

Homework 15

States of matter.

We have started discussing states of matter. There are a lot of states of matter, but for the beginning we will talk about 3 of them. These are

1. **Solid state** (a solid object has both definite volume and shape).
2. **Liquid state** (liquids have definite volume – they are almost incompressible, but have not a shape).
3. **Gas state** (both volume and shape are determined by the container).

Below are the questions for you:

1. A closed bottle is half full of mercury. Is there any mercury in the other half of bottle?
2. Can iron, led or mercury be in the gas state?
3. In what states are the following substances at room temperature: water, sugar, air, tin, alcohol, ice, oxygen, aluminum, milk, nitrogen? Make your answer in a form of a table with three columns corresponding to three basic states of matter.
4. Sometimes in a summer evening one can see fog over a surface of a lake. What state of matter is the fog?
5. Do the water molecules change when the water evaporates? How does the character of their motion change after evaporation?