

Sticky stuff

Raw materials for adhesives?

Research question

You've probably experienced this too: You've eaten something with your fingers, and they're all sticky afterwards. Or you've helped to bake a cake, and the mixing bowl is very difficult to clean because the batter sticks to it. Why does this happen? Could you make a glue out of these things? Try it out.

You will need

- Samples to test for example, sugar, salt, baking powder and cornstarch
- 4 small bowls
- 4 spoons for stirring
- Water









How to do it

Step by step



Preparation

 Pour about a tablespoon of each substance into a small bowl.



Mix with water

Now slowly and carefully add enough water to each of the four samples to make a thick paste, stirring the mixtures constantly. Are some of the substances more difficult to stir than others? Rub each of the samples between your fingers.





Answer the questions

- 1. Which substances make fingers sticky and which do not?
- 2. Two of the substances mentioned here can be used to make adhesives. Which are they?





Further information

For parents and teachers



Context

This simple experiment is an introduction to the gluing series of lessons. The aim is to take the children on an experimental journey from the raw material to the recipe for the glue stick compound to the finished glue stick. At the beginning, the children are asked the question: What can glue be made from? From their everyday lives, children are familiar with the situation where they get sticky hands when they eat sweets. In general, there are some substances in the kitchen that sometimes quite involuntarily make everything sticky. Pudding powder, for example, is also such a substance. This experience can be used to introduce the children in a preliminary experiment to a substance that has its place both in the kitchen and in the production of adhesives: starch.

Raw material for glue

Natural starch from potatoes, for example, and sugar are actually raw materials for certain adhesives. There are potato varieties specially bred for these purposes. However, the natural starch is still chemically modified for the production of adhesives.



