

# 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?

Start → What \_\_\_\_\_ and \_\_\_\_\_ are you starting with?

Unknown → What \_\_\_\_\_ are you trying to get to?

Conversion 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.

## Conversion Factors:

1 box = 1 pizza

1 pizza = 12 slices

1 human = 4 slices

1 slice = 5 pieces of pepperoni

1 pizza = \$18.78

Setup & Solve → 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:

*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*