

PERIODIC TABLE
CBSE/WBCHSE/ISC BOARD
ASSIGNMENT SET 2

1. Arrange the following elements in the descending order of atomic size and give a reason for your answer. Mg, Cl, P, Ar (At. numbers of the above elements are 12, 17, 15, 18 respectively).
2. Mention any two trends exhibited by elements when we go from left to right across the period of periodic table.
3. (a) Atomic radius of hydrogen is 37pm. Express it in meters. (b) How does atomic size vary in a group and in a period?
4. (a) What are metalloids? Write any two examples. (b) Given below are some of the elements of first group Li, Na, K (Their atomic numbers are 3,11,19 respectively and they belong to 2nd 3rd and 4th period respectively) Arrange these in the decreasing order of metallic character exhibited by them.
5. (a) "Silicon is classified as a metalloid." Justify this classification. (b) Name two more such metalloids. (c) In which part of the Periodic Table we can look for metalloids. On which side of these we can get non- metals?
6. State the modern periodic law. How many groups and periods are there in the modern periodic table.
7. Out of the two elements X and Y which has bigger atomic radius? Give reason to justify your answer. (i) X has atomic number 18 and atomic mass 40 (ii) Y has atomic number 20 and atomic mass 40.
8. Given below is a part of the periodic table.

Li	Be	B	C	N	O	F	
Na	Mg	Al	Si	P	S	Cl	

(a) What happens to the atomic size? Justify your answer. (b) what happens to the metallic character of the elements?

9. The electronic configuration of three elements X, Y and Z are given below.

X	2		
Y	2,	6	
Z	2,	8,	2

(i) Which element belongs to the second period? (ii) Which element belongs to the eighteenth period? (iii) Which element belongs to the second group? (iv) What is the valency of Y? (v) Y and Z, are they metal or a non - metal?