

MATH SKILLS TRANSPARENCY WORKSHEET**13**

Calculations Involving the Molar Mass of an Element

**Use with Chapter 10,
Section 10.2**

1. Determine the mass in grams of each of the following. Use the periodic table.
 - a. 1.00 mol silver (Ag)
 - b. 12.0 mol aluminum (Al)
 - c. 3.25 mol copper (Cu)
 - d. 1.93 mol xenon (Xe)
 - e. 5.34 mol vanadium (V)

2. Determine the number of moles in each of the following. Use the periodic table.
 - a. 10.0 g lithium (Li)
 - b. 367 g magnesium (Mg)
 - c. 72.1 g silicon (Si)
 - d. 4.87 g fluorine (F)
 - e. 1.56 kg lead (Pb)

Calculating the Molar Mass of a Compound

Use with Chapter 10,
Section 10.3

Determine the molar mass of each of the following compounds. Use the periodic table.

1. carbon dioxide (CO_2)
2. mercury(I) fluoride (Hg_2F_2)
3. magnesium thiotellurite (Mg_3TeS_5)
4. copper(II) cyanide ($\text{Cu}(\text{CN})_2$)
5. cobalt(II) orthophosphate ($\text{Co}_3(\text{PO}_4)_2$)