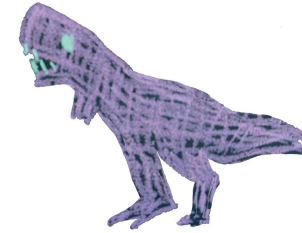


**45 min**  
Science  
Workshop



**OKIDO**



**Ages**  
**3-8**

# Learn-Through-Play Workshop

This OKIDO downloadable workshop is designed for families and can be easily delivered in the home by YOU. It is designed in collaboration with the British Science Association and follows learning to facilitate Early Years and KS1 development using easy-to-find objects from around the home.

This 45 minute learn-through-play workshop includes:

- Watch an episode of Messy goes to OKIDO together
- Discuss the science with easy-to-follow pointers around the subject
- Complete a make-and-do science activity
- Reinforce the learning with a fun, follow-up worksheet



Theme - **How the world works**  
Subject - **Volcanoes**



For lots more workshop activities subscribe to OKIDO Magazine at [www.okido.com](http://www.okido.com)

### Watch and learn together

Together with your child, watch this 10-minute episode of Messy goes to OKIDO - 'Vivienne Blows Her Top'.

[Link to Vivienne Blows Her Top episode](#)

This week Messy wonders why his fizzy drink exploded out of the bottle after he dropped it. So off he goes to OKIDO to see if he can get some help.

At OKIDO a bird leads Messy and his friends to an island with a volcano on it. Vivienne is not feeling well and needs to erupt to relieve the pressure inside her but Messy and his friends need to save the animals who are trapped on the island!

In this episode we learn that volcanoes are mountains with molten rock inside - this is called lava. When too much pressure builds up from gasses underneath the lava it causes the lava to explode through the top - this is called erupting.

### Talk about the science

Right after watching, ask your child some questions about what they've seen:

- Where does the bird lead Messy and his friends?
- What idea does Messy come up with to stop the volcano erupting?
- Who is trapped on the island and need rescuing?

Now talk to your child about what they've learned about volcanoes:

- What's inside the middle of the volcano?
- Why does a volcano erupt?

*If your child asks a question that you don't know the answer to - just investigate together to find out!*

Don't worry - all the information you need to know is explained in the episode : )



New words: Erupt, lava, molten



### Now make an erupting volcano

You will need:

- Paper cup
- A3 paper
- Pencils
- White vinegar
- Bicarbonate of soda
- food colouring
- washing up liquid
- sticky tape

This fun and messy experiment involves measuring quantities accurately which is a great **life skill** to teach your child.

- Put a paper cup or sturdy glass in the middle of the A3 paper or card and draw around.
- Next draw a large round shape to the edges of the paper but don't worry if it's a bit rough : )
- Cut out both circles and decorate to look like a volcano!
- Wrap the volcano around the cup, making sure the cup pops out at the top.
- Add 2 tablespoons bicarbonate of soda, a few drops of washing up liquid and 5 drops of red food colouring.
- Get ready!..Add ½ a cup of vinegar into the cup...

Now watch the volcano explode!

### Experimenting and data collecting

- Change the quantity of food colouring.
- Try different sized vessels and paper volcanoes.
- Try to film the eruption on a smartphone and play in slow motion to observe what happens really carefully.

Children love to learn about dinosaurs. You can incorporate this subject with this activity by asking your child to make dinosaurs as props around their volcano. Investigate different types of dinosaurs together and draw on cardboard, cut out and stick into pieces of Playdough, Fimo, Plasticine or Blue Tack.

Alternatively, model the dinosaurs directly out of any modeling product that you have.

Encourage your child to behave as a scientist during this activity. Make sure their 'lab' is clean and tidy, wear aprons or protective equipment and follow the instructions carefully.

**Talk to your child about what has happened. Let them know that this is an example of why it is very dangerous to mix chemicals together without knowing what may happen. This is why we keep household chemicals such as cleaners, detergents and washing liquids separate and securely closed.**

# Make a bubbling volcano

## You will need:

A3 paper, cup, white vinegar, bicarbonate of soda, food colouring, washing up liquid, colouring pens/pencils and sticky tape.



- 1 Put your cup in the middle of the A3 paper and draw around it. Draw a larger circle to the edges of the A3 paper - don't worry if it's a bit rough! Then ask an adult to help you cut out the big and little circles.



- 2 Decorate the paper to look like a volcano.

- 3 Wrap the paper around the cup making sure the top of the cup is above the paper. Secure with some sticky tape. You can fold parts of the volcano to make it fit and look more volcano-like!



- 4 Add 2 tbsps of bicarbonate to the cup, followed by a few drops of washing up liquid and 5 drops of red food colouring. When you're ready, pour 1/2 a cup of vinegar into the cup. Watch the volcano erupt!





Share your images with us at [#okidoworkshop](https://www.instagram.com/okidoworkshop)

# Erupt the volcano!

