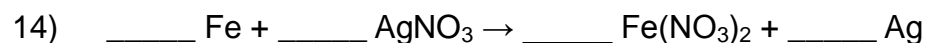
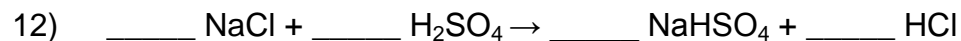
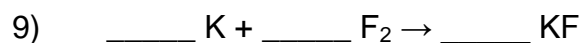
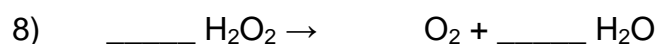
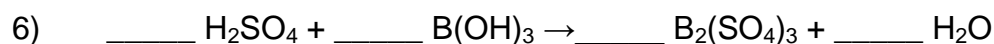
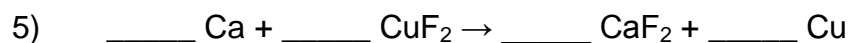
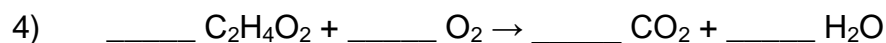
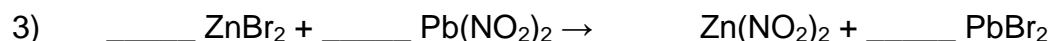
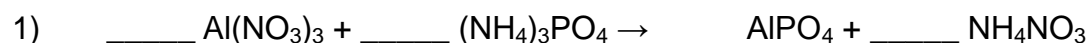


## Balancing Equations Worksheet

Important: The worksheet that you came here for has been replaced by a new and improved version. That's going to happen from time-to-time if you use this site, as [www.chemfiesta.com](http://www.chemfiesta.com) is being completely rewritten and overhauled. The version of this sheet that you see here was made in October 2014, and will no longer be updated and/or fixed if errors are found. If you want the new and improved (and updated) version, visit <http://misterguch.brinkster.net/balancing1.odt>, and for another worksheet that wasn't even on the old Chemfiesta site, visit <http://misterguch.brinkster.net/balancing2.odt>.



## Balancing Equations Answers

Before giving you the answers, I just want to give a quick reminder about things you should do to balance the equations, and things you should try if the balancing isn't going too well.

How to balance equations (the very brief version):

- Write down a chart of all the elements before and after the arrow
- Count the number of atoms of each element and put in the chart
- Change one coefficient in the equation
- Redo the chart
- If it's not balanced, change another coefficient and repeat until it is

Things to try if the equation doesn't balance:

- Start over from the very beginning. It's likely that you either messed up the inventory or are stuck in a rut and can't see what you're doing wrong. Start over and get a fresh start.
- Show your work. If you're doing this in your head, you're probably making mistakes at some point. Yes, I know that it messes up your paper, and I know that it looks sloppy, but *it works*.
- If that doesn't work, start over again, but put a "2" in front of the most complicated looking formula. This often forces you to get a fresh perspective on the problem. If that doesn't work, try putting a "3" and so on.
- Use your gut instincts. What's the worst that can happen? It's not like you can get *more* wrong or anything. This isn't a big deal, so take some chances!
- Go get a snack. And then come back and try again.

The biggest thing to remember is that you're not an idiot if you can't solve the equation. Yes, I know that your friend Heidi could balance the equation, but some people take longer to figure this out than others. Once it clicks in your head, you'll be just as good as she is. And who cares about Heidi anyway – her boyfriend is totally messing around with Stephanie and she *doesn't even know!* Plus she had a crush on the kid who eats his boogers in the third grade – what's the deal with that?

That's enough of that. Let's look at the answers on the next page:

## Balancing Equations Answers

