

Chapter 6

Gases, Liquids, Solids, and Intermolecular Forces

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- a. Covalent
- b. Molecular
- c. Ionic
- d. Schematic



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- b. H_2
- c. HCl
- d. H_2O
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Hydrogen bonding occurs when hydrogen is bonding directly to O, N, or F. For example, hydrogen bonding occurs in this molecule $\text{CH}_3\text{CH}_2\text{OH}$, but NOT this molecule CH_3OCH_3 .

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- a. NaCl
- b. HOCH₂CH₂OH
- c. C₆H₆
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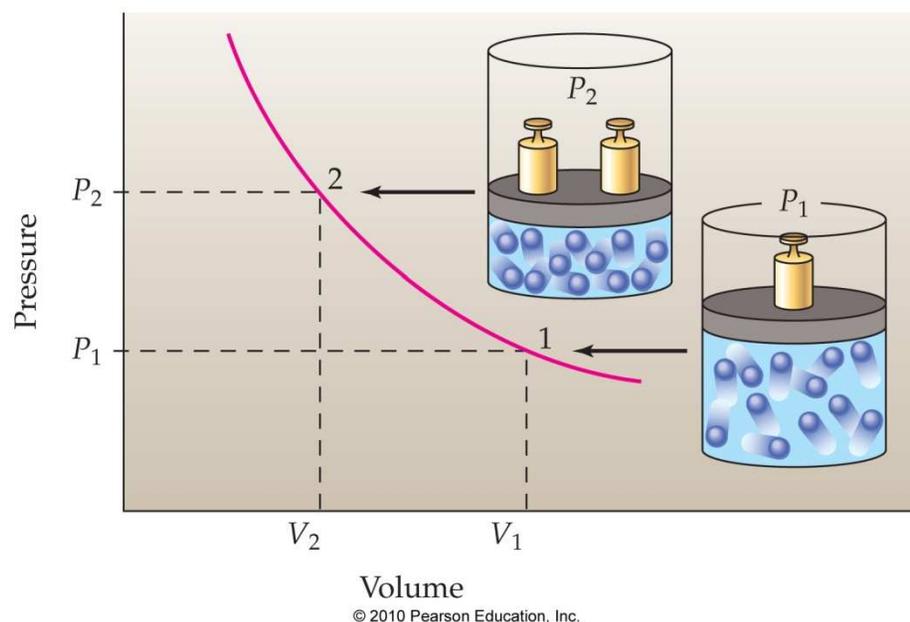
- a. 7 g
- b. 14 g
- c. 16 g
- d. 21 g
- e. 28 g



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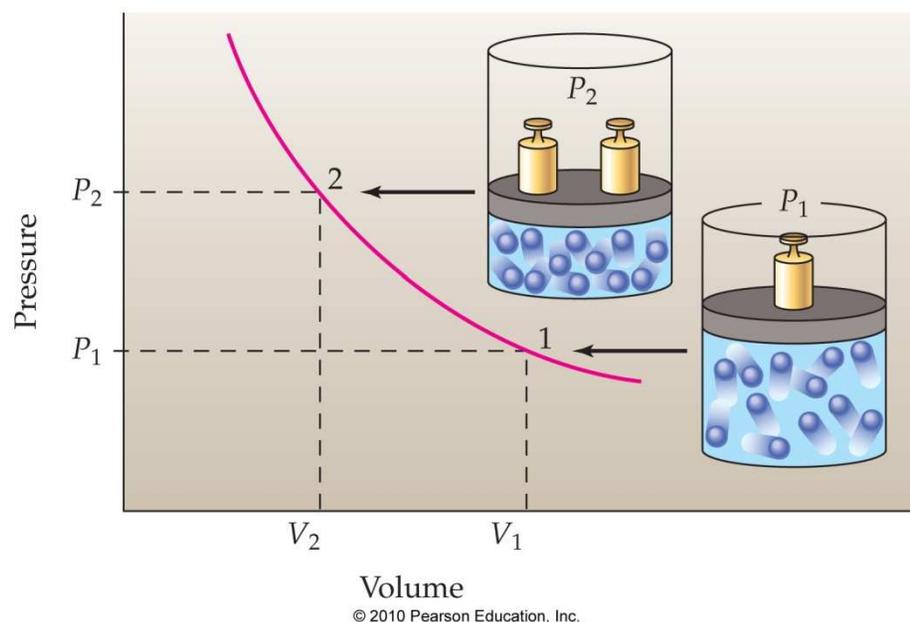
If a gas occupies 1.5 liters at 20 °C and 2.0 atm pressure, what volume will the gas occupy at 20 °C and 1.0 atm?



- a. 0.75 L
- b. 1.5 L
- c. 15 L
- d. 3.0 L
- e. 30 L



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A balloon shrinking when being cooled by liquid nitrogen is an example of which law?



(a)

(b)

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- a. $PV = a$, constant T
- b. $1 \text{ mol} = 22.4 \text{ L}$ at STP
- c. $1 \text{ mol} = 6.02 \times 10^{23}$
- d. $V = bT$, at constant P
- e. $P = cT$, at constant V



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