

(ECC02-0001E)

- The collisions between gas molecules are
- A) Elastic
B) Inelastic
C) Both a and b
D) None

(ECC02-0002H)

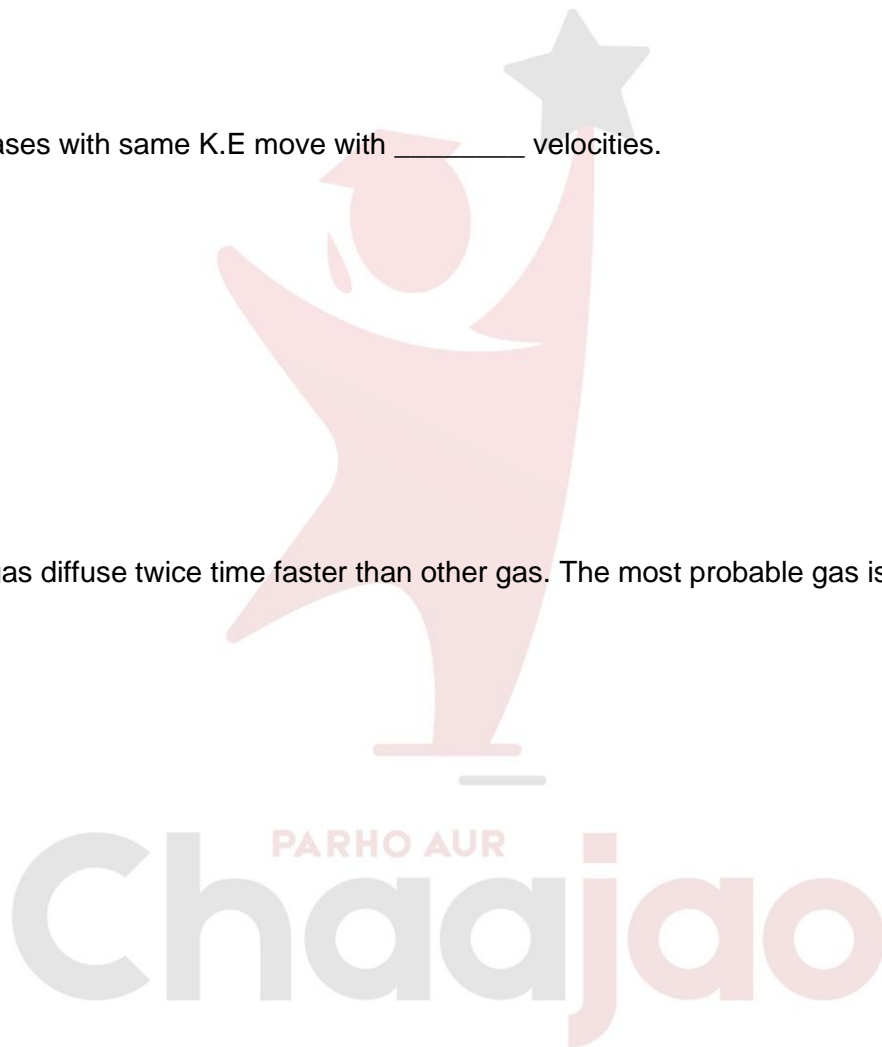
- Different gases with same K.E move with _____ velocities.
- A) Same
B) Different
C) Equal
D) None

(ECC02-0003H)

- Ammonia gas diffuse twice time faster than other gas. The most probable gas is:
- A) SO_2
B) C_4H_{10}
C) C_5H_8
D) Cl_2

(ECC02-0004E)

- If $V_1 = 5$ litres, $P_1 = 2$ atm, $T_1 = 273$ °C. $T_2 = 0^\circ\text{C}$ and $V_2 = ?$ When $P_2 = 1$ atm.
- A) 5 lit
B) 10 lit
C) 2.5lit
D) 12.5 lit



(ECC02-0005E)

