

## Lesson Plan Template

<b>Grade:</b> Kindergarten		<b>Subject:</b> Science	
<b>Materials:</b> Soil, Dixie cup, radish seeds, aluminum foil, spray bottle, paper plates/bowls, label stickers		<b>Technology Needed:</b> Science Videos from Mystery Science	
<b>Instructional Strategies:</b> <input type="checkbox"/> <u>Direct instruction</u> <input type="checkbox"/> Peer teaching/collaboration/cooperative learning <input type="checkbox"/> <u>Guided practice</u> <input type="checkbox"/> Visuals/Graphic organizers <input type="checkbox"/> Socratic Seminar <input type="checkbox"/> PBL <input type="checkbox"/> Learning Centers <input type="checkbox"/> <u>Discussion/Debate</u> <input type="checkbox"/> Lecture <input type="checkbox"/> Modeling <input type="checkbox"/> Technology integration <input type="checkbox"/> Other (list) <input type="checkbox"/> Other (list)		<b>Guided Practices and Concrete Application:</b> <input type="checkbox"/> Large group activity <input type="checkbox"/> <u>Hands-on</u> <input type="checkbox"/> Independent activity <input type="checkbox"/> Technology integration <input type="checkbox"/> <u>Pairing/collaboration</u> <input type="checkbox"/> Imitation/Repeat/Mimic <input type="checkbox"/> Simulations/Scenarios <input type="checkbox"/> Other (list) Explain:	
<b>Standard(s)</b> K-LS1-1. Describe patterns, through observation, of what plants and animals (including humans) need to survive		<b>Differentiation</b> <b>Below Proficiency:</b> Partner work and extra prodding questions to help guide their thoughts  <b>Above Proficiency:</b> Ask questions that take their thinking deeper. Ex: They say: "The tree couldn't grow without sunlight", you ask "What had to change so the tree could get the sunlight?"  <b>Modalities/Learning Preferences (Auditory, Visual, Tactile, Kinesthetic)</b> Auditory: Discussion questions and the chance to answer them Visual: This video had great pictures and visuals of what plants do without water and the lack of sunlight for the small tree Tactile: Planting the seeds in the dirt, counting out the seeds, Kinesthetic: They changed location a couple of times and the short activity of acting like a plant that didn't have water	
<b>Objective(s)</b> Students will predict whether or not the radish seeds need sunlight in order to grow and set up an experiment that will either prove or disprove their theories.  <b>Bloom's Taxonomy Cognitive Level:</b> Apply		<b>Classroom Management- (grouping(s), movement/transitions, etc.)</b> They will pick their own partners, but I will give them a time limit- You have 5 seconds to pick a partner, 5, 4, 3, 2, 1. When moving from the carpet spot to the tables pick the quiet sitters who seem ready to start. When moving from the tables back to the carpet them can just come in a big group.	
<b>Classroom Management- (grouping(s), movement/transitions, etc.)</b> They will pick their own partners, but I will give them a time limit- You have 5 seconds to pick a partner, 5, 4, 3, 2, 1. When moving from the carpet spot to the tables pick the quiet sitters who seem ready to start. When moving from the tables back to the carpet them can just come in a big group.		<b>Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules and expectations, etc.)</b> They are expected to sit nicely at the carpet with their focus on me. When they get their supplies, they will wait before doing anything. If they aren't listening, they will go to a think spot before rejoining the group. When they are off task or need to be regrouped, I will use, "Class, Class" to which they will respond, "Yes, yes". Expect them to be quiet and listening before explaining the next step	
<b>Minutes</b>	<b>Procedures</b>		
10	<b>Set-up/Prep:</b> <ul style="list-style-type: none"> <li>• Fill 20 Dixie cups with dirt</li> <li>• Have seed spread out on 5 different plates (1 for each table)</li> <li>• Have labels for them to write their name pre-cut out so you can give each kid one</li> <li>• Have extra soil on hand in case they spill their dirt</li> <li>• Cut small squares of tin foil to cover some of the cups (10 squares)</li> <li>• Have extra tin foil on hand in case they tear it on accident</li> <li>• Get squirt bottle ready to go</li> </ul>		
1	<b>Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.)</b> What do we know about plants? What type of plants do we see around us? Today, we're going to talk about plants and what they need to grow and get big.		
10	<b>Explain: (concepts, procedures, vocabulary, etc.)</b> Play mystery science video about plants needing water Ask discussion questions: <ul style="list-style-type: none"> <li>• Why do we need someone to watch our plants when we leave to go somewhere?</li> <li>• What happens to a plant when it doesn't get water?</li> </ul> Can you all act like a plant that is running out of water? *They're going to stand up and pretend to droop and wilt* You have 5 seconds. Count down: 5, 4, 3, 2, anddddd 1. Play