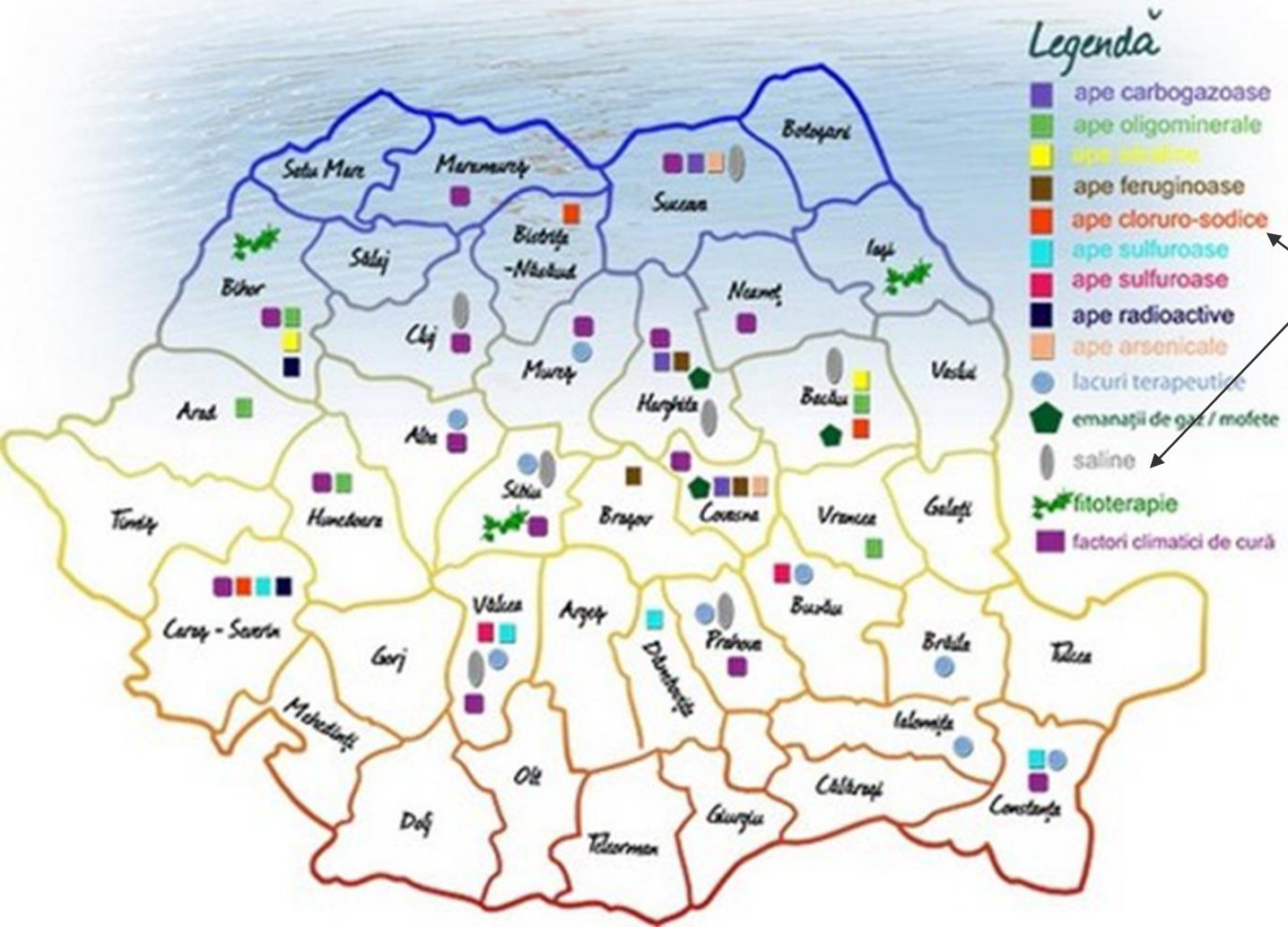


# Salt diamonds



# Spread

## Harta factorilor naturali terapeutici



- Cooking salt ( $\text{NaCl}$ ) is found in the form of deposits, in salt mines - **rock salt**, in sea and ocean waters - **sea salt**
- In Romania there are many springs with **chlorinated, ferruginous, sulfurous, mineral waters** (as you can see on the map)

Can you give examples of salt mines or mineral springs in your country?

