

## Crazy Chemistry (2-3)

Hello! This document includes a brief outline of our Crazy Chemistry workshop, as well as relevant BC ADST curriculum connections. In this workshop, students will complete multiple experiments to learn about the difference between chemical & physical changes.

If you'd like to register for our workshops, please fill out our registration survey linked here: [https://ubc.ca1.qualtrics.com/jfe/form/SV\\_eQbTY2Kj1ByZM8K](https://ubc.ca1.qualtrics.com/jfe/form/SV_eQbTY2Kj1ByZM8K)

<p><b>BC Curriculum Ties</b> (In addition to satisfying multiple core competencies)</p>	<p><u>BC Applied Design, Skills, and Technologies Curriculum Links 2-3:</u></p> <p>Complex tasks require the acquisition of additional skills &amp; complex tasks may require multiple tools and technologies.</p> <ul style="list-style-type: none"> <li>• <i>Applied Design:</i> <ul style="list-style-type: none"> <li>○ <i>Ideating - Identify opportunities for designing through exploration &amp; choosing an idea to pursue.</i></li> <li>○ <i>Making - Making a product using known procedures/tutorials.</i></li> <li>○ <i>Sharing - Decide on how to share &amp; display their products.</i></li> </ul> </li> </ul> <p><u>BC Science Curriculum Links 2-3:</u></p> <p>Materials can be changed through physical and chemicals processes.</p> <ul style="list-style-type: none"> <li>• <i>Questioning and Predicting:</i> <ul style="list-style-type: none"> <li>○ <i>Demonstrate curiosity and sense of wonder about the world.</i></li> <li>○ <i>Observe objects and events in familiar contexts.</i></li> <li>○ <i>Make simple predictions about familiar objects and events.</i></li> </ul> </li> </ul>
<p><b>Grade Levels</b></p>	<p>2-3</p>
<p><b>Time</b></p>	<p>1~1.5 Hours</p>
<p><b>Goals of the Workshop</b></p>	<ol style="list-style-type: none"> <li>1. Understand the difference between chemical and physical changes.</li> <li>2. Practice observing experiments.</li> <li>3. Follow instructions/scientific procedures.</li> </ol>

## Activity Descriptions

### Chromatography Flowers

Objective: To learn about physical and chemical changes by making a physical change using household items.

Participants will:

- Learn about the differences between chemical & physical changes.
- Have students make their own flowers by drawing on a coffee filter, then reversing the physical changes using water!

### Lava Lamp Demo

Objective: To demonstrate how gas formations are also physical changes by completing a quick chemical experiment.

Participants will:

- Be shown a demo where a lava lamp is created using a bottle, water, oil, and an alka-seltzer tablet, where a gas is created inside the bottle!

### Heat Pack Demo

Objective: To demonstrate how chemical changes are usually accompanied by a heat change through completing a science experiment.

Participants will:

- Participate in a demo where calcium chloride, baking soda, and water is added into a ziploc bag. After the bag is sealed & shaken, the chemicals will undergo a chemical change and the bag will expand & get hot!

### Sensational Slime

Objective: To have students create their own chemical changes by making slime!

Participants will:

- Learn how a chemical changes' properties can be adjusted, by having the student's slimes become more solid or liquid based on the ratio of contact solution to baking soda.
- Figure out the best ratio of contact solution to baking soda, so students can determine how to make the best slime using tests, similar to how scientists conduct science experiments!

**We can't wait to connect with your school & expose your students to the STEM field with our exciting, hands-on STEM activities!**

