Dimensional Analysis Pizza   Name _____

Chemistry   Date _____ Hour _____

What is dimensional analysis?

What is a conversion factor? Provide a few examples.

- A tool in dimensional analysis used to _____ from one _____ to _____.

- These are _____ values - They _____ change.

- They have an infinite number of sig figs. (rule 5)

What does S.U.C.S. stand for?

<u>S</u>tart → What _____ and _____ are you starting with?

<u>U</u>nknown → What _____ are you trying to get to?

<u>C</u>onversion Factor(s) → How are you going to get there?

● Select a conversion factor that _____ out the unit on top.
● If needed, select another conversion factor. Continue to cancel units until you have the ending unit.

<u>S</u>etup & <u>S</u>olve → Math! Make sure all units _____!

● Multiply across the top. Multiply across the bottom. Divide the top and bottom.
● NO _____ _____!

Practice!
1) If you have 4 pizzas, how many boxes would you need?

S: U: C:

S:

4 pizzas

2) If you invite 14 humans over for your super awesome party, how many slices of pizza would you need?

S: U: C:

S:

56 slices

3) If you invite 15 humans over for your super awesome party, how many pizzas would you need?

S: U: C:

S:

5 pizzas

4) If you have a budget of $150 for pizza, how many pizzas could you get?

S: U: C:

S:

Conversion Factors:
1 box = 1 pizza
1 pizza = 12 slices
1 human = 4 slices
1 slice = 5 pieces of pepperoni
1 pizza = $18.78

7 pizzas

5) If you have a budget of $150 for pizza, how many slices could you get?

S: U: C:

S:

95 slices

6) If you ordered 23 pizzas, how many pieces of pepperoni would you have?

S: U: C:

S:

1,380 pepperoni

7) CHALLENGE! If I have $80.00, how many pieces of pepperoni would come on top of my pizza(s)? *Hint: this is a 3-stepper!*

S: U: C:

S:

255.0 pepperoni