

Learning Experience

Science Experiment: Creating A Cave

Educational Purpose - Why is this important for children's learning?

This science experience helps children discover and develop an understanding about chemical reactions. Hands-on science experiments provide children with the opportunity to develop a range of skills and processes that promotes a wide variety of thinking strategies such as problem solving, inquiry, experimentation, hypothesising, research and investigating.

It is important to use verbal language during this experience to develop children's understanding of scientific concepts and increase their vocabulary.

Resources needed

- Vinegar
- Mould/measuring cup
- Oil or baby oil
- Bi-carb soda
- Baking powder
- Eye dropper/medicine syringe/ teaspoon
- Test tube or small bowl

Description of what to do including prompts for questions to ask children

1. Mix the bi-carb soda, baking powder and baby oil together.
2. Place mixture into your mould and then turn it out, leaving it in a solid form

During this process, discuss with your child the texture and smell, and the types of ingredients being used.

3. Using the eye dropper put small amounts of vinegar onto the mixture and watch it bubble

Encourage your child to describe what they see, and ask them why they think the mixture bubbles and fizzes.

Possible extension

- Try using different liquids to pour onto the chalk. Use water or lemon juice.
- If you mix the chalk into the water, it creates paint. The child can then use it in a painting experience.
- To extend on chemical reactions, you can make a volcano using diet coke and mentos – be sure to do this one outdoors.