

Answer to Chemistry Test 1

1. A 2. D 3. C 4. A 5. C
6. C 7. A 8. B 9. D 10. B

11.(a) (i) Halogens / Non-metals

(ii) $s = 7/8/25/26$

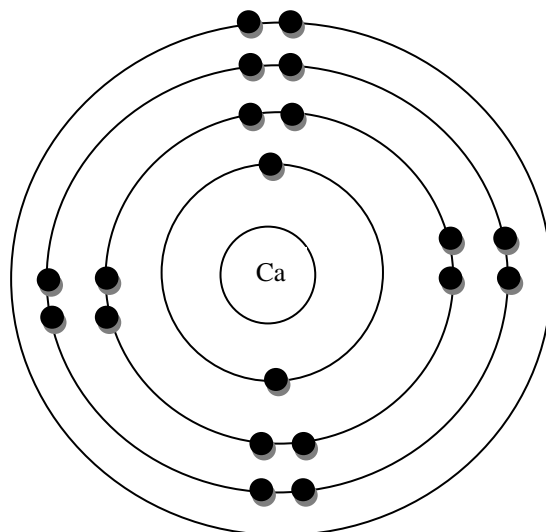
(iii) A is more reactive than D.

Since A is smaller in size / have 2 shells less than D, the attractive towards electron is stronger / D obeys octet rule.

(b) (i) Alkaline earth metals / Metals

(ii) $r = 1/2/3/4/5/6/7/8/9/10/11/12/13$

(iii) e.g.



12. (a) Atoms with the same atomic number (number of protons) but different mass number (number of neutrons) are called isotopes.
- (b) Isotopes have different physical properties since they have different mass number, therefore leading to differences in boiling point, melting point and density.
- (c) All isotopes have similar chemical properties since they have the same number of electrons in their outermost shells .
- (d) Two isotopes, they are $^{35}_{17}\text{Cl}$ and $^{37}_{17}\text{Cl}$.
- (e) Relative atomic mass = $54 \times 0.0584 + 56 \times 0.9168 + 57 \times 0.0217 + 58 \times 0.0031$
 $= 55.91$

THE END