

## Mass and Moles Worksheet

1. How many moles in 34.2 g of sulfur?
2. How many grams in 1.20 moles of carbon?
3. How many atoms in 3.91 moles of sodium?
4. How many atoms in 45.22 moles of strontium?
5. How many molecules in 31 g of chlorine gas?
6. How many nitrogen atoms in 3.4 moles of ammonia?
7. What mass would  $4.52 \times 10^{24}$  molecules of water have?
8. How many oxygen atoms in  $2.3 \times 10^{-8}$  g of oxygen?
9. How many atoms in 1.00 ounce of pure gold?
10. How many sugar molecules ( $C_{12}H_{22}O_{11}$ ) could you make from 1.0 pound of carbon?
11. What is the mass of 4.00 moles of sugar?
12. How many moles of sulfate ions would be released if 2.5 moles of aluminum sulfate were dissolved in water?
13. What is the mass of  $1.2 \times 10^{-3}$  moles of sodium chloride?
14. How many formula units of NaCl are there in  $3.55 \times 10^{-6}$  g of salt?
15. How many Volkswagens are there in 2 moles of Volkswagens?