

Make a Fizzy Snowman Disappear!

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Have you ever tried building a snowman indoors? Check out this magical experiment, and you'll never have to wait for a snowy day to build a snowman again! The best part is that the process of the snowman "melting" is also very interesting. You can try it at Christmas!

- Age: 6-8
- Time: Less than 30 minutes
- Mess Level: A bit messy

Materials Needed:

Tray
Baking soda
Bowl
Spoon
Salt
Water
Washing-up liquid
Vinegar
Snowman decorations



Step-by-Step Instructions:

1. Put a cup of baking soda, a spoonful of salt, and a spoonful of washing-up liquid into a bowl.



2. Gradually add 4 spoonfuls of water while stirring, mix thoroughly until it forms a clumpy consistency.



3. Use your hands to form 3 small balls and stack them to build a snowman. Use clay and scraps of paper, along with movable eyes to decorate your snowman.



4. Pour vinegar over it and observe the snowman's fizzy reaction.



The Science Behind It:

What happened to the snowman?

This involves an acid-base chemical reaction. When baking soda (an alkaline compound) mixes with vinegar (an acidic compound), a chemical reaction occurs and produces a large amount of carbon dioxide, which are the bubbles we see. Just like the carbon dioxide bubbles in carbonated drinks, the carbon dioxide rises to the top of the mixture. This is what you see as bubbles when the snowman "melts".

Why add washing-up liquid?

Adding washing-up liquid makes the foam richer. This is because the gas produced by the citric acid and baking soda forms a porous structure in the washing-up liquid (a liquid), causing the bubbles to multiply and seep out, producing more and longer-lasting foam.