

Worksheet to teach balancing equations

Name _____

Directions:

1. Start Internet Explorer or Netscape and go to <http://pw1.netcom.com/~kellerq/chemball/default.htm>
2. Click 'Directions'. Read and understand the directions.
3. Click 'OK'.
4. Click on 'Start Game'
5. Try entering some numbers in the text boxes in front of each molecule. What happens?
6. If you forget the directions, click on the 'How to Play the Game' link. Click 'OK' when you finish reading them to return to the game.
7. When you think you have typed the right numbers in all the boxes, click the 'Balanced' button.
8. If you didn't get it right, try again.
9. If you did get it right, then fill in the correct answers on this worksheet for #1.
10. Repeat steps 7-9 for the other 10 questions.
11. Now do the two problems on the back of this worksheet. You can draw the molecules just like the program did to figure out the answer.

Questions

Fill in the blanks below as you go through the game. This is so I have a record that you did your assignment.

1. ____ Fe + ____ S \rightarrow ____ FeS
2. ____ H₂ + ____ Cl₂ \rightarrow ____ HCl
3. ____ Mg + ____ O₂ \rightarrow ____ MgO
4. ____ O₂ + ____ H₂ \rightarrow ____ H₂O
5. ____ HgO \rightarrow ____ Hg + ____ O₂
6. ____ Ca + ____ H₂O \rightarrow ____ Ca(OH)₂ + ____ H₂
7. ____ CH₄ + ____ O₂ \rightarrow ____ CO₂ + H₂O
8. ____ Na₂O₂ + ____ H₂SO₄ \rightarrow ____ Na₂SO₄ + ____ H₂O₂
9. ____ N₂ + ____ H₂ \rightarrow ____ NH₃
10. ____ Al + ____ O₂ \rightarrow ____ Al₂O₃
11. ____ KMnO₄ \rightarrow ____ K₂O + ____ MnO + ____ O₂