Chemistry 2202 – Review Quiz Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Instructions: Complete the questions on the sheets provided. Show any workings where necessary.*

1. Draw an energy level diagram for each of the following:
	1. Magnesium 2pts
	2. Oxide ion, O2- 2pts
	3. How many how many electrons are in the valence shell of the O2- ion? 1pt
2. Determine the names of the following compounds: 3pts
	1. C3H6
	2. PCl5
	3. N2O4
3. Write the formulas for the following compounds: 2pts
	1. Nitrogen Trichloride \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	2. Tetraphosphorous Pentaiodide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Determine the names of the following compounds: 5 pts
	1. CaBr2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	2. Li2O \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	3. Hg(I)Cl \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	4. Zn(MnO4)2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	5. Cr(II)Cr2O7 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Determine the formulas of the following compounds: 5 pts
	1. Cesium Oxide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	2. Barium Sulfide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	3. Vanadium(IV) Sulfate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	4. Sodium Cyanide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	5. Copper(I)Oxalate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Balance the following equations by placing the proper coefficients in the blanks before each product and reactant.
	1. \_\_\_ Hg + \_\_\_ Fe2O3 🡪 \_\_\_ HgO + \_\_\_ Fe 2 pts
	2. \_\_\_ C8H16 + \_\_\_ O2 🡪 \_\_\_ CO2 + \_\_\_ H2O 3 pts
7. Perform the following calculations, leaving the correct number of significant digits in your answer: 5pts
	1. 3.448 + 1.9002
	2. 0.004 – 45.34
	3. 77.11 x 3.8
	4. 89.475 / 23.7
	5. 2.1 x 108 – 3.7 x 107