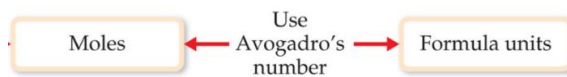


Chemistry  
More Practice with Moles & Avogadro's Number

Name \_\_\_\_\_

*Instructions: Read the following problems and complete the correct calculations. SHOW ALL WORK. Try to round to the correct number of significant figures.*



1. How many formula units are in 3.54 moles of  $\text{Na}_2\text{S}$ .
  
  
  
  
  
  
  
  
  
  
2. How many moles of  $\text{NaCl}$  are in a sample of  $8.022 \times 10^{23}$  formula units?
  
  
  
  
  
  
  
  
  
  
3. How many chlorine atoms are in 2.19 mol of  $\text{SrCl}_2$ ?
  
  
  
  
  
  
  
  
  
  
4. How many moles of  $\text{H}_2\text{O}_2$  are in a sample of  $8.96 \times 10^{22}$  molecules?
  
  
  
  
  
  
  
  
  
  
5. How many atoms are in 1.42 mol of  $\text{HNO}_2$ ?

6. Calculate the number of molecules in 5.64 moles of  $\text{H}_2\text{O}$ .
  
  
  
  
  
  
  
  
  
  
7. Calculate the number of atoms in 0.961 moles of Fe.
  
  
  
  
  
  
  
  
  
  
8. How many moles of calcium ions are in a sample of  $1.24 \times 10^{22}$  ions?
  
  
  
  
  
  
  
  
  
  
9. How many atoms are in 7.91 mol of  $\text{Al}_2\text{O}_3$ ?
  
  
  
  
  
  
  
  
  
  
10. How many moles of carbon are in a sample of  $29.547 \times 10^{26}$  atoms?