Name: $\qquad$
Chemistry Ch. 9 Review
Mole to Particle and Particle to Mole

Date: $\qquad$
Work these on a separate page.

Show all work as taught in class. Make sure to use units on all numbers except the one under the given. Box your answer and unit.

1. How many atoms are in 3.0 moles of silver atoms?
2. How many moles are in $5.60 \times 10^{24}$ molecules of water?
3. How many formula units of sodium peroxide are in 1.04 moles?
4. How many moles are in $2.5 \times 10^{25}$ potassium ions?
5. How many electrons are in 5.48 moles of electrons?

Step 1: Write the formula
Step 2: Find the molecular mass
Step 3: Use that as the conversion factor to work the problem
Use another sheet of paper for the first two steps and show the third step on this paper.

1. Find the number of grams in 4.05 moles of calcium bicarbonate.
2. Find the number of moles in 580 grams of water.
3. How many grams of strontium sulfide make up 14.4 moles?
4. How many moles are in 640.9 grams of oxygen (it is a diatomic molecule)?
5. How many grams are in 4.27 moles of gold IV phosphate?
