

**1.** Determine the number of atoms present in 4.00 mol of aluminum.

**2.** Determine the number of atoms present in 1.55 mol of sodium.

**3.** Convert  $2.65 \times 10^{25}$  atoms of fluorine to moles of fluorine atoms.

**4.** Convert  $4.26 \times 10^{25}$  molecules of hydrogen,  $\text{H}_2$ , to moles of hydrogen,  $\text{H}_2$ .

**5.** Convert  $1.75 \times 10^{26}$  atoms of potassium to moles of potassium.

- 6.** Determine the mass in grams of 7.20 mol of antimony.
- 7.** Determine the mass in grams of 0.500 mol of uranium.
- 8.** Determine the mass in grams of 0.750 mol of francium.
- 9.** A sample of lead has a mass of 150.0 g. What amount of lead in moles does the sample contain?
- 10.** A sample of gold has a mass of  $5.00 \times 10^{-3}$  g. What amount of gold in moles does the sample contain?