NAME: _____

STOICHIOMETRY WORKSHEET

A. Interprete the following reactions in terms of representative particles, moles and mass:

1. $2\ Mg_{(s)} + O_{2\ (g)} \rightarrow 2\ MgO_{(s)}$

_____	_____	_____
_____	_____	_____
_____	_____	_____

2. $2\ Na_{(s)} + 2\ H_2O_{(aq)} \rightarrow 2\ NaOH_{(aq)} + H_{2\ (l)}$

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

B. Solve the following stoichiometry problems and write the correct answer with units.

1. How many moles of O_2 can be produced by letting 12.00 moles of $KClO_3$ react?

   $2\ KClO_3 \rightarrow 2\ KCl + 3\ O_2$

   Answer:_____

2. How many moles of Cu are needed to react with 3.50 moles of AgNO 3 ?

   $Cu + 2\ AgNO_3 \rightarrow Cu(NO_3)_2 + 2\ Ag$

   Answer:_____

3. How many moles of CO_2 are produced with 10 mol of C_3H_8 ?

   $C_3H_8 + 5\ O_2 \rightarrow 3\ CO_2 + 4\ H_2O$

   Answer:_____

4. How many moles of HCl can be produced with 5.7 moles of H_2SO_4?

   $2\ NaCl + H_2SO_4 \rightarrow Na_2SO_4 + 2\ HCl$

   Answer:_____

5. How many moles of Oxygen are needed to make complete combustion of 17.5 moles of propane, C_3H_8, in order to get CO2 and H2O?

   $C_3H_8 + 5\ O_2 \rightarrow 3\ CO_2 + 4\ H_2O$

   Answer:_____