

UNIT 1: MATTER.**STATES OF MATTER AND CHANGES OF STATE.**

Dear language assistant,

1. You can ask the students: **How many states of matter are there?** (Solid, liquid, gas). You are asking them for **examples** of solid, liquid and gaseous substances. Then are naming different substances and ask them if they are solid, liquid or gas: Is the chair liquid? **Which state is milk?** (wood, stone, oxygen, water, smoke, juice...). At the end of this discussion they have to do activities 46 and 47 on their Activity Book (page 18). Five minutes and check it, please.

46.Name the three states of matter.

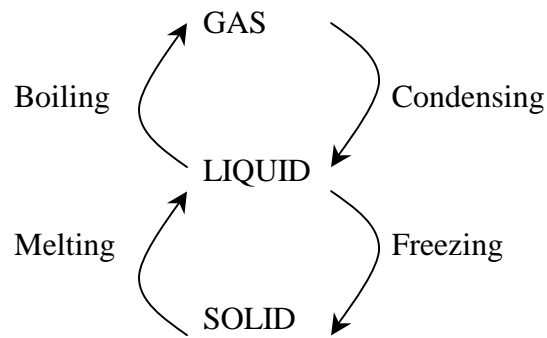
47.In which state are these substances usually?

Wood	Smoke
Oxygen	Milk
Stone	Wine
Carbon dioxide	Perfume
Juice	Book
Air	Iron

48.Complete the following chart

States	Does their shape change?	Does their volume change?
Solid		
Liquid		
Gas		

2. Now we are talking about the shape of solid, liquid a gaseous objects. Remind them the meaning of shape. **Does their shape change?** Solids have always the same shape, a fixed shape, but liquids and gases change, they have the shape of the receptacle they are in. The answer (yes/no) can be written in the first column of the chart from activity 48. After that, you are asking a similar question: **Does their volumen change?** Just volume of gases change (the teacher can show a balloon and a syringe to explain this).
2. After that, tell them we are going to explain the **CHANGES OF STATE.** Remember a substance change when we HEAT or COOL it (Write every word in capital letters on the board and explain their meanings, please).
 - a. WHAT HAPPENS when we cool liquid water? It BECOMES solid (ice)
 - b. What happens when we heat water? It becomes gas (water vapour).
 - c. What happens when we cool a gas? It becomes liquid.
 - d. What happens when we heat a solid?
 - e. And so on.
3. Then you can show the names of the different changes of state. Practise the pronunciation and wait two minutes for them to copy this graph (activity 58 from their book):



4. Then you can ask some questions to check if they have understood the previous words:
- What's the name of the change from solid to liquid?
 - And from gas to liquid?
 - What happens to the liquid water if it is warmed up?
 - And if you cool it? How is called that process?
 - What is the boiling?
 - What is the condensation?
 - Etc

58. The state of a substance can change when the temperature changes. For example if you heat liquid water it becomes gas and if you cool liquid water it becomes solid ice. Draw some arrow and label them using these words: melting, boiling, condensation, freezing.

GAS

LIQUID

SOLID

Thank you