****Concentration and Dilution Quiz**

/30

*Read each question carefully.* ***Show all of your work*** *and remember to include* ***units****!*

/9

1. Fill in the blanks for the following symbols in the equation used to calculate concentration.

C is the \_\_\_\_\_\_\_ of the and is calculated in (*units*)

m is the of the and is calculated in (*units*)

V is the of the and is calculated in (*units*)

# Concentration Calculations

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1. If I use 30 grams of Nesquik powder to make 240 ml of chocolate milk. What is the concentration of my chocolate milk in g/L?

 Answer:

/4

1. Dylan is having a party and decides to make freezies from Kool-Aid. If one pack of Kool-Aid has 150g and the Kool-Aid needs to have a concentration of 350g/L to taste the way he wants it to, what will be the volume of solution that Bradley can make with his one pack of Kool-Aid?

 Answer:

1. If Dylan was able to make 10 freezies from the Kool-Aid he prepared in the previous question:
2. What is the volume of each freezie?

/1

 Answer:

1. What mass of Kool-Aid would he need to use if he wanted to make 24 freezies?

/4

Answer:

# Dilution Calculations

1. Matt was preparing some hydrochloric acid (HCl) for a lab. The bottle of acid he was using had a concentration of 120g/L. If he took 15ml of this original solution and added 185ml of water, what was the final concentration of the solution he prepared?

/4

 Answer:

/4

1. Mindy was given a bottle of Chemical-X with a concentration of 25g/L. How much of the original Chemical-X solution would she need to use to make 2.5L of a 1.5% solution?

 Answer: