Student directions Reactants, Products, and Leftovers activity 2: Limiting Reactants in Chemical Reactions

http://phet.colorado.edu

homework

Learning Goals: Students will be able to:

- 1. Predict the amounts of products and leftovers after reaction using the concept of limiting reactant
- 2. Predict the initial amounts of reactants given the amount of products and leftovers using the concept of limiting reactant
- 3. Translate from symbolic (chemical formula) to molecular (pictorial) representations of matter
- 4. Explain how subscripts and coefficients are used to solve limiting reactant problems.

Directions: Your answers should demonstrate comprehensive self-evaluation.

1. Play all levels of the Game with "nothing" hidden and record your scores. Play a few times if you feel you need to.



2. Play all levels of the Game with "molecules" hidden and record your scores. *Play a few times if you feel you need to*.



3. Play all levels of the Game with "molecules" hidden and record your scores. Play a few times if you feel you need to.



- 4. If you were helping a friend do stoichiometry problems, what would you tell them about how they might use subscripts and coefficients in their problem solving?
- 5. How might using molecular images help your friend when doing problem solving?