

EXPERIMENTS

I. Water as a solvent

Water dissolves a huge number of gases, liquids and hard substances. However, there are some, which do not dissolve in water.

The aim of these experiments is to establish the level upto which different substances dissolve in water. The tests are picked, in a way that makes them appropriate for the age of the students.

You pour water into a number of different cups. Then each of them gets one of the following added into it : sugar, salt, spirit, sand and vegetable oil. You stir the mixtures in the cups gently with a glass stick. Our results show that sugar, salt and spirit dissolve into the water to a very high degree. However, sand and vegetable oil did not dissolve .

II. The Boiling Point of Water and the Melting Point of Ice

1) Measuring the boiling point of water

You put a metal cup of water on a hob. As soon as the water starts boiling, you measure its temperature. The boiling point of water, at a sea level is 100 C.

2) Measuring the melting point of ice

You place an ice cube in a glass of water and you stir it gently with a glass stick. The Ice starts melting and the temperature of the water in the glass starts dropping. You keep adding ice to the glass, until it is no longer melting in it. The ice stops melting, because the water temperature has become equal to the melting point of the ice. The current temperature of the water is measured, and it is established that ice melts at 0C.