

Answer Building Blocks of 19th

1. What are acids made of?
Protons, Neutrons and Electrons
2. What is the difference between atomic number and mass number?
Atomic number represents the number of protons in an atom while the atomic mass represents the number of protons and neutrons
3. What are ions?
Ions are atoms that have either lost or gained an electron. (They are either positively charged or negatively charged)
4. What is the difference between cations and anions?
Cations are the positively while anions are negatively charged.
5. What are isotopes?
Isotopes are atoms having different number of neutrons. (Carbon 12, 13, 14) oxygen 16 and 18 (Carbon being used as a form of isotope)
6. What is the difference between isotopes and radioisotopes?
Isotopes is a form of element while radioisotopes is part of isotopes. (Hind, $^{14}_6\text{C}$, $^{13}_6\text{C}$) (radioactive isotopes) Radioisotopes is part of
7. What is the difference between electron configuration and orbital?
Electrons occupy fixed set energy of orbitals due to their positions. (Hind, $^{14}_6\text{C}$, $^{13}_6\text{C}$) while orbital are sets region where an electron is more likely to be found. (Hind, $^{14}_6\text{C}$)
8. How are chemical reactions classified?
The rate of chemical reaction depend on three factors:
- concentration: Higher the concentration of reactants, the faster the reaction.
- Temperature: Higher the temperature, higher the rate of reaction.
- Catalyst: Catalyst that speed up the reaction.
9. What are Lewis acids?
Acceptance of lone bonding electron changes. (They undergo an addition)
10. What are Lewis bases?
Donor bonding ability of electron, undergo bond.
11. What is electronegativity?
How far an atom wants an electron. As you go from left to right the electronegativity increases.
12. What is the difference between polar and nonpolar covalent bond?
Polar covalent bond occur due to difference in electronegativity while nonpolar bond occur due to similarities in electronegativity.