

1. Which of the following is the correct expression for the natural gas law?

A. $PT = nVR$

B. $VR = nPT$

C. $PV = nRT$

D. $RT = nPV$

2. What is the boiling point of water at standard pressure on the Kelvin Scale?

A. 272 K

B. 273 K

C. 372 K

D. 373 K

3. Which statement is consistent with the kinetic theory of ideal gases?

A. Molecules transfer energy through collisions.

B. Molecules are always stationary.

C. The force of attraction between molecules is constant.

D. The size of the molecules is large compared to the distance that separates them.

4. Gas molecules at the same temperature are always assumed to have the same

- A. Uniform velocity
- B. Uniform acceleration
- C. Number of atoms
- D. Kinetic energy
- E. Random motion

5. As the volume of a fixed mass of an ideal gas increases at constant temperature, the product of the pressure and the volume of the gas

- A. Decreases
- B. Increases
- C. Remains the same

6. Which property determines the direction of the exchange of internal energy between two objects?

- A. Temperature
- B. Specific Heat
- C. Mass
- D. Density

7. A glass rod becomes positively charged when it is rubbed with silk. This net positive charge accumulates because the glass rod

- A. Gains electrons
- B. Gains protons
- C. Loses electrons

D. Loses protons

Answer Key

1. C

2. D

3. A

4. D

5. C

6. A

7. C