

# THE MOLE AND VOLUME

Name \_\_\_\_\_

For gases at STP (273 K and 1 atm pressure), one mole occupies a volume of 22.4 L. What volume will the following quantities of gases occupy at STP?

1. 1.00 mole of  $H_2$

2. 3.20 moles of  $O_2$

3. 0.750 mole of  $N_2$

4. 1.75 moles of  $CO_2$

5. 0.50 mole of  $NH_3$

6. 5.0 g of  $H_2$

7. 100. g of  $O_2$

8. 28.0 g of  $N_2$

9. 60. g of  $CO_2$

10. 10. g of  $NH_3$