



Science in the kitchen

HOW TO CREATE YOUR ELEMENTS

Disclaimer: the activities described below are using hot water. Perform these activities only with a calm group of pupils.

STORAGE:

Regarding the material needed for the experiment, you could store it in a shoebox.

CRAFT THE ELEMENTS

For Sequence 1

Experiment

Divide students in groups.

1. Fill all three dishes with about 5 cm of cold water.
2. Place your clear glasses in each dish and label them 1, 2, and 3.
3. In glass 1, mix one teaspoon of yeast, $\frac{1}{4}$ cup of warm water, and 2 teaspoons of sugar.
4. In glass 2, mix one teaspoon of yeast with $\frac{1}{4}$ cup of warm water.
5. In glass 3, place one teaspoon of yeast in the glass.
6. Observe each cup's reaction.

Creating a pop-up cake card

Follow the instructions from Storytelling elements.



TECHNOLOGY

For Sequence 2

Divide students in groups.

1. Pour lemonade or clear soda into a glass.
2. Add a squeeze of lemon juice for flavour.
3. Slowly add a teaspoon of baking soda to the glass.
4. Observe as the mixture fizzes and bubbles.
5. Optionally, garnish with lemon slices for decoration.

ALTERNATIVES

Use 3 bottles in which you put different amounts of sugar and the same amount of yeast and hot water:

- bottle 1 one teaspoon of sugar;
- bottle 2 two teaspoons of sugar;
- bottle 3 three teaspoons of sugar.

Use balloons to close the bottle. You will notice that the balloons will inflate differently depending on the amount of gas in the bottle. In the fermentation process, sugar breaks down in the presence of the yeast enzyme zymase. The resulting carbon dioxide produces bubbles in the air.



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