

Non-Toxic Paint Lesson Plan

Lesson Overview

The purpose of this lesson is to raise awareness among students in Grades K-6 (ages 5-12) of the chemicals in our environment, including our homes, that may be harmful to health and to introduce safer alternatives through open discussion and hands-on activities.

Note: this lesson plan was developed when working with an Atlanta community-based youth club where students aged 5-12 participated in an environment club lesson for 1 hour after school. Please adapt this lesson plan for your context (e.g., the ages and duration).

Full Materials List

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| <input type="checkbox"/> Giant Sticky Note Pad | <input type="checkbox"/> Flour | <input type="checkbox"/> Paper Towels |
| <input type="checkbox"/> Art Supplies with AP seals | <input type="checkbox"/> Cornstarch | <input type="checkbox"/> Tablespoons |
| <input type="checkbox"/> Markers | <input type="checkbox"/> Food Coloring Dye | <input type="checkbox"/> Paint Brushes |
| <input type="checkbox"/> Non-Toxic Handouts | <input type="checkbox"/> Paper or object to paint on (we used pinecones) | <input type="checkbox"/> Cups for mixing |
| <input type="checkbox"/> Water | <input type="checkbox"/> Smocks or used shirts | <input type="checkbox"/> Spoons for mixing |
| <input type="checkbox"/> Tubs/bins with the ingredients | | |

Handouts

- [Non-Toxic Paint Handout](#)

Opening Brainstorm Activity	Time	Materials Needed
<ol style="list-style-type: none"> 1. <i>Set up a giant sticky note to write down student responses, titled, "Harmful to Our Bodies". Create three sections, for Skin, Eating, and Breathing.</i> 2. Discussion: "What is something that is bad or harmful to get on your skin?...Bad to eat?...Bad to breathe in?" <ol style="list-style-type: none"> a. Examples: <ol style="list-style-type: none"> i. Breathing: smoke (air pollution), vaping and smoking, pollen (for some people) <i>(can connect to other lessons on pollen and AQI)</i> ii. Skin: Poison ivy, permanent marker, super glue, make-up, lotion 	10-15 mins	<input type="checkbox"/> Giant Sticky Note Pad <input type="checkbox"/> Markers

<p>iii. Eating: plastic, crayons, things that are not food!</p>		
Introduction to Lesson	Time	Materials Needed
<ol style="list-style-type: none"> 1. Today we will be making our own DIY paint! Why? Paints can have chemicals in them, and we do not always know what these are so it's best not to eat paint and to wash hands after use! 2. Some paints have passed safety tests and are safer to use! These paints will be labeled with the AP Seal pictured at the top of your handout. <ol style="list-style-type: none"> i. <i>Pass around handouts and show them the AP seal on it.</i> ii. <i>Show Crayola washable paint or other paint with the Approved Product (AP) seal and ask kids to find the seal.</i> 3. [Optional] Acrylic paint or other commonly used paint with the Cautionary Label (CL) Seal is unsafe. Avoid using this paint or make sure to use protection so it does not get on your skin or in your mouth. <ol style="list-style-type: none"> a. <i>Pass around an example of art supply with CL label</i> 	<p>10 mins</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Non-toxic handouts <input type="checkbox"/> Paint and other art supplies with seal examples
Set-Up for Paint Activity	Time	Materials Needed
<ol style="list-style-type: none"> 1. <i>Set out painting ingredients in a row: water, cornstarch, and flour, each with a tablespoon scoop.</i> 2. <i>Provide each student with a mixing spoon and cup.</i> 3. <i>Students can come through in a line and measure 2 tbsps. of water, cornstarch, and flour each into their mixing cups.</i> 4. <i>Add 3 drops of food coloring of their choice to their paint.</i> <p><i>Place paintbrushes, paper towels, water cups, and object to paint at each table.</i></p>	<p>10 mins</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Tablespoons <input type="checkbox"/> Smocks or used shirts <p>Bins with following ingredients:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Water <input type="checkbox"/> Cornstarch <input type="checkbox"/> Flour <input type="checkbox"/> Food coloring <p>At each table/desk:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Paint Brushes/Paper Towels/Water cups <input type="checkbox"/> Object to paint (e.g., pinecones)

Activity – DIY Paint Time!	Time	Materials Needed
<ol style="list-style-type: none"> 1. Now the students can mix the ingredients in their cups with their spoons until nice & smooth! 2. Finally, students can begin painting their objects on a paper towel. 3. Encourage them to share their paint especially if peers around them chose different colors! 	30 mins	<input type="checkbox"/> Paper Towels <input type="checkbox"/> Paint Brushes <input type="checkbox"/> Prepared DIY non-toxic paint
Closing	Time	Materials Needed
<ol style="list-style-type: none"> 1. Everyone’s painting looks great! Let’s leave them somewhere so they can dry overnight 2. Today we learned how to make our non-toxic paint! <p>Remember that many products, like paint, contain chemicals so it is best to use them for what they were made for, and always wash our hands!</p>	5 mins	<input type="checkbox"/> Non-toxic Handouts
Resources		
<p>Morteza. (n.d.). <i>Editable Daily Lesson Plan Template Google Docs, Word & PDF</i>. TPT. https://www.teacherspayteachers.com/Product/Editable-Daily-Lesson-Plan-Template-Google-Docs-Word-PDF-14246850</p> <p>Understanding the Shelf Life of Flour Paint: A Comprehensive Guide - The Cooking Facts</p> <p>Art Hazards List</p> <p>Materials Safety</p> <p>static.ewg.org/files/hht-school.pdf</p>		