

Name: _____

Date: _____

Notes: Balancing from Scratch

Define *The Law of Conservation of Mass*: _____

What should you be careful to do when you are solving for the mass of a substance? _____



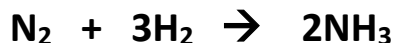
1. When solid carbon reacts with 64.0 g of oxygen gas to form carbon dioxide, no carbon or oxygen is left over. How much carbon is reacted if 88.0 grams of carbon dioxide is produced?

A 24.0 g

B 64.0 g

C 88.0 g

D 112.0 g



2. When 14.0 g of nitrogen gas reacts with 6.0 g of hydrogen gas to form ammonia, no nitrogen or hydrogen is left over. How much ammonia was produced?

A 14.0 g

B 8.0 g

C 20.0 g

D 40.0 g

What should you do to make sure that an equation is properly balanced? _____

THE STEPS TO BALANCING FROM SCRATCH:

1. Determine how many of each element are present.
2. Identify which element (if any) is keeping the equation from being balanced.
3. Add coefficients to make this element balanced.
4. Recalculate how many of EVERY element you now have in the equation.
5. Add coefficients to make any other element that has been unbalanced correct and recalculate.
6. STOP ADDING COEFFICIENTS once it is balanced. Many students find this to be the hardest step.

How can a set of coefficients balance but not be correct? _____

Balance the following chemical equations from scratch:

MAKE TABLES!

