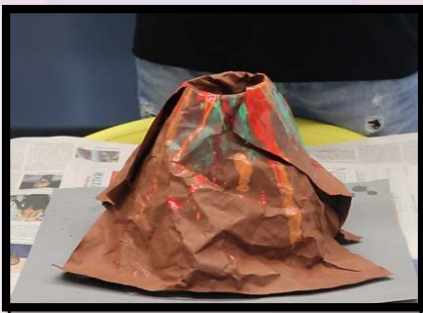
If you added an orange/red thicker layer underneath what would you be representing?



4- Remove the top of your plastic bottle (your **volcano main vent**) and fix it in the middle of the model base.

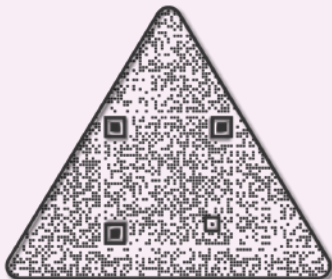


5- Wrap the bottle with newspapers to build the **volcanic cone**. Cover it with colour paper and add some features to make it look more real!



6- Start a research on internet or in books to find out more about famous volcanos around the world for inspiration. **Can you find one in each continent?**

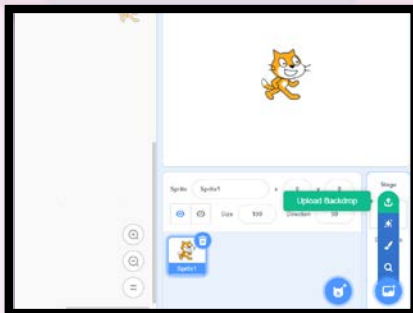
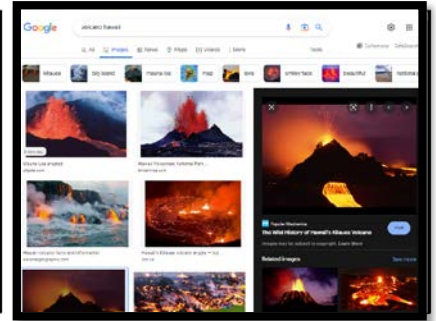
7- Pour soda from the **crater**. Then, add vinegar into the volcano **throat**. **What did it happen? What is the name of the semi-fluid that comes out from volcanos?**



8- Scan the QR code to learn more about volcanos! **Why real volcanos erupt?**

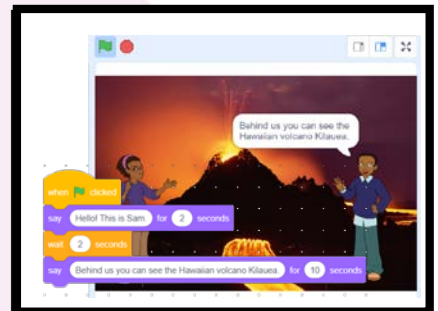


9- Take a photo of your volcano or pick one from internet and download it in your digital device.



10- Open Scratch and upload the photo of your volcano model or the one you have previously downloaded as a backdrop.

11- Select two characters from the Scratch sprite gallery and program them to have a dialogue about volcanos.






12- The characters script should include some of the following topics (scan the QR code for some volcano facts):

What are volcanoes (definition, locations and types),
the name of their parts and their functions, how
eruptions are provoked and what they think are their
consequences, other interesting facts.



Play and share

Draw or take a photo of your model.

		Share your Scratch project on our class studio. 
A large grid area for drawing or taking a photo of a model.		

I shared my science model with...





Reflect

Choose one of the following questions and develop its answer.

1.	Do you think volcano eruptions may have some benefits? If so, which ones?
2.	Share something that you have learned while working on your volcano model.
3.	Explain a challenge you faced when programming in Scratch and how you overcame it.

How many stars will you give to your collaboration skills? Colour them!



	
A large grid area for writing an answer.	



School Workshop



Imagine

How do you imagine the inside of a volcano? Draw it and try to label its parts.

A large grid area for drawing. On the left side of the grid are icons for a document and a palette. On the right side, there is a circular flow diagram with icons for 'IMAGINE' (lightbulb), 'REFLECT' (cloud), 'SHARE' (handshake), 'PLAY' (play button), and 'CREATE' (pencil and gears). Below the diagram is a cartoon illustration of a woman with a flower in her hair, looking thoughtful.

Reflect

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3.	Explain a challenge you faced when programming in Scratch and how you overcame it.

How many stars will you give to your collaboration skills? Colour them!



A large grid area for writing answers. On the left side of the grid is an icon of a document with a pencil. On the right side is a cartoon illustration of the same woman from the 'Imagine' section, looking thoughtful.