Mass & Particle Systems

System

Investigate the mass and particle relationships of chemical reactions:
The molar masses for atoms are: R = 1.00g, G = 2.00g, and B = 1.5g

A. Molecular - http://cheminfo.chem.ou.edu/~mra/CCLI2004/S2GBM.htm
B. Molecular - http://cheminfo.chem.ou.edu/~mra/CCLI2004/SRGBM.htm
C. Graphic - http://cheminfo.chem.ou.edu/~mra/CCLI2004/SRBN.htm

Research Statements

Use evidence from the MoLE simulations to prove or disprove the following assertions.

1. Molecules are conserved in a chemical reaction.

2. Mass is conserved in a chemical reaction.

3. Moles are conserved in a chemical reaction.

4. The coefficients in a balanced chemical equation are related to the number of moles of reactants and products.

5. The coefficients in a balanced chemical equation are related to the number of grams of reactants and products.

6. Increasing the amount of a reactant will proportionally increase the amounts of a product.

7. The ratio of masses in a chemical reaction and the ratio of moles in a chemical reaction are the same.