

Science@Home

To support children's scientific learning outside of school, each month, I'll be releasing a simple experiment that can be undertaken at home by families. December's experiment is entitled 'Scientific Snowman'.

Nothing says 'it's Christmas' quite as much as making your own snowman. However, with British weather being what it is it's not always possible to make a traditional snowman which is why I think you're going to love the Scientific Snowman experiment!

What do you need:

- Baking powder
- White vinegar
- Plastic cups
- Bowl
- Plate
- Scissors
- Orange paper
- Plastic eyes (optional)



How you do it:

1. Add one plastic cup of baking powder to your bowl for each Scientific Snowman you want to make.
2. Add just enough water to your baking powder so that it holds together when you mix it.
3. Fill one plastic cup per snowman with your wet baking powder and place in the freezer for several hours.
4. Once your snowmen are completely frozen, take them out of the freezer and submerge them in warm water to make removing your snowmen from their cups easier.
5. Decorate your snowmen with your plastic eyes and an orange carrot nose!
6. Stand your Scientific Snowmen on your plate and start your reaction by adding your white vinegar.



What's going on?

Did you notice that your Scientific Snowmen started to bubble as soon as you added your white vinegar? Those bubbles were full of carbon dioxide and that lets us know that there was a chemical reaction happening. White vinegar is an acid and baking powder is an alkali. When we mix the two together, we get a chemical reaction that gives off carbon dioxide!

Taking your experiment further:

What's the perfect mixture to make the perfect Scientific Snowmen?

What other (safe!) types of acid could you try adding to your snowman?

What happens if you just add warm water?

If you have any questions or want to share a photo of your colourful creation, I'd love to see it!

Email me at: newzealand@lainesmeadprimary.co.uk

Happy experimenting!

Mrs Smith