

THIRUVANANTHAPURAM EDUCATIONAL DISTRICT

CWX3(1) EM

STD X

CHEMISTRY

CHAPTER 3 MODULE 1

1. Classify the following elements into metals and nonmetals?
sodium, carbon, potassium, oxygen, magnesium, chlorine
iron, gold, sulphur, copper, zinc, nitrogen, silver

Metals	Nonmetals
• • • •	• • • •

2.



sodium is added to water mixed with phenolphthalein

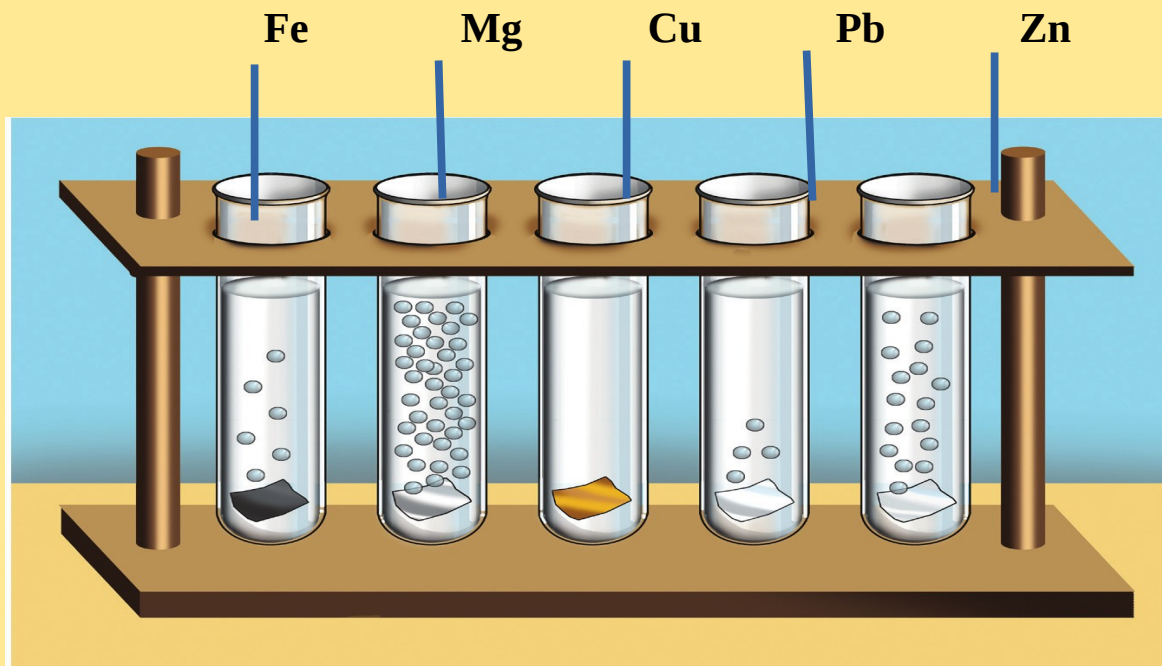


copper is added to water mixed with phenolphthalein

Sodium reacts vigorously with water in the beaker and turns to pink colour but there is no change with **copper**. What may be the reason?



3.



Small pieces of different metals are added in dilute hydrochloric acid. Observe the figures keenly and answer the following questions

a) Name the metal which reacts very fastly?

b) Which metal reacts slowly ?

c) Which metal does not react with acid?

d) Write the chemical equation of these metals reacted with acid?

e) Name the gas obtained here?

f) Arrange the given metals in the increasing order of their reactivity?

It can be seen that the lustre of **aluminium vessels** diminishes as time passes by. In the case of **copper vessels**, it takes months for the loss of its lustre by the formation of verdigris. Does the shining of **gold** fade even after a long time? Give reason?



REACTIVITY SERIES

Potassium	K	↑ most reactive
Sodium	Na	
Calcium	Ca	
Magnesium	Mg	
Aluminium	Al	
Zinc	Zn	
Iron	Fe	
Nickel	Ni	
Tin	Sn	
Lead	Pb	
Hydrogen	H	↓ least reactive
Copper	Cu	
Silver	Ag	
Gold	Au	