Name $\qquad$

1. A solution is prepared by dissolving 50.0 g of cesium chloride $(\mathrm{CsCl})$ in 50.0 g water. Calculate the mass \% of cesium chloride in the solution.
2. A solution is prepared by dissolving 125 g sucrose $\left(\mathrm{C}_{12} \mathrm{H}_{22} \mathrm{O}_{11}\right)$ in $135 \mathrm{~g} \mathrm{H} \mathrm{H}_{2} \mathrm{O}$. Calculate the mass \% of sucrose in the solution.
3. How many grams of $\mathrm{K}_{2} \mathrm{SO}_{4}$ would you need to prepare 1500 g of $5.0 \% \mathrm{~K}_{2} \mathrm{SO}_{4}$ solution?
4. On average, glucose makes up about $0.10 \%$ of human blood, by mass. How many mg of glucose are there in 100.0 g of blood?
5. Helium gas, $3.0 \times 10^{-4} \mathrm{~g}$, is dissolved in 200 g of water. Express this concentration in parts per million and parts per million?.
6. A sample of 300.0 g of drinking water is found to contain 38 mg Pb . What is this concentration in parts per million?
7. A solution of lead sulfate $\left(\mathrm{PbSO}_{4}\right)$ contains 0.425 ppm of lead sulfate in 100.0 g of water. How many mg of lead sulfate are there in this solution?
8. A 900.0 g sample of sea water is found to contain 6.7 ppm Zn . How many mg of Zn are in the sea water?
