

Weekly Assignment #1
Grade 11 Chemistry Review

name: _____

1. (a) Draw the Lewis structure for dichlorodifluoromethane, CCl_2F_2 , one of the versions of Freon® (Freon-12)?

(b) Which bond is more polar: C—Cl or C—F? Explain.

(c) Calculate the number of moles of dichlorodifluoromethane in an 8.50 g sample of CCl_2F_2 .

(d) Based on the **unbalanced** chemical equation provided, what mass of carbon tetrachloride, CCl_4 , is needed to produce 8.50 g of CCl_2F_2 using excess hydrogen fluoride, HF?



2. (a) Show the formation of magnesium chloride using Lewis symbols.

(c) Write the dissociation equation of magnesium chloride, $\text{MgCl}_2(\text{aq})$.

(d) Complete the balanced the equation for the following double displacement reaction, indicating the precipitate that will form?



(e) Write the total and net ionic equation for the double displacement reaction between silver nitrate, $\text{AgNO}_3(\text{aq})$, and magnesium chloride, $\text{MgCl}_2(\text{aq})$.