Chemistry 141 Name key

Dr. Cary Willard

Quiz 3a (20 points) September 12, 2012

1. (7 points) A metal forms a compound with the formula MCl3. If the compounds contains 68.96 % Cl by mass, what is the identity of the metal?
2. (7 points) Vanadium forms four different oxides. One of the oxides is 68% vanadium, what is the empirical formula of this vanadium oxide?
3. (6 points) Write and balance the equation for the reaction described below:

Solid lead(II) sulfide reacts with aqueous hydrobromic acid to form solid lead(II) bromide and dihydrogen monosulfide gas.

Chemistry 141 Name key

Dr. Cary Willard

Quiz 3a (20 points) September 12, 2012

1. (7 points) A metal forms a compound with the formula MCl3. If the compounds contains 52.57 % Cl by mass, what is the identity of the metal?
2. (7 points) Vanadium forms four different oxides. One of the oxides is 56% vanadium, what is the empirical formula of this vanadium oxide?
3. (6 points) Write and balance the equation for the reaction described below:

Aqueous hydrochloric acid reacts with solid manganese(IV) oxide to form aqueous manganese(II) chloride, liquid water, and chlorine gas.