

Episode 1: Lemon Volcano



What do you do when life gives you lemons? Make a DIY volcano of course! An episode exploding with fun, join Luke in the Science Time Lab as he uses lemons and other ingredients to make an extra epic erupting volcano.

Scientific concept:

Chemical reaction.

Science process skills:

Observing, communicating and hypothesising.

Let's investigate:

What can we mix to make a mini volcano eruption?

Materials

- Lemons
- Bi-carb soda
- Food colouring
- Knife, fork and spoon
- Tray

Experiment procedure

1. Slice off the top and bottom of a lemon. Poke the inside of the lemon with a fork to release the acidic juice.
2. Place a few drops of red food colouring over the lemon.
3. Sprinkle a spoonful of bi-carb soda on top and watch the lemon volcano erupt! The bi-carb soda reacts with the acid in the lemon causing it to foam and fizz.
4. **Extension:** Place three cut lemons amongst a volcano model made from recycled or craft materials. Put different food colouring in each lemon to create erupting volcanoes with coloured lava! Add dinosaur models and trees for small world play.



Early Education links

Episode themes relate to [EYLF Learning Outcomes](#) 4.1, 4.2, 4.4 and 5.2. Encourage children to manipulate resources in this experiment to investigate and develop understandings about chemical reactions in science. Invite children to hypothesise about what might happen when the lemon and bi-carb soda are mixed. Provide a selection of open-ended craft materials for children to build their own volcano model for the experiment.

Follow-up learning

- Extend children's knowledge and understandings by implementing other simple chemical reaction experiments such as (use *italic* experiment titles below in your search engine):
 - *Make your own bath bombs using bi-carb soda and lavender oil.*
 - *Create crystals with salt, sugar and bi-carb.*
 - *Make run away pepper* using pepper and dish detergent.
- The ABC Kids listen *Imagine This* [Why do volcanoes erupt?](#) podcast shares fascinating facts about one of the most powerful forces on earth!