Go to [www.menti.com](http://www.menti.com) and use the code 2305 8817

Can you give examples of salt mines or mineral springs in your country? (name the mine/spring and country)

Connection lost. Reload

The word cloud displays various responses, with the most prominent being 'portugal' and 'sal gema de loulé'. Other visible responses include 'mina de sal-gema em loulé', 'wieliczka - poland', 'mesologi salt mines', 'targu oca - romania', 'wieliczka poland', 'mina de sal-gema do loulé', 'minas de sal de loulé', 'targu oca from romania', 'poland - inowroclaw - 40', 'mina sal-gema de loulé pt', 'turda - romania', 'salt mines of castro mar', 'castro marim portugal', 'clay coal marble salt', 'salt mine in loulé', 'minas de sal gema de loulé', 'cacioca - romania', 'minas de sal-gema portuga', 'mina sal-gema - portugal', 'mesologi salt mines gr', 'mesolog-greece', 'salinas', 'de rio maior', 'mesologi', 'sal gema', 'salinas da fonte da bica', 'minas de sal-gema loulé', 'praid - romania', 'minas sal-gema loulé-pt', 'cacioca-romania', 'gema de loulé portugal', and 'mesologi greece'.

Karla ERASMUS 1....docx

Karla ERASMUS 1....docx

Show all



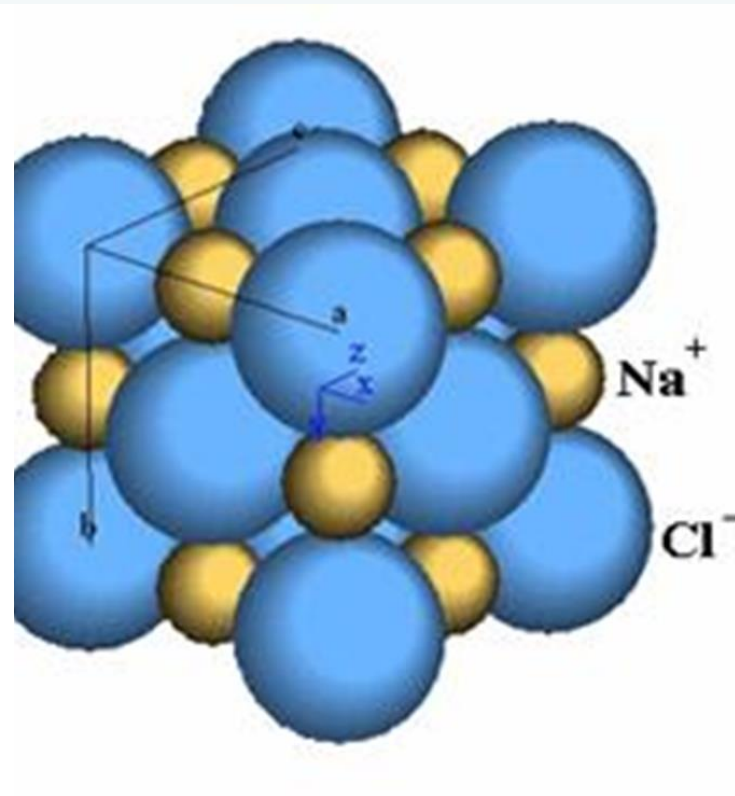
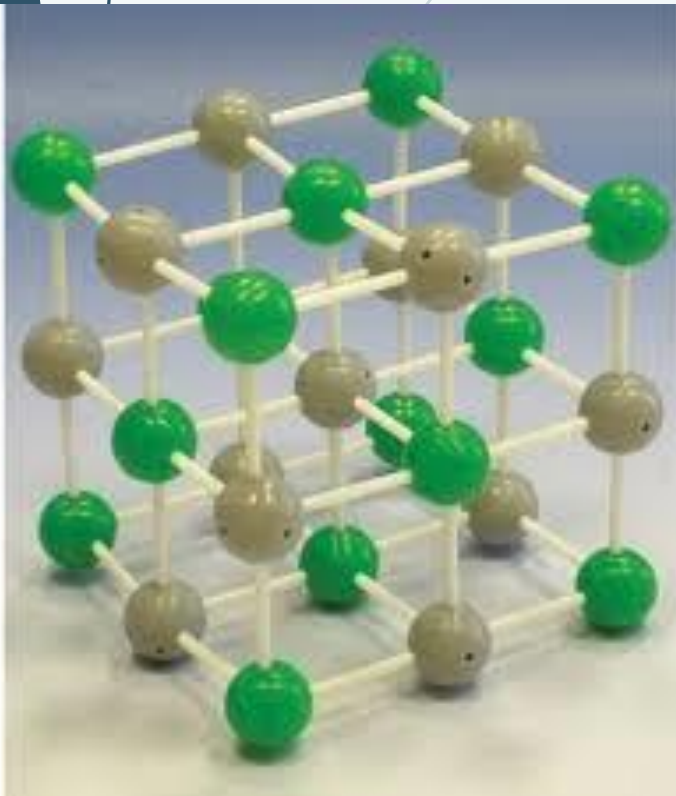
# Salt crystals



