Chemistry Corner

Conversion! The Chemistry Board Game
Stoichiometry Edition

Teacher Tips and Hints

Included in Product:

- ✓ Conversion Game Board (Print 5 or 6, laminate and use for years!)
- ✓ Two Stacks of Cards (Print two sided, laminate, and cut out)
  - "Conversion Cards": standard stoichiometry problems (grams, # of particles, and gas stoichiometry at STP
  - "Mole Cards": include limiting reactant problems and percent yield
- ✓ Student Game Directions
- ✓ Player Answer Sheet (two sided-ready to copy)
- ✓ One sheet Quick Answer Key for all 60 cards (Answer Only)
- ✓ Five pages of Answer Key with each problem (60) worked out.

Objectives:

Students will:

- ✓ Calculate stoichiometry problems- mol to mol, grams to mol, # of particles to mol, grams to # of particles, and gas stoichiometry at STP.
- ✓ Identify the limiting and excess reactants in a problem.
- ✓ Calculate the amount product based on the limiting reactant.
- ✓ Calculate percent yield.

<u>Differentiating Your Game to Fit Your Needs:</u>

The Conversion cards are basic stoichiometry problems. They do include some gas stoichiometry at STP. The Mole cards include limiting reactant and percent yield questions. If these are two things that you don't teach, you can just use the one set of Conversion cards. This will give you thirty cards, which should be enough for the game. Students just choose a Conversion card each time they land on a "card" space on the board.

If you do teach limiting reactant, but not percent yield, use both sets of cards and take out cards #9-12, 18, 21-23, 25-27, and 30. This will leave you 18 Mole cards which will be enough for the game. The card stacks are shuffled, and the students will never know they are missing.

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Printing Instructions:

The Board: The game board is in a pdf format. As is, it's a 8.5" x 11" board. Depending on your printer, you can choose "as is" or "shrink to fit" when getting ready to print. You may want to try out both. There is also a 300 dpi jpg file included if you should want to print a larger board. Take the file to a printing place and have it blown up to whatever size you would like to have it.

Laminate the board for years of use. I have seven boards for my classes.

The Game Cards: Print the cards as two sided pages. Run a trial first to make sure that you have them lined up. Print one set of cards for each board. Laminate and cut out the cards. Divide the "Conversion" cards from the "Mole" cards to have two piles of cards to draw from, and shuffle each stack of cards.

The Student Instructions Page: I have printed one for each board and laminated it. It has more detailed instructions than the board. It also shows up real quick who has not read the directions!

Student Answer Sheet: Print (two-sided) one per student. Once the students have read the directions, they will realize that each player works each problem.

Answer Only Key: You may choose to print a few of these to have around the room. Or just have one for yourself as you monitor the game.

Complete Answer Key: This answer key has all problems worked out for you. You may want to have this key with you as you monitor the game in order to settle any disputes that may arise.

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Note regarding student answer sheets:

Following are three different types of student answer sheets. Each with a different size work space for calculations and answers. You can mix and match if you wish, for example, small boxes on front and large on back. Or, just use all one size. The limiting reactant problems take up quite a bit of space. You can look at the problems that I worked on the key. I used the small boxes for the "Conversion" problems and the middle answer sheet for the "Mole" problems. Students will not be working the problems in order. The major thing is that they label each number box with the problem they are working. Example: C-12, or, M-10.

And, of course, we all have those students that write large and have to have everything perfect, and will balk at being so confined in their work. You know who they are. For those, I just let them use their own paper, again, being sure to label the problems as they work.

I hope you find much success with this board game in your classroom!

~Beth
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Your students will love this game! This will be a game you will want to use for years to come!