Name _____ Class _____ Date _____

The Mole: One Step Conversions: Quiz 2b

/6

Make sure to <u>SHOW ALL WORK and INCLUDE UNITS!</u>

1. How many molecules are there in 4.00 moles of glucose, $C_6H_{12}O_6$?

2. What is the mass of 5.00 moles of Fe_2O_3?

3. How many moles of argon atoms are present in 11.2 L of argon gas at STP?

Name _____ Class _____ Date _____

Answers:

1. See Below: *(Sig and Units)*

a. $4.00\ mols\ C_6H_{12}O_6\ x\ \frac{6.02x10^{23}\ molec}{1\ mol} = 2.41\ x\ 10^{24}\ molec\ C_6H_{12}O_6$

b. $5.00\ mols\ Fe_2O_3\ x\ \frac{159.70\ g}{1\ mol} = 799\ g\ Fe_2O_3$

c. $11.2\ L\ Ar\ x\ \frac{1\ mol}{22.4\ L} = 0.500\ moles\ Ar$