Can you think of several  
physical properties of  
table salt?



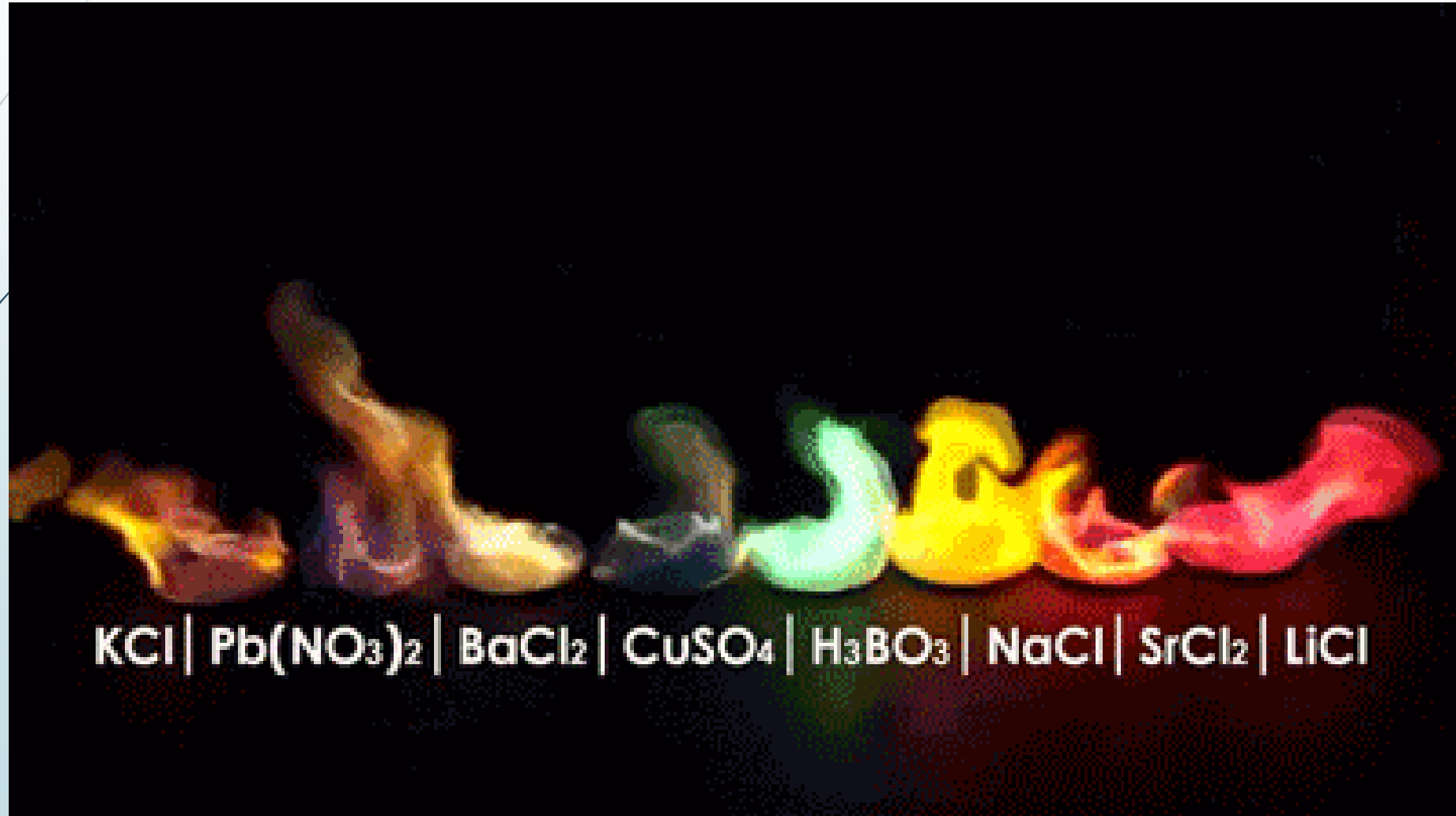
# Physical properties of table salt



Structural models

- NaCl is the best known salt
- It is a solid, crystallized substance
- It is colorless
- It tastes salty
- It is soluble in water
- It is hygroscopic (absorbs water vapor from the atmosphere)

