

# Electrical current in liquids and solutions



## Ingredients of the experiment



Distilled water



Sodium Chloride



Electric circuit

# The experiment

1st

Distilled water

Introduce the positive and negative charges in the distilled water. Does it work before the charges touching? And after?

2nd

Result

Distilled water doesn't conduct electricity, so the circuit isn't closed until the two charges are touching.

3rd

Sodium chloride

Introduce the positive and negative charges in the solution. Does it work before the charges touching? And after?

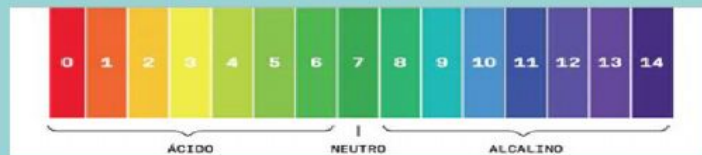
4th

Result

It does work before the charges touch each other because the electrolytes allow electric current

 **LIVEWORKSHEETS**

## pH along the experiment



01

Distilled water

The pH of distilled water is 7, which means it is neutral

02

Sodium Chloride

The pH of sodium chloride is 7 approximately

03

Sodium chloride after electrolysis

After electrolysis, the pH of the solution changes almost 14

 **LIVEWORKSHEETS**



## EXERCISE 1



Alcaline

Acid

Neutral

 **LIVEWORKSHEETS**

## EXERCISE 2

Complete/answer the following sentences:

- ★ Initial pH of the distilled water is
- ★ After introducing the charges in the water the pH changes?
- ★ The initial pH of the compound with Sodium Chloride is
- ★ After introducing the charges in the liquid, the final pH is

 **LIVEWORKSHEETS**

## EXERCISE 3

Select the FALSE sentences:

- ☐ The electric current works in the distilled water
- ☐ When we connect the two charges in any environment, the light bulb turns on
- ☐ From the positive and the negative charges, we can see bubbles when there is Sodium chloride
- ☐ This compound turns into a more acid reaction