$\qquad$

## Determining Concentration

1. "Crystal Light on the Go Packets" are 54 grams. They are to be added to a standard 500 ml bottle of water. What is the concentration of Crystal Light in the water ( 3 marks)?
2. Rachel and Caitlyn are having chocolate milk. Rachel has 400 ml of milk and adds 60 ml of chocolate sauce. Caitlyn has 250 ml and adds 40 ml of chocolate sauce. Whose chocolate milk is stronger ( 6 marks)?
$\qquad$
3. The concentration of sugar in coke is said to be $0.106 \mathrm{~g} / \mathrm{ml}$. How much sugar would be in a 375 ml can of Coke ( 3 marks)?
4. According to an online source, a 250 ml can of Red Bull contains 80 mg of caffeine. A 473 ml can of Monster Energy Drink contains 160 mg . How much more caffeine per ml is in the Monster? If these companies decided to make a 2 L bottle, how much more caffeine would be in a 2 L bottle of Monster than in a 2 L bottle of Red Bull - carry 3 decimal places for all concentration values ( 8 marks)?