- K.E. $a T$ is expression for
- A) Boyle's Law
B) Charles's law
C) Kinetic Molecular Theory
D) None

(ECC02-0006M)

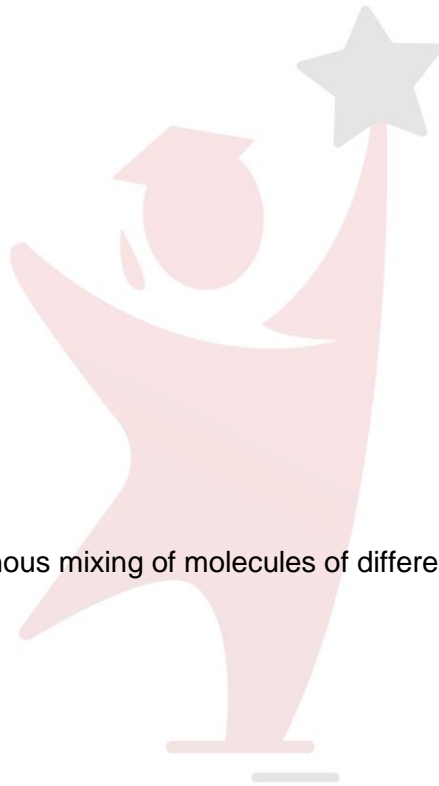
- Absolute zero is equal to
- A) 0°C
B) -459.7°F
C) -273°K
D) none

(ECC02-0007E)

- The spontaneous homogenous mixing of molecules of different gases by random motion and collision called
- A) Diffusion
B) Effusion
C) Dalton's law
D) None

(ECC02-0008E)

- $V \propto 1/P$; is mathematical expression for
- A) Charles's Law
B) Avogardo's Law
C) Boyle's Law
D) Brown's Law



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(ECC02-0009E)

- Which is correct?
A) 1 mm Hg = 1 torr = 1 atm
B) 1 mm Hg = 760 torr = 1 atm
C) 760 mm Hg = 760 torr = 1 atm
D) 760 mm Hg = 1 torr = 1 atm

(ECC02-0010E)

- The gas law are not obeyed by general gases at
A) Low temp
B) High pressure
C) High temp
D) both a and b

(ECC02-0011M)

- Which is not the state of matter?
A) Plasma
B) Solid
C) Gas
D) None

(ECC02-0012M)

- All gases liquefy before reaching at
A) 273°K
B) 373°K
C) 0 K
D) 73°K



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(ECC02-0013M)

- Most ideal gas at room temperature is
- CO₂
 - NH₃
 - SO₂
 - N₂

(ECC02-0014M)

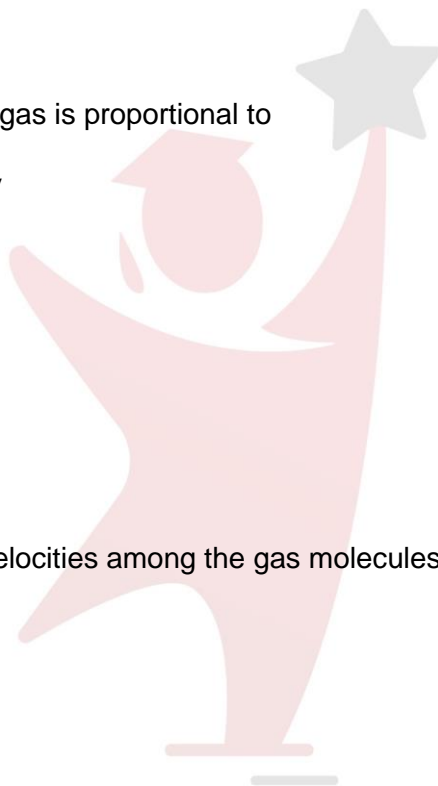
- Absolute temperature of a gas is proportional to
- Translational kinetic energy
 - rotational kinetic energy
 - Vibrational kinetic energy
 - Potential energy

(ECC02-0015M)

