Chemistry 100   Name:_____

1. Complete the following table

Soluble or Insoluble?	Soluble	Insoluble
CuS		
K_2S		
$FeCl_3$		
$C_6H_{12}O_6$(Polar)		
Fe(OH)3		
$HC_2H_3O_2$		
PbI_2		
$CuSO_4$		
C_8H_{18}(nonpolar)		
$Pb(NO_3)_2$		
H_2SO_4		
$BaSO_4$		

Show all work and units

2. What is the % (v/v) concentration of 14.6 ml of alcohol dissolved in 104.5 grams of solution?

Answer_____

3. What is the % (m/m) concentration of 124.6 grams of glucose dissolved in 678.5 grams of water?

Answer_____

4. How many ml of a 2.4% (m/v) solution of KCl can be made using 350 g of solute in water?

5. Answer_____

6. What volume of 35% (v/v) aqueous solution can be made using 14.5 ml of alcohol.

7. Answer_____

8. What mass of glucose is needed to make 2.2 L of a 25 % (m/v) aqueous solution ?

9. Answer_____

10. How many ml of solute are needed to prepare 1,450 ml of a 72% (v/v) solution of alcohol in water?

11. Answer_____