## Molar Conversions Worksheet

1. How many moles does 80.0 grams of $\mathrm{H}_{2} \mathrm{O}$ represent?
2. How many moles does 22.0 grams of $\mathrm{CO}_{2}$ represent?
3. What is the mass of 5.0 moles of $\mathrm{Ba}(\mathrm{CN})_{2}$ ?
4. What is the mass of 3.5 moles of water?
5. How many molecules are in 0.25 moles of $\mathrm{CH}_{4}$ ?
6. How many sodium ions are in 3.0 moles of NaCl ?
7. Convert $3.01 \times 10^{23}$ molecules of $\mathrm{C}_{2} \mathrm{H}_{6}$ to moles.
8. How many moles of glucose does $1.2 \times 10^{24}$ molecules represent?
9. What would be the mass of $1.20 \times 10^{24}$ molecules of water?
10. How much mass does $1.51 \times 10^{22}$ atoms of neon represent?
11. How many molecules does 36.0 grams of water represent?
12. How many atoms does 3.0 grams of carbon represent?
13. What would be the volume of 0.25 moles of chlorine gas at STP?
14. What would be the volume of 6.25 moles of helium gas at STP?
15. How many moles does 44.8 L of Hydrogen gas at STP represent?
16. A sample of Oxygen gas occupies 6.2 L at STP. How many moles does that represent?
