



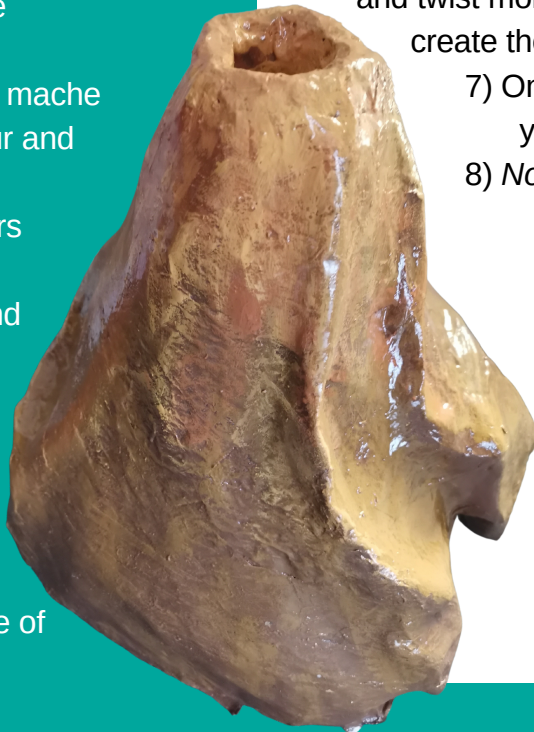
WAITAKI  
**WHITESTONE**  
ASPIRING GLOBAL  
**GEOPARK**  
AOTEAROA NEW ZEALAND

# HOW WE MADE OUR VOLCANO

## OUR

## INGREDIENTS

- 1) Plastic cone – this will form the basis of the shape of the volcano. We used a cone that had a hole in the top of it. You may need to get an adult to cut a hole if your cone doesn't have one
- 2) Small plastic container (to go in the opening of the top of the cone) – this will become the vent of the volcano. We used an old medicine cup.
- 3) Chicken wire – to create strength and shape of the volcano
- 4) Wire cutters – to be used by an adult to cut the chicken wire
- 5) Glue
- 6) Newspaper – for paper mache
- 7) Paper mache glue (flour and water)
- 8) Paint – whatever colours you choose. We used brown, orange, red and yellow
- 9) Baking soda, vinegar, dishwashing liquid (& food colouring if you wish)
- 10) An adult to supervise (and to carry out some of the steps)!



## OUR METHOD

- 1) Place the plastic cone on a flat firm surface
- 2) **Adult required** - Insert the plastic cup into the hole at the top of the cone and glue into place. We used silicon seal to ensure it was watertight.
- 3) **Adult required** - Cut the chicken wire to fit the cone (the wire can be very sharp and could cut you so your adult could wear gloves). Ensure the ends of the chicken wire are pushed into the volcano so there are no sharp ends poking out
- 4) Ball the newspaper up and glue to the cone – to create topography
- 5) Repeat step 3
- 6) Paper mache over the chicken wire – make sure each layer dries before the next layer is applied. Scrunch and twist more newspaper as you paper mache to create the topography you want

- 7) Once dry, paint the volcano in colours of your choice

### 8) *Now to make the volcano erupt*

Add to the vent baking soda and pour in a mix of white vinegar and dishwashing liquid (you may also add food colouring if you wish). We used a tablespoon of baking soda to our container and then poured in the vinegar (with a squirt of dish washing liquid) but you can experiment with the ratios. The mix can sting cuts and eyes and stain clothing so care is required!

## WHAT OBSERVATIONS DO YOU MAKE?

- What happens when you add the vinegar and dish washing mix to the baking soda?
- How does the lava move down the volcano? Note down your observations.
  - Fast / slow?
  - Spreads out evenly down the volcanic cone / travels in 'rivers' of lava?
- You could now change the baking soda/vinegar mix ratio (or not add the dish washing liquid) and do the experiment again – notice any differences as to how the lava behaves – and note down your observations.
- Why do you think the lava behaves like this?