

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

<http://phet.colorado.edu>

homework review

Learning Goals: Students will be able to:

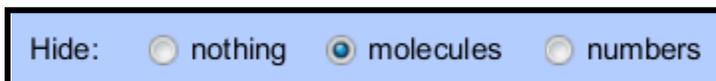
1. Predict the amounts of products and leftovers after reaction using the concept of limiting reactant
2. Predict the initial amounts of reactants given the amount of products and leftovers using the concept of limiting reactant
3. Translate from symbolic (chemical formula) to molecular (pictorial) representations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

Directions: *This activity is a review for the final exam, so the 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. How might using molecular images help you when you are doing real-world problem solving?
5. Use examples to describe how you use the subscripts and coefficients while doing stoichiometry problems. Include examples that measure chemicals in grams, volumes of solution, and volume of gas.