



Subject: Chemistry

Grade Level: 11th

DI Strategy: Targeted Check, Tiering

Targeted Check on Chemical Reactions

What skill(s) were you targeting and why?

Balancing equations, identifying types of reactions, and predicting products of a chemical reaction.

There are five types of reactions in this unit. Students have learned three of the five types. The first three types are easier to deal with. This targeted check was given in the middle of the unit to see if students have mastered the skills necessary to describe chemical reactions by writing balanced chemical equations given reactants. These skills are necessary for the remaining types of reactions as well as meeting objectives for the entire unit.

What targeted check did you give to students and what did you notice?

A pop "quiz" that involved questions about each of those three skills separately.

Many students mastered all three skills. A few students needed help on balancing equations. Some students needed help on types of reactions and predicting products.

How did you respond to the targeted check data?

I split the class into three groups. Group one was ready for more challenging practice. Group two needed scaffolds for types of reactions and predicting products. I gave this group a summary of the types of reactions with a general equation for each type of reaction and a flow chart with questions to guide students to determine the formation of products. Group three needed scaffolds for balancing equations. I used different colored beads to represent models of atoms. Students used them to visualize balancing equations.

How were students engaged at the correct level of difficulty?

Group one worked with more complicated reactions and were challenged to become more advanced in the topic. Group two was able to advance to predicting the product for each type because they had the summary chart and/or flowchart to support them. Group three could see the actual equations built with tangible objects. The above scaffolds addressed the needs seen from the targeted check.

