

# Reactions!

## Summary

Students use colored marshmallows (representing atoms) to construct compounds and arrange them into a balanced chemical equation.

## Time Frame

1 class periods of 90 minutes each

## Group Size

Pairs

## Materials

- [student sheet](#)  
(attached)  
white and colored marshmallows  
paper towel

## Background for Teachers

### Time needed:

About an hour, although checking students off takes time. You may want to reserve a 90 minute block and have another independent activity prepared for students to work on while waiting to be checked off, or after they are checked off. This will allow you latitude to do some re-teaching where necessary.

## Student Prior Knowledge

Writing formulas and equations, balancing equations, conservation of matter, catalysts (generally), parts of equations.

## Instructional Procedures

Pass out the "Reactions!" student page and explain the activity. Group students in pairs for this activity.

Students should first convert the word equation to a formula equation, and have another group check it for accuracy. When they are ready, come around with the marshmallows to quickly check them and distribute marshmallows. This more easily accomplished if the marshmallows are in bowls on a tray that can be carried around.

Point out that once students have constructed and balanced their marshmallow reaction, another group needs to check them off. Instructor check-off will be concurrent with a verbal quiz. Point out that each person should quiz the other person in their pair, as neither person can be checked off by the instructor if any of the answers are wrong. The line to be checked off is typically long, and putting students back at the end of the line if they miss any in their check-off encourages them to make sure they are ready before they ask to be checked off, and also encourages them to be good about testing and helping each other.

As students wait to be checked off, or after they are checked off, they can work on the questions on the back of their student sheet.

Set up a solution of silver nitrate and add a copper wire. Allow it to sit during the period and observe occasionally. It may be started previous to the period starting.

## Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

[Utah LessonPlans](#)