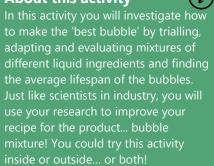


Children Challenging Industry

BECOME A PARTNER

About this activity



Kit List

- Washing up liquid
- 4-6 small containers (e.g. yogurt
- ☑ Bubble wand (could be) homemade – see examples)
- Teaspoon (could use a pipette or medicine syringe if you have one)

Time: 30 Minutes+

Watch out!

- Take care not to get bubble mixture in your eyes when observing the bubbles closely.
- This activity could be quite messy if tried indoors and could also make some floor surfaces quite slippery so make sure you clean up afterwards.
- If you colour the mixture with food colouring, be aware that clothes could get messy too.

Industry AT HOME



Important words to understand:

- industry ratio
- liquid repeat
- mix
- adapt
- mixture
- improve evaluate
- investigate compare
- product

Not sure what they mean? You could use an online or paper dictionary to check.

The Bubbles Company need a 'best bubble' mixture to make the longest lasting bubble. Can you make one?



OUR METHOD

- We mix washing-up liquid and water together (teaspoons/pipettes/syringes)
- We use as much water as possible to keep costs low

Make 4-6 different mixtures using different ratios of the ingredients. When you have discovered the ideal mixture, you must convince our directors that you have the best product.

THEY WILL WANT TO KNOW...

- How did you carry out your tests and make them fair? Think about force of breath, landing surface and size of bubble wand.
- How did you test each bubble mixture?
- 0 What are your results?
- Average bubble lifespan (B1+B2+B3 ÷ 3)
- Which recipe makes the longest lasting bubbles?
- Why do you think your recipe is the best?

Write a short report or make a video to share your results with The Bubbles Company.

Share it with us @ciecyork



Recording your Results



	Ratio of bubble mixture (in teaspoons/pipettes/syringes)		Life span of bubble (in seconds)			
	Washing up liquid	Water	Bubble 1	Bubble 2	Bubble 3	Average
1	:					
2	:					
3	:					
4	:					
5	:					
6	:					

Follow up investigations:



- Design and make different bubble wands with a pipe cleaner or craft wire. Does the shape of the bubble wand make a
- Does adding food colour to your bubbles affect your results?
- How could you create the biggest bubble?
- How long can you keep a bubble afloat for? Try blowing it or fanning it with some paper to keep it in the air.
- If you have some glycerine at home, how does adding this to your mixture change your results?

Things to think or talk about:



- What makes a bubble the 'best bubble'? The largest? The longest lasting? The most bubbles from one blow?
- Are all bubbles the same? How are they different?
- Which surfaces do bubbles last longest on?
- Can you catch a bubble without popping it?
- Do bubbles float or fall?
- Why does a bubble take longer to fall than a football or tennis
- Can you find anything which falls slower than a bubble?
- Take a science selfie and share it with your friends and family.



The Centre for Industry Education Collaboration is delighted to support Bags of Creativity, and we are excited to include one of our Industry at Home activities. If you would like to see more, please visit http://www.ciec.org.uk/industry-at-home.html. We have been able to provide this support, thanks to funding from the Chemical Industries Association.



Bubble Wand Inspiration





