

# CHEMISTRY

## THIRUVANANTHAPURAM EDUCATIONAL DISTRICT

AK2CH10 2(E)

### WORKSHEET - 2

Standard – X

### Answerkey



- 
- Size of the balloon increases.
    - Volume of the gas decreases with increase in pressure.
    - Boyles law states that at a constant temperature, volume of a definite mass of gas is inversely proportional to its pressure. If  $P$  is the pressure and  $V$  the volume, then  $P \times V$  is a constant.
    - The size of the air bubbles rising from the bottom of an aquarium increases. ( Any other relevant instance )
  - In summer the temperature is very high. According to Charles law, volume of the gas increases with increase in temperature. So during summer fully inflated tyres will burst.
    - Charles law states that at constant pressure, the volume of a definite mass of a gas is directly proportional to the temperature in Kelvin Scale. If  $V$  is volume and  $T$  the temperature, Then,  $V / T$  will be a constant.
    - 2
      - 400
      - 900
  - Volume of the balloon increases with the increase in the number of molecules present in them.
    - Avagadro's Law. It states that, at constant temperature and pressure, the volume of a gas is directly proportional to the number of molecules.
    - A = 2 litres and C = 10 litres**
  - Freedom of gas molecules is very high.
    - The energy of gas molecules is very high.
    - The attractive force between gas molecules is very less.
  - Avagadro's law
    - Charles' law
    - Boyle's law
    - Charles' law
  - A - 5**  
**B - 23 g**  
**C - 12 g**

# CHEMISTRY

7.  $B < D < A < C$

8. 1. TEMPERATURE  
2. JACQUES CHARLES  
3. VOLUME.  
4. AMEDEO AVAGADRO  
5. PRESSURE.  
6. ROBERT BOYLE

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