

Answer Key
Chemistry Term 1
Set B

1. f Block
2. 6.022×10^{23}
3. Mg
4. a) $1s^2 2s^2 2p^6 3s^2 3p^6 3d^5 4s^1$
b) Rearrangement of electrons in 3d and 4s so as to get half filled 3d subshell.
5. a) In liquid state, energy of the molecules will be greater than that in solid state.
b) Inter molecular attraction will be lower in liquid state, than that in solid state.
6. a) Copper sulphate solution.
b) Copper
7. a) $1s^2 2s^2 2p^6 3s^2$
b) 2
c) 12
8. a) 5 GMM
b) 5 mole
c) $5 \times 6.022 \times 10^{23}$
9. a) Cu
b) $\text{Cu} \rightarrow \text{Cu}^{2+} + 2e^-$
c) Both oxidation and reduction take place simultaneously.
10. a) d Block, 4th period
b) +4
c) $1s^2 2s^2 2p^6 3s^2 3p^6 3d^3$
d. Energy difference between 3d and 4s electrons is very small.
11. a = 100, b = 4, c = 200
Boyle's Law
12. a) Ions which can move freely.
b) Electrolytes are substances which conduct electricity in molten states or in aqueous solutions and undergo chemical change.
c) acids, bases, salt solutions...
d) Michael Faraday