

Adventure series: Chemistry

Lesson Goals

- Learners will be able to explain some basic chemical reactions with the proper terms.
- The early stages of the lesson are primarily focused on reactions related to CO₂
- Students will be able to present their findings using the Method, Results and Conclusion approach.

Introduction

What is an experiment? Let's talk about experiments you've done before, brain storm experiments. Now let's introduce method, results and conclusion. Use the student's contributions as examples.

Video experiment

Play the video experiment and discuss with the students what happened. Then go through the power point explaining the method, results and conclusion.

Group experiment: Floating bubbles

Hand out the "Method Jumble" sheet. Now have the students attempt to rearrange the jumbled method into the correct order. Then reveal the correct order on the slide. (Maybe skip this step if their level is too low). Then have the students read the method to you step by step. Perform the experiment as they read the instructions to you.

Perform the experiment and allow the students to maybe have a go if there's time and really examine what's happening.

Have them go back to their tables in teams and fill out the results and conclusion part of the sheet. Then in teams have the students read out their team conclusions.



Graphing worksheet

Hand out the graphing worksheet to each student and explain to them how to draw a graph. (I have no doubt that they'll already know how to do this but it will be a good medium for introducing the English terminology). This will help them, recording and properly explaining their findings in the next activity.

Team experiment: Exothermic reactions

Now we'll look into something more specific. First tell the students about exothermic reactions and how they produce heat.

Now show the students the method of the team experiment with the slides. Tell the students to take notes on the method then briefly explain each slide. Allow to the students to then conduct the experiment, record their findings and write up a conclusion. If there's time they can also make a graph.

Time filler

Hand out the "what chemical reactions do you know?" sheet and have the students put a mark in the box of the most **probable** reaction for each item. I stress **probable** because, of course, food can explode! Then at the bottom of the sheet they can add some of the chemical reactions they know.