

How the Major of Lemberg tasted salt

Somewhere in the mountains, the people of Lemberg had found a rock salt. They sent their major to try it and estimate if it would be good to extract it.

The major went up the mountain and started to lick some salt between the rocks. There laid **a snake** but the major didn't see it. When he was licking and tasting salt a snake bit him on his tongue. The major spit and said that in all his life he didn't taste such a bad salt.

The people of Lemberg even today don't want to say if their ancestors went up the mountain and dug salt.

PHARAOH'S SNAKE EXPERIMENT

TASK: We follow steps with all our senses!

INGREDIENTS

- 25 g of powdered sugar
- 3 g baking soda (sodium bicarbonate)
- sand
- ethanol
- grinder
- the basis on which the experiment is performed

PERFORMANCE:

Weigh the sugar and soda. Place the mixture in a mortar and pestle, where it is well mixed. Place well-dried sand on the base and soak it with ethanol. Make a hole in the middle of the pile of sand, where you pour a mixture of sugar and soda. Then light the ethanol.

EXPLANATION:

The burning of sugar produces carbon, which is strained due to the carbon dioxide released from sodium bicarbonate.

How people of Lemberg wanted to get rid of hunger

In the town of Lemberg hunger governed for a lot of years and finally, they decided they would just take it and send it somewhere else.

They made a huge barrel. They grabbed hunger and pushed it inside, put the lid on, mounted the barrel on a cart, and slowly they went along the road which was leading out of their town.

On the hill, the barrel fell off the cart and rolled down the road to the town's square and that's how hunger stayed in Lemberg.

A MIRACLE COIN EXPERIMENT

Theory



Galvanizing is one of the most effective, most environmentally friendly, and long-term effective protections against the physicochemical reaction between the material and its environment. We call this phenomenon rust or corrosion.

An alloy is a solid solution of two or more metals. They are obtained by adding one or more alloy elements to the base metal. Alloys are more resistant, react more slowly with the environment, and have other quality properties. We encounter alloys every day. The € 1 and € 2 coins consist of two alloys. The 10 and 20 cent coins are made of copper, aluminium, zinc and tin alloy, while the 1, 2 and 5 cent coins are made of copper-plated steel.

Our most famous alloys:

- steel - an alloy of iron, carbon and other metals
- bronze - an alloy of copper and other metals
- amalgam - an alloy of mercury and sodium
- brass (also honey) - an alloy of copper and zinc
- alpaca - an alloy of copper, zinc and nickel

Substances	Accessories:
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<ul style="list-style-type: none"> - 3M NaOH  - Zn powder  - water - coin for 1, 2 or 5 c 	<ul style="list-style-type: none"> - alcohol burner - cooker - tweezers - glass wand - 2 cups - measuring cylinder - cup tongs - paper towel
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Experiment - steps

Dissolve 3M NaOH in water. Add Zn powder and heat on the stove. Before boiling, add a coin to the solution. After a while (about 30 s), remove the cap from the cooker with tongs and take a coin out of the cup. Immerse it in water to cool. Then wipe the coin with a dry paper towel. The coin is "SILVER". We are now heating this coin over a flame. Cool it in the water again and wipe with a paper towel. The coin is "GOLD".

Photo of the experiment



Explanation of the experiment

When the coin is dipped in a basic zinc solution, the coin is coated with a layer of zinc. During the heating of the coin, the copper layer of the coin merges with zinc to form an alloy of copper and zinc called brass.

You can watch the experiment

<https://www.youtube.com/watch?v=UjhRq1mVDM>

Prevod zgodb in eksperimentov:

Mateja Voh in Bernarda Zalokar