Chemistry   Name _____
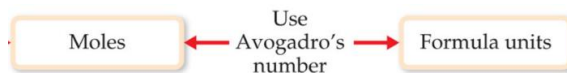## Moles & Avogadro's Number (Part 1) WS

Instructions: Read the following problems and complete the correct calculations. SHOW ALL WORK. Try to round to the correct number of significant figures.

Moles → Representative Units

1. Calculate the number of molecules in 1.058 moles of H_2O.

2. Calculate the number of atoms in 0.750 moles of Fe.

3. How many formula units are in 2.54 moles of Na_2S.

4. How many molecules are in 3.24 mol CH_3CH_2OH?

5. How many ions are in 3.84 moles of O^{2-}.

Representative Units → Moles

6. How many moles of carbon are in a sample of 25.125×10^{27} atoms of C?

7. How many moles of calcium ions are in a sample of 2.35×10^{24} ions?

8. How many moles of N_2O_4 are in a sample of 1.17×10^{22} molecules?

9. How many moles of helium are in a sample of 5.50×10^{22} atoms of He?

10. How many moles of CO_2 are in a sample of 12.54×10^{23} molecules?