# Ion recognition

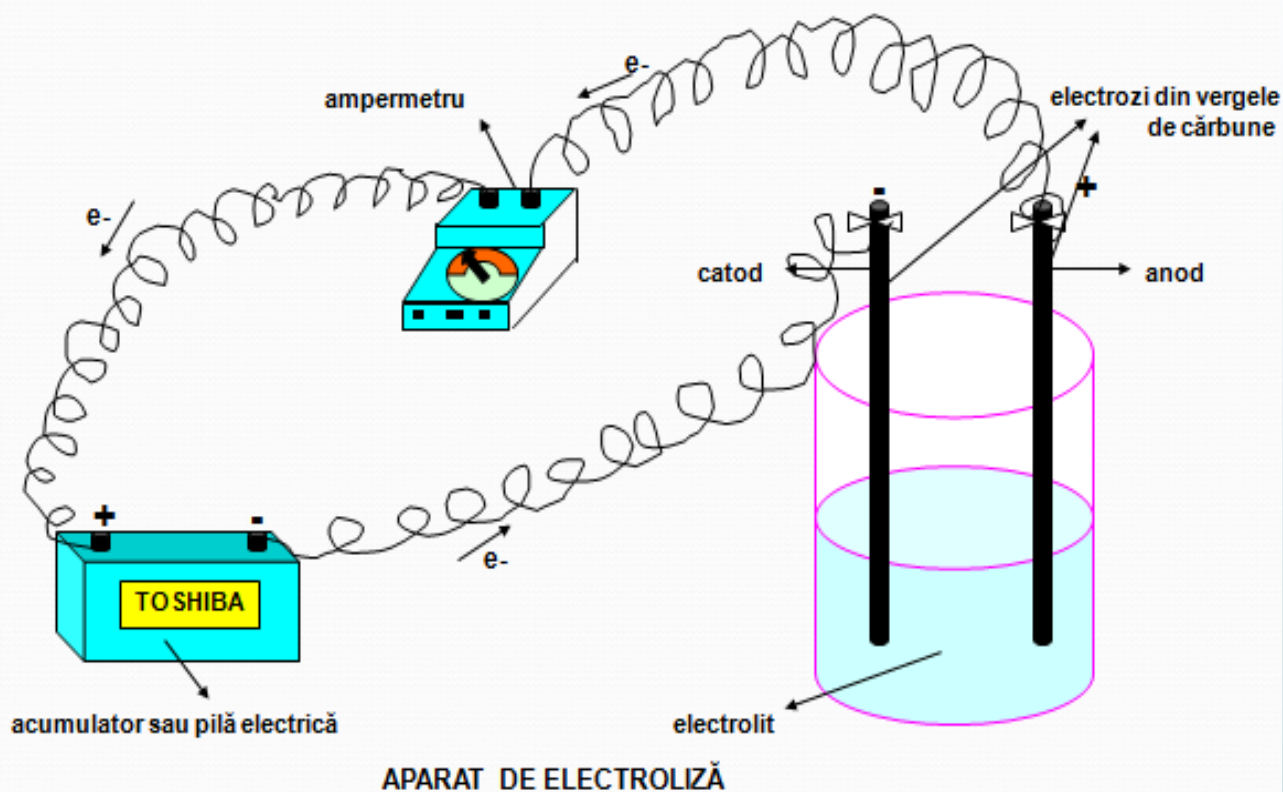




# Chemical properties of NaCl

- The main chemical property is electrolysis which can be reproduced in the laboratory, using the NaCl solution
- At the industrial level, NaCl electrolysis is performed, both in solution and in melt



