

# How Do You Know When a Chemical Reaction Has Occurred?

## Summary

With this simple Inquiry lab students will be introduced to chemical reactions.

## Time Frame

1 class periods of 15 minutes each

## Group Size

Pairs

## Materials

- [student page](#)  
(attached)  
dH<sub>2</sub>O, 0.1M Ammonia  
Universal Indicator

## Instructional Procedures

Hook activity: Have the students brain storm what are different types of evidence of chemical reactions.

Have students conduct lab investigation.

## Assessment Plan

### Scoring Rubric or answer key:

1. The color change is blue to red, then orange, then yellow, then green. The temp. change is ~2 degrees
2. Yes, a gas was produced. The contents foamed
3. Each of the characteristics of the reaction is evidence of a chemical change, therefore, a chemical change is observed.

## Bibliography

Lesson Design by Jordan School District Teachers and Staff.

## Authors

[Utah LessonPlans](#)