- Concept of distribution of velocities among the gas molecules was developed by
- Clausius
 - Maxwell
 - Boltzman
 - Vander wall

(ECC02-0016E)

- Which of the following pair has same numbers of molecules at STP
- 1000cm³ of N₂H₄ and O₂
 - 200cm³ of CO₂ and N₂O
 - 50cm³ of CO and N₂
 - All above



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(ECC02-0017M)

- The deviation of a gas from ideal behavior is maximum at
 - A) -10°C and 5.0 atm
 - B) -10°C and 2.0 atm
 - C) 100°C and 2.0 atm
 - D) 0°C and 2.0 atm

(ECC02-0018H)

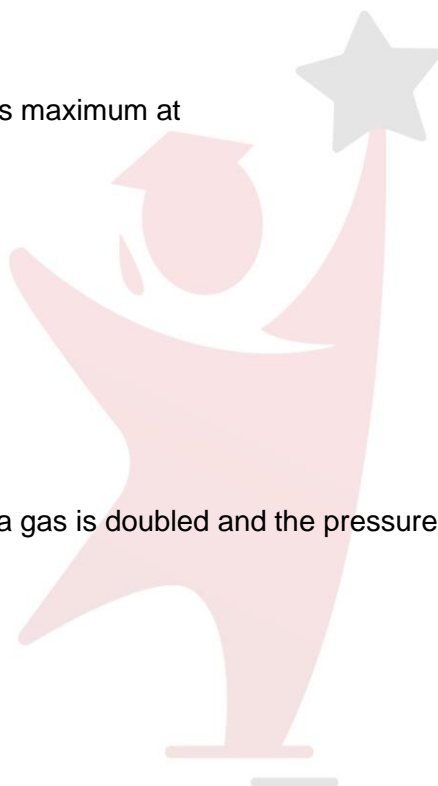
- The molar volume of CO_2 is maximum at
 - A) STP
 - B) 127°C and 1 atm
 - C) 0°C and 1 atm
 - D) 273°C and 1 atm

(ECC02-0019H)

- If absolute temperature of a gas is doubled and the pressure is reduced to half the volume of gas will
 - A) Remain unchanged
 - B) Increases four times
 - C) Reduce to $1/4^{\text{th}}$
 - D) Be doubled

(ECC02-0020E)

- The order of the rate of diffusion of gases NH_3 SO_2 Cl_2 and CO_2 is
 - A) $\text{NH}_3 > \text{SO}_2 > \text{Cl}_2 > \text{CO}_2$
 - B) $\text{NH}_3 > \text{CO}_2 > \text{SO}_2 > \text{Cl}_2$
 - C) $\text{Cl}_2 > \text{SO}_2 > \text{CO}_2 > \text{NH}_3$
 - D) None of them



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(ECC02-0021M)

- Linde's method is employed for.
A) Separation of gases
B) Expansion of gases
C) Compression of gases
D) Liquefaction of gases

(ECC02-0022H)

- Equal masses of methane and oxygen are mixed in an empty container at 25°C. The fraction of total pressure exerted by oxygen is.
A) 1/3
B) 8/9
C) 1/9
D) 16/17

(ECC02-0023M)

- Which pair of gases do not obey Dalton's law of partial pressure.
A) H₂ and O₂
B) N₂ and O₂
C) NH₃ and HCl
D) H₂ and He

(ECC02-0024E)

- Pressure remaining constant, at which temperature the volume of a gas will become twice of what is at 0°C.
A) 546°C
B) 200°C
C) 546K
D) 273K



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(ECC02-0025E)

- Which of the following gas has the lowest density at s.t.p.?

- A) CO
- B) Ne
- C) N₂
- D) NH₃



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Answer key	
1	A
2	B
3	C
4	A
5	C
6	B
7	A
8	C
9	C
10	D
11	D
12	C
13	D
14	A
15	B
16	D
17	A
18	D
19	B
20	B
21	D
22	A
23	C
24	C
25	D