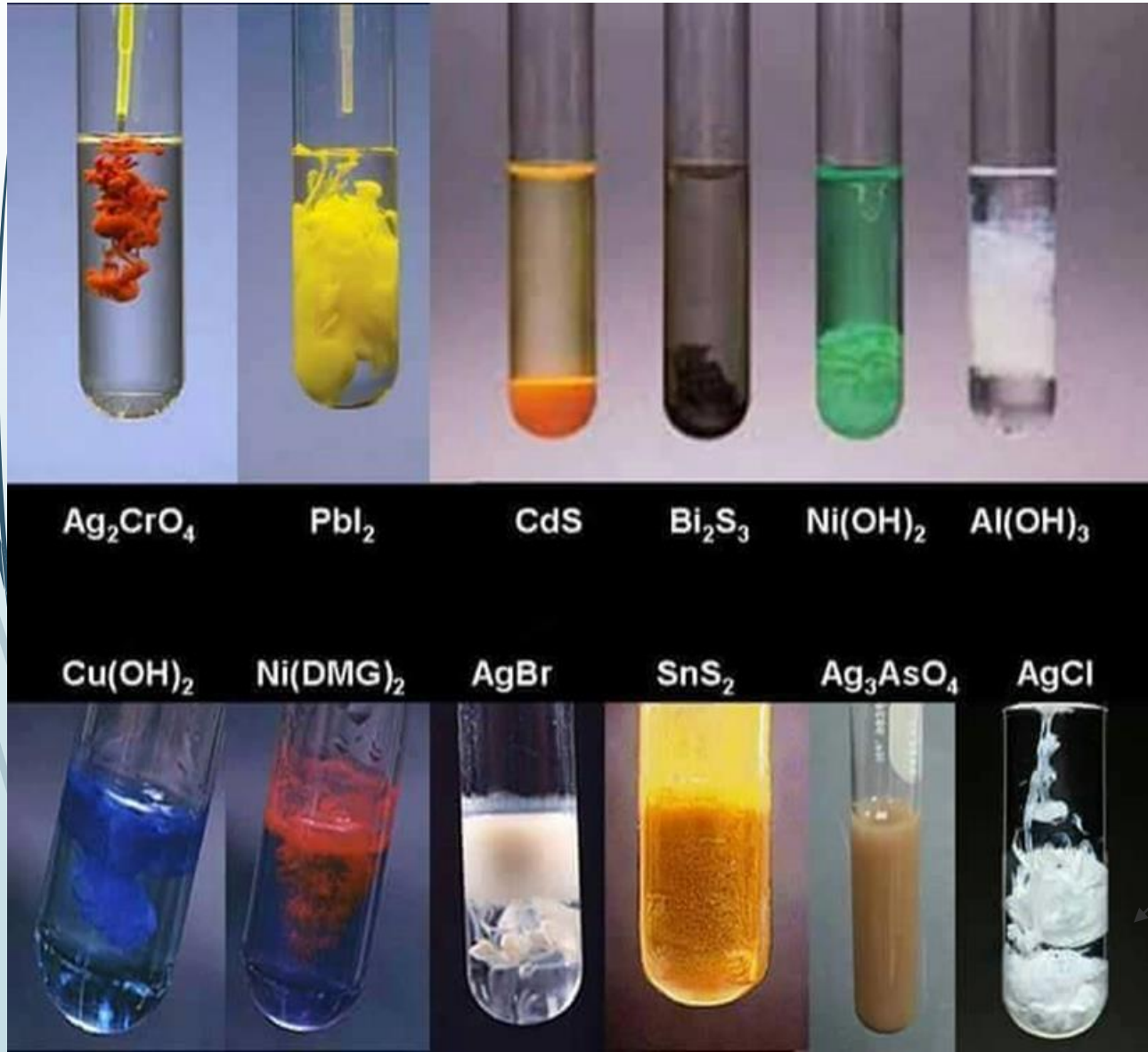


► By electrolysis of the salt solution, **caustic soda** and **chlorine** are obtained.



► In **the chlorosodium industry**:

- From **caustic soda** (NaOH) are obtained **soap, detergents, artificial silk**
- **Chlorine** (Cl<sub>2</sub>) is the basis for obtaining **hydrochloric acid (HCl)**, which in its turn is used:
  - as a reagent in the laboratory,
  - in the plastics industry,
  - in the manufacture of organic solvents,
  - in the medicine industry



- NaCl is identified with AgNO<sub>3</sub> (hell stone), resulting in a white precipitate



Can you think of some uses of salt?





# Uses of table salt

- In the diet, in the preservation of fish and meat, in the tannery
- In the energy industry
- In the chlorosodium industry
- when thawing roads
- In animal husbandry
- In medicine as a saline, because the solution with sodium chloride with a concentration of 0.9%, has the same concentration with blood plasma
- as a disinfectant



