



## Tasty Edible Dirt!

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<b>Subject:</b> Science	<b>Grade Level:</b> 4 <sup>th</sup> - 6 <sup>th</sup>
<b>Time Required:</b> 1 hour	<b>Standards:</b> Standard: 4 Earth Space Systems

<b>Overview</b>	Students will make their own cup of dirt patterning it after soil that sustains plant life and conserves water. This is the soil needed for rangeland plant life to grow and flourish.
<b>Goal(s) &amp; Objective(s)</b>	Students will review the layers of soil and what was learned in lesson 1 about the different kinds of soil. They will be able to make an edible model of soil organizing the ingredients into a cup to make it look like the different layers of soil.
<b>Prerequisites &amp; Materials</b>	<p><u>Soiled Art Lesson</u></p> <p><b>Materials:</b> For a class of 30:</p> <ul style="list-style-type: none"> <li>• 3 boxes of 6 oz. instant chocolate pudding (can get 10 cups out of each box). Make according to the directions on the box. 1/3 c is needed for each student. (soil)</li> <li>• Cool Whip may be added to the pudding to enhance taste and make it lighter in color.</li> <li>• 2 lbs. of chocolate cookies or Oreos. Cookies need to be crushed by putting them in a plastic bag, seal, and crush using a rolling pin, hammer, or a brick/rock in a plastic bag. 1/4 c per student (mineral particles)</li> <li>• Green sugar or coconut colored green (plant life)</li> <li>• A large box of Grapenuts 1 to 2 T for each student (weathered material)</li> <li>• Choco rock candy (can buy in bulk at WinCo) or an assortment of chocolate chips, white chocolate chips, butterscotch chips or toffee chips. 1 to 2 T for each student (small and large rocks)</li> <li>• 1 box of Vanilla Wafers or a box of Graham Crackers. 3 crushed vanilla wafers or 1/2 of a graham cracker crushed per student. (organic material)</li> <li>• 1 chocolate cookie or 1/4 of a graham cracker per student. (bedrock)</li> <li>• 30 8 oz. clear wide-mouthed cups to put their dirt in.</li> <li>• 30 plastic spoons</li> <li>• Optional: gummy worms to aerate their topsoil</li> </ul>

<p><b>Teaching Activities:</b> <i>Instructional Approaches/Strategies</i></p>	<p><b>Introduction:</b></p> <ol style="list-style-type: none"> <li>1. Do a short review with students about their previous lesson on Soil profile.</li> <li>2. Explain the Activity and organize the students</li> </ol> <p><b>Procedures</b></p> <ol style="list-style-type: none"> <li>1. With the above ingredients the students will assemble their cup of dirt. Do not tell them what each ingredient stands for. (Remind them of the review of the different layers of soil they participated in at the beginning of class.) They are now to decide what ingredients they need to make a good representation of soil found on rangelands.</li> <li>2. After making their cup of dirt, they need to label the layers either with a permanent marker or tape on the outside of the cup.</li> </ol> <p><b>Closure</b></p> <ol style="list-style-type: none"> <li>1. Before eating have them look at an illustration of a soil profile. Is their cup of dirt a good representation? What ingredients could they add or take away that would show clay or sandy soil?</li> </ol>
<p><b>Assessment:</b></p>	<p>Check to see if the cup of dirt is assembled correctly &amp; Enjoy eating!!</p>

**Modifications:**

Students can make the pudding, crush the cookies, etc. or the teacher can do this before the lesson. If students are involved it works best to form an assembly line with each student being responsible for the job assigned them.