

# Volcanic Eruptions and Dinosaurs

Building structures and sandcastles is such an enjoyment at the beach and can be modified for your home environment. Have you ever built a volcano? It's easy!

## How to Do It

Build a volcano outside, or inside on a tray, with your child using earth, pebbles or sand. Children usually know how to make amazing sandcastles so encourage your child to recall one they may have built in the past, then to make one as big as they can!

Help your child make a hole at the top, big enough to insert the small container. There is no rushing necessary at this stage of the play. If your child wants to keep building castles or volcanoes and to knock them down, encourage this play and learning to be the game for the moment, and come back to volcano eruptions at a later time.

Use a flat surface to make a small hole that will fit the container at the top of the volcano. Support your child to measure out the baking soda and pop it into the container with any dye or paint. Mix together gently with a spoon.

Place the container in the top of the volcano. Next, get your vinegar ready - you will need at least one cup. Help your child to pour it slowly into the baking soda container and watch the lava overflow! Don't forget to have your camera ready!

## What Learning is Occurring?

- Communication skills
- Basic maths and science concepts
- Inventing and experimenting
- Creativity and imagination

## Things you will need

- Sand/earth/pebbles
- Tray with sides (optional)
- Small container
- ¼ cup baking soda
- A splash of dye or paint (optional)
- Spoon
- 1 cup vinegar
- Easy-pouring jug or container
- Optional – plastic animals

## Tips

- Chose a space where, if there is a little mess, the clean-up will be easy.
- If nothing much happens, add a bit more vinegar into the container.
- Decorate your volcano with natural resources found in your garden.
- Keep the vinegar well clear of your child's eyes and mouth.

## Age Considerations

- Toddler: after the volcano has 'erupted', add a basket of natural materials like leaves and sticks and a few dinosaurs to create a dinosaur world for your toddler to play in.
- Kinder: what happens if you add other ingredients? Does it make it bigger and better; did it not work at all? Did it change colour? Encourage your child to think about other materials another volcano could be made out of? E.g. clay, wire and paper mâché, bendy sticks etc. What materials could be easily reused if the volcano is to erupt more than once?
- Transition to school: use this opportunity to go through the scientific process and hypothesise together. Ask your child what they think might happen and why. Build the experiment with your child, test and try things out together, discuss what worked and what didn't and how you might make it different or bigger and better next time!
- Think big: For those great volcano and dinosaur enthusiasts, set the volcano up outside (undercover perhaps, where it can be revisited.) Hide small dinosaurs in plaster of Paris (or ice) and bury them in the backyard to be found and chipped open. You and your children might also be inspired to create a much larger 'dinosaur world' in the backyard, complete with functioning rivers, mud, islands etc. The possibilities are endless!

