## National Institute of Open Schooling <br> Lesson 2 - Matter in our Surroundings <br> Worksheet-2

Q1. Observe your daily routine and make a list of things you smell, eat, drink and use throughout the day. Observe is there any similarity in material used throughout the day?

Q2. A solid is defined as "a matter with definite size and shape which do not change on their own". Take a rubber band and stretch it, you will observe that it changes its shape on stretching? Is it a solid? Support your answer with suitable reasons.

Q3. Take different matters from your surroundings and classify the matter in different ways and make a table as below -

| Name of the Matter | Solid | Liquid | Gas |
| :---: | :---: | :---: | :---: |
| Book | Solid | - | - |
|  |  |  |  |

Comment why different matter have different states of matter?
Q4. Take water in liquid state and heat the water gradually till temperature $100^{\circ} \mathrm{C}$. Secondly cool the water till temperature $0^{0} \mathrm{C}$. Write your observations. Plot the temperature versus time graph of water. (Do the experiment in the presence of guardian)

Q5. Continue to the Q4 - explain why the temperature of water remains constant during its boiling point?

Q6. Take different matters from your surroundings and classify the matter in different ways and make a table as below -

| Name of the Matter | Elements | Compound | Mixture |
| :---: | :---: | :---: | :---: |
| Mango Shake | - | - | Mixture |
|  |  |  |  |

Write different points which differentiate Elements, Compounds and Mixture.
Q7. Imagine there is any matter say "Matter A". "Matter A" can be compressed easily by applying pressure. "Matter A" expands with increase in temperature and contracts with decrease in temperature. Name and explain the Nature of "Matter A".

Q8. In ancient time, when there was no water purifier, explain different methods to purify the water for drinking purpose used by our forefathers. Support your answer why these methods were used to purify the water.

Q9. Observe your mother throughout the day and make a list when she is using different methods to purify or to separate substances or anything else. Explain anyone method used by her in detail.

Q10. Make a mixture of "Iron + Sugar + Sand" and another mixture of "Lemon Juice + Sugar + Water". Observe both the mixture and comment how mixtures are different in nature. Is it possible to separate both the mixtures? If Yes, Name and explain method of separation. If Not, support your answer with suitable reasons.

