

Activity Title:

Blowing Up Balloons

Learning Objective / Activity Outcome:

To be able to use fine motor skills to carry out an experiment

Link to Early Years Framework:

- ELG: Creating with Materials – Safely use and explore a variety of materials, tools, and techniques, experimenting with colour, design, texture, form, and function, share their creations, explaining the process they have used.
- Understanding the World, ELG Past and present - Talk about the lives of the people around them and their roles in society
- ELG Fine Motor Skills – Use a range of small tools, including scissors, paint brushes and cutlery.

Resources:

- Balloons,
- white vinegar,
- bicarbonate of soda,
- bottles (small, individual sized bottles),
- funnel,
- small spoons,
- covered table.

Starter:

Share some soda water with the children – no sugar, carbonated water – considering any dietary needs. If the children can't taste it, show them the fizzy water – pour it into a glass. Watch the bubbles. Ask the children what they can see.

New Learning:

Tell the children what they saw was caused by gas – which is usually invisible, we can't see it, but we can see the bubbles it makes! We can use gas to do fun and useful things

Shared Learning:

Demonstrate to the children how to do the activity:

1. Use a funnel and small spoons to half fill an uninflated balloon with bicarbonate of soda.
2. Carefully half fill a small plastic bottle with vinegar.
3. Wrap the opening of the balloon around the mouth of the bottle, being careful to not spill any of the bicarbonate of soda into the vinegar.
4. When ready, lift the balloon and allow the bicarbonate of soda to spill into the vinegar.
5. Watch as the balloon inflates.
6. Wash hands afterwards

Independent Learning:	Differentiation:	
	Support:	Extension:
Support the children to have a go at the balloon activity themselves, under adult supervision	Adult to aid in use of equipment.	Ask children what they think is happening? What could they do differently to make the balloon inflate

		more, or faster?
Plenary:		
Tell the children that as the vinegar and bicarbonate of soda mix, the vinegar breaks up the bicarbonate of soda, and the carbon dioxide gas in it escapes, making the bubbles they can see in the bottle. This gas is what is filling up the balloon. We can't see the gas itself, but we can see the bubbles and that it is blowing up the balloon, so we know it is there.		

Careers in the Curriculum:	
Partner Profile:	
Name:	SLB – previously Schlumberger
Web Address:	www.slb.com/about/who-we-are
Partner Summary:	
(What are the primary activities of the partner? What industry sector are they? Where do they operate? What are key products / outcomes?)	
SLB are based on Madingley Road in Cambridge. They are an industry leading energy technology company who aims to help make our current energy processes more efficient and environmentally friendly to achieve the global target of net zero carbon emissions by 2050. They work to develop products and services to help decarbonise industry, innovating use of current oil and gas reserves, and developing new energy systems. Their projects include carbon capture and harnessing geothermal energy. Their vision is for a world with more energy and fewer emissions. SLB is committed to helping deliver the world's greatest balancing act – enabling secure, accessible, sustainable energy to meet growing demand.	
Career Roles Available:	
(What are the main types of jobs available within the partner organisation?)	
Scientist, chemical engineer, engineer, technician, IT services.	
Links To Curriculum:	
(What subjects best reflect Partner activities? Which activities in schools)	
Science, developing fine motor skills, speaking, and listening.	