

CHAPTER 7	Determining the Number of Moles in a Sample	BLM 7.0.8
ASSESSMENT		

In order to solve stoichiometry problems, calculations must be done using moles of reactants or products. The following questions ask that you calculate the number of moles when given information about gases, solutions or pure substances.

Calculate the number of moles in:

1. 20.0 g of NaOH. Its molar mass is 40.00 g/mol.
2. 1.46 L of argon gas at 305 K and 125 kPa.
3. 1.25 L of a 1.50 mol/L sulfuric acid solution.
4. 10.5 g of copper(II) chloride.
5. 33.0 mL of 0.0075 mol/L barium nitrate solution.
6. 438 mL of chlorine gas at 22.0 °C and at 150 kPa pressure.
7. 150 g of sucrose,  $C_{12}H_{22}O_{11}(s)$ .