# The effects of the salt on the human body

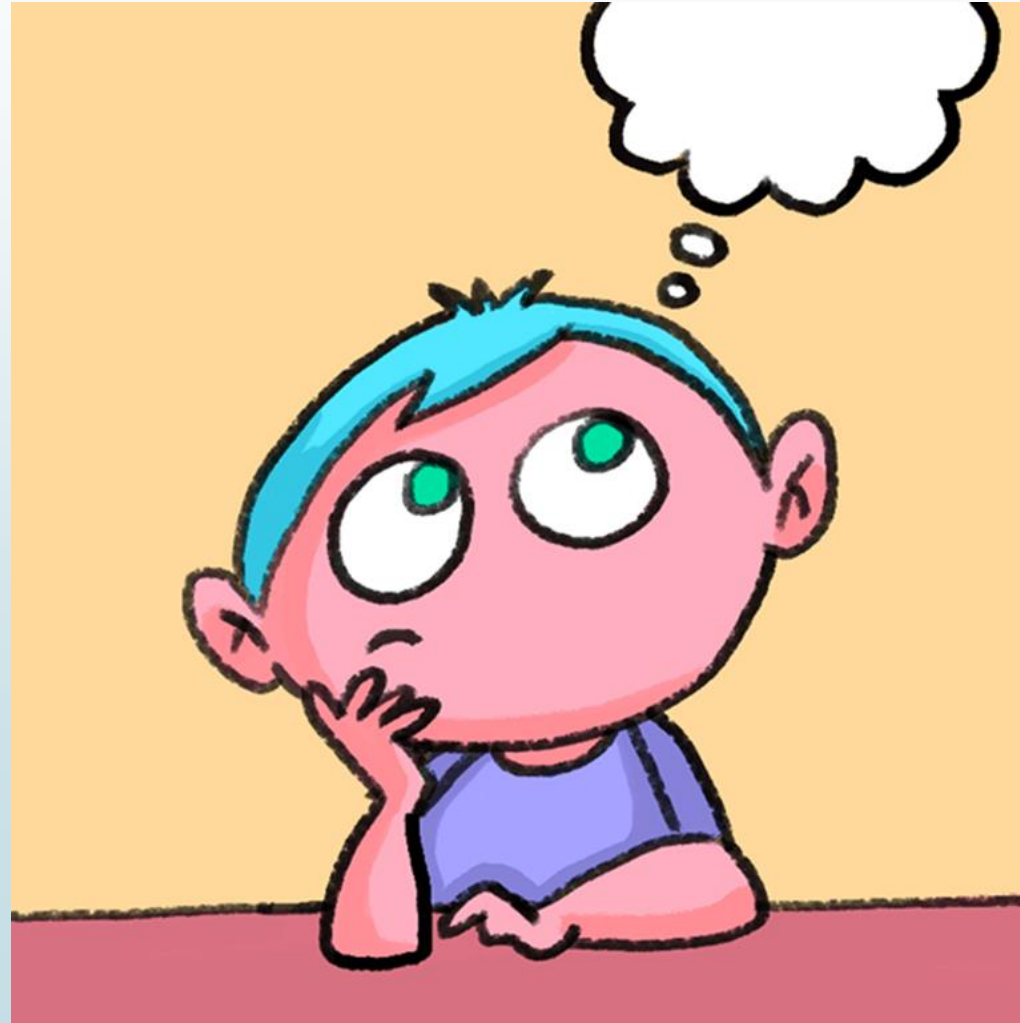


- Once the salt is in the human body, it dissociates (splits) into Na ions and Cl ions.
- In the healthy organism, there is a **balance** between the **ingestion** and the **elimination** through urine of the ions from the body.
- **Some diseases** (diarrhea, vomiting, some kidney or glands diseases) go to **disequilibrium**, as