## **National Institute of Open Schooling**

Secondary Course: Science And Technology Lesson 6: Periodic Classification of Elements Worksheet-6

- 1. There are numerous elements in nature. Could you remember location of each element? If yes, how? If not, give reasons why do we need to classify these elements?
- 2. Name the scientists who first attempted to classify the elements found in nature. How many attempts have been taken before modern periodic table is formed?
- 3. "Mendeleev included noble gas elements in his periodic table." Justify this statement
- 4. If a new element is discovered, using your knowledge of chemistry, explain how you would decide whether it belonged in group 2, group 4 or group 0 of the Periodic Table.
- 5. Why is it important to arrange the elements in the table rather than a list of elements in the Periodic Table?
- 6. 2 isotopes of Nitrogen are N14 and N15. How would you place both isotopes in one group or in different group. Give reasons in support of your answer.
- 7. "Modern periodic table is superior to Mendeleev Periodic table." Whether you support this or not. Justify this statement.
- 8. Arrange the following elements in increasing order of their atomic number.

- 9. "The importance of atomic number as the fundamental property was realized by Henry Mosely". Give reasons in support of this statement.
- 10. The elements of a period are given below is order from left to right with missing of 2 elements.

Answer the following questions:

- a. Name the period which these elements belong to.
- b. Name all these two missing elements.
- c. Make correct arrangement of the elements as answer the question "a" and question "b".
- d. Identify these elements as metal, non-metal and noble gas.