Physical Properties and Chemical Properties of Elements and Compounds

A. As per Dr. Pete's demonstration you will analyze the chemical reactivity of the following elements with water, acid, and acid/heat combined. When a reaction occurs and a gas is released, you will test the gas to determine if the gas is hydrogen or oxygen. For no reaction use NR. For reactivity use +, ++, +++, to rate reactivity.

copper	iron	zinc	aluminum	calcium	
					Observe substance. Write observations in box below symbol.
					Add an equal volume H_2O. Write observations.
					Add 5-6 drops of 6M HCl. Use NR, +, ++, +++ to indicate rxn.
					Gently heat mixture. Use NR, +, ++, +++ to indicate rxn.
					Test the reaction for hydrogen gas. Use + or -
					If any rxn, write observation- what did you see happen.

B. As per Dr. Pete's demonstration.

Na_2CO_3 Transfer a stick of powder to a clean tube and add 20 drops water	MnO_4 Transfer 5 drops to clean tube	MnO_2 Transfer a stick of powder to a clean tube and add 20 drops water	K_2CrO_4 Transfer 5 drops to clean tube	
				Observe substance.
				Add H_2O. Write observations. Use NR for no rxn. Use +, ++, +++ for rxn.
				Add H_2O_2. Write observations. Use NR for no rxn. Use +, ++, +++ for rxn. Test any gases for hydrogen and oxygen. Label result gas + or -
				Add 6M HCL to Na_2CO_3. **DO NOT ADD ACID to the other compounds**.