well as **the salt excess** goes to **different illnesses**.
- The daily necessary of salt is a ¼ spoonful of salt, or 500 mg of natrium.

# What role do Na and Cl ions play in our body?

## The role of $\text{Na}^+$ :

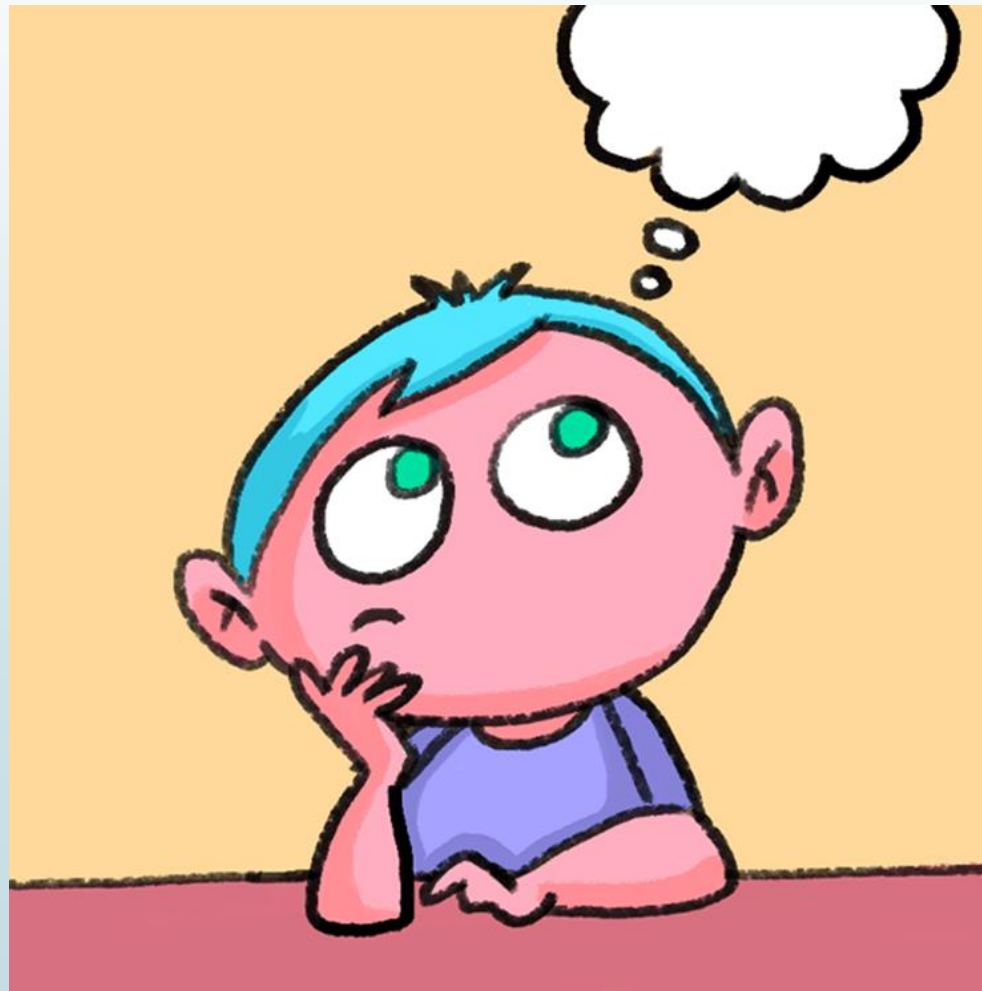
- In the transmission of the nervous impulse
- In maintaining the equilibrium of the electrolytes
- In the good functioning of the muscles



