

Creating future inventors and scientists

Encourage children within your setting to explore, investigate and start to predict results with this week's scien-terrific activity!

Below you will find two activities that you can use within your setting to promote scientific investigation with your children.

Who knows, maybe they will become the scientists of the future?

Learning aims

- Understanding the world around us
- Communication and language
- Physical development
- Mathematics
- Literacy.

Resources

Activity 1 – sugar crystals

- 4 teaspoons of sugar
- 20 teaspoons of water
- Food dye
- Bowl.

Activity 2 – preserving food

- 4 pieces of fresh bread
- 4 jars with lids
- Vinegar
- Water
- Salt.



Activity outline

Activity 1

- Stir the sugar into the water until it dissolves
- Talk to the children about the word dissolve and what this means (children take the lead in future activities and find items that dissolve)
- Add a few drops of food dye and mix
- Leave the bowl in a warm place for a few days
- Ask the children to 'report' on what is happening in the bowl through taking photos, telling you what is happening or creating 'experiment books'
- As the mixture gets warmer the water will evaporate and this will leave coloured sugar crystals behind.
 - What do the children think has happened? Where has the water gone?



Activity 2

- Place one piece of bread into each jar
- In one jar, add the water just so it covers the bread
 - You can ask the children to predict how much water is needed and then measure to see how close they are
- In the second jar, add the vinegar so it covers the bread
- Dissolve a few teaspoons of salt in some water and add this to the third jar just covering the bread
- Develop vocabulary by talking about the word dissolve and what this means
- Leave the fourth jar untouched
- Add the lids to all the jars, labelling each jar with each of the contents
- Ask the children to 'report' on what is happening in each jar on each day through taking photos, telling you what is happening, or jotting findings down in 'experiment books'.
 - What is happening in each jar? which jar do we think is going to be mouldy first and why?

Food that contain yeast and bacteria grow mould over time. Vinegar and salt can kill off most organisms which means the bread in these jars will take longer to go mouldy, if at all. This is why salt and vinegar are both used to preserve food.

You can look into this further with your children by exploring how people kept food for longer before the fridge and freezer were invented.

Working with Babies?

Add new materials to existing areas to encourage babies and toddlers to explore their senses:

- Add scented bubble bath to water play
- Add colour to your sand
- Add herbs to play dough
- Add food dye to your cornflour gloop.

Encourage your verbal children to talk about what they can feel or smell.

Special considerations

Activities with children must always be risk assessed, including for allergies or choking. Children must always have adequate supervision. Resources and materials must always be appropriate for children's age and stage of development.