

Steps Taken



1) Research different demonstrations that have been executed already



2) Consult with someone with a background in the needed safety and proper execution of demonstrations



3) Practice your demonstration several times, and adjust the information you will be sharing to the age/class level that you will present in front of



4) Present your demonstration once the technique has been mastered

Examples of Demonstrations

Zinc Penny



This demonstration capitalizes on the difference between physical and chemical changes. It also can be a teachable subject, as the crucial point of this experiment is that heat has the capability to form alloys. This is an example of a safe demonstration that has easily accessible components.

Density Layers



This demonstration is great for putting a visual to the mathematical part of chemistry. Calculating density can be a difficult concept to grasp in middle school and high-school, but this demonstration shows the importance behind doing so. This allows students to participate in the demonstration, as much of the chemicals that are used are safe and used in household consumption.

Introduction

The purpose of chemical demonstrations is to excite and educate younger generations about Chemistry. It helps to diminish the negative connotation surrounding Chemistry and open up a door for students to gain interest in pursuing science as a possible career choice. In this way, it is important that those who will be demonstrating to younger audiences come prepared and informed.

Consulting with Department

To ensure that what will be presented will be safe and feasible, a professor or department head will need to be contacted. Their role will be to oversee the materials used and that the proper protocol is being followed. Don't be afraid to ask for tips and advice!

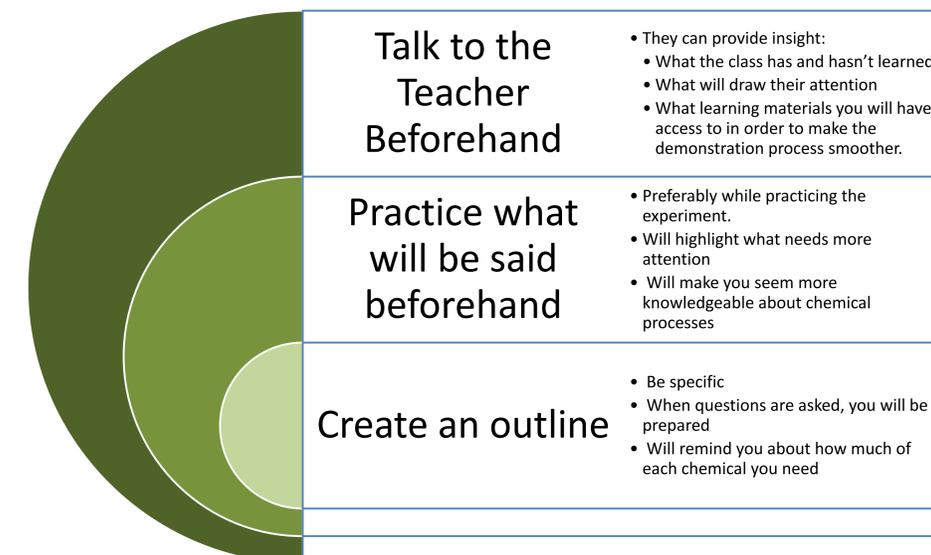
Adjustments

Depending on grade level, there are a few adjustments that need to be made in order to succeed in educating and reviewing material.

In an elementary setting, there is not as much exposure to chemistry, so the goal is to excite and introduce children to a "new world". They will not know the science behind certain processes, so much of what they see will seem almost magical. The Density Layers demonstration allows a younger audience to be more hands on, and once it is completed, the presenter can explain the science behind it in simpler terms.

In high school, students will be more inclined to lose interest in chemical processes, so demonstrations will be better at educating, rather than exciting. Demonstrating can provide a visual for material that was seen as difficult and make chemistry more interesting.

Tips and Tricks



Safety

- When using chemicals, ensure students are at a safe distance
- If students are participating, ensure they are wearing the proper protective equipment
- Ensure all chemicals are approved by your department prior to using them
- Confirm each chemical is used in the proper way prior to using it

Conclusions

Future generations can be excited about Chemistry too. Chemical demonstrations allow both the preparer and students to learn and grow if done correctly and with proper background information.

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