## The role of $\text{Cl}^-$ :

- Antibacterial
- It forms HCl (chlorine Hydrogen)
- It adjusts the intestinal transit
- The good functioning of the heart

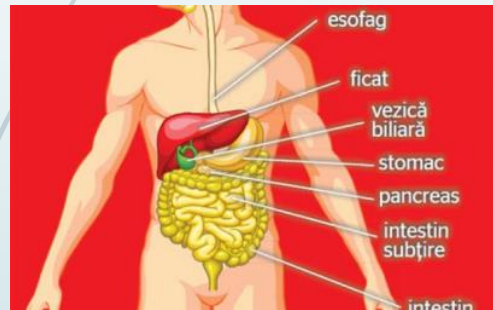
What are the effects of salt excess?



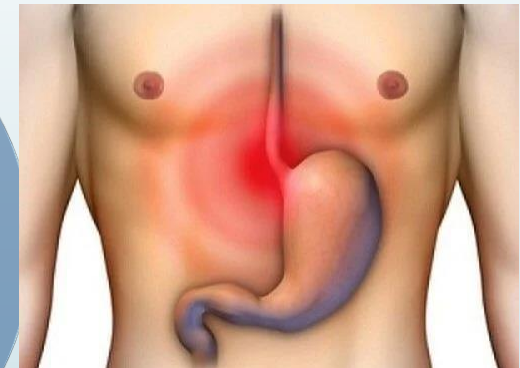
# The salt excess goes to:



The increasing of the blood pressure (the sodium ions retain water)



The destruction of the intestinal microflora



Gastric hyperacidity



Kidney and thyroid diseases







And now, please open package  
**number 2.**

# Salt lamps

Some of the benefits of Himalayan salt lamps are:

- Cleans and purifies the air
- Neutralizes the electromagnetic radiation generated by electrical appliances
- Reduces static electricity in the air
- May relieve sleep and concentration disorders
- Relieves allergy and asthma symptoms
- Increase the efficiency of relaxation exercises.

The beneficial effect of salt crystals is intensified by heating the salt. **Salt naturally attracts moisture from the air, along with various particles and positive ions.** By heating the salt, the water evaporates back into the air together with the negative ions, and the particles of dust, pollen, smoke, etc. remain trapped in the salt. This creates a saline air in the house.





Thank you for your attention!