



## ERUPTING PAPER-MACHE VOLCANOES

Suits ages 40 – 60 months



### ***What you will need:***

To make the volcano

- Strips of newspaper
- Paper-Mache paste – flour and glue
- Cardboard or round cardboard cake tray measuring 2 feet (0.6) in diameter.
- Small bottle or plastic cup
- Masking tape
- Paint
- Paintbrush

For the lava

- 1 tablespoon of warm water
- Liquid dishwashing soap
- Red food colouring
- 1-2 tablespoons of baking soda
- Vinegar (clear is possible)
- Small paper cup
- Small funnel

### ***What you do:***

To make the volcano

1. Support your child in making a base for the bottle/cup by crumpling a mound of paper and taping it down to the center of the cardboard together.
2. Support your child in securing the bottle/cup upright in the center of the mound by using masking tape.
3. Let your child start to form their volcano by wrapping crumpled newspaper around the sides of the bottle cup. Let your child make this as wide as they like at the bottom, but ensure you



support your child in moulding this into a cone shape, so this will be narrower at the top of the bottle/cup.

4. Ask your child tape this all down so it is secure, the outside should then be smooth from the tape. Ensure your child has not covered the opening of the bottle/cup at the top.
5. Support your child to mix the glue and flour together to create the paste.
6. Together tear newspaper into strips about 1-2 inches wide.
7. Let your child dip the strips of newspaper one at a time into the paste and start to stick these over the volcano, using your fingers to smooth each strip on. If your child does not like to get their hands dirty they can wear gloves or you can support them by smoothing each strip on for them.
8. Supporting your child, repeat the above process until all of the volcano and base is completely covered. The strips should overlap and they can run in different directions, it does not really matter. Just ensure the top of the bottle/cup is uncovered.
9. When this is complete it needs to be left to dry over 24 hours.
10. If needed, you can apply another layer to create more of a volcano shape, this would then need to dry for 24 hours again.

When this is completely dry it is time for your child to paint their volcano.

To make the lava explosion

1. Start by getting your child to measure a tablespoon of warm water, let your child pour this into the volcano crater (bottle/cup) using the funnel.
2. Next your child needs to add 3-4 drops of dishwashing soap into the bottle/cup using the funnel.
3. Your child then can add the baking soda and then stir the mixture with the end of the paintbrush.
4. Next your child needs to pour the white vinegar into a separate cup, filling it till it is 1/3 full, they may need support on how much they need to pour. Then ask your child to add a few drops of red food colouring.
5. Ask your child what they think will happen when the vinegar is added to the mixture.
6. Using the funnel ask your child to quickly pour in the vinegar into the crater. Then step back and watch the volcano's explosion begin.

This is the perfect science activity which allows your child to identify cause and effect. It creates lots of opportunities to talk about what is going to happen and what has happened.

It is also developing creativity whilst building and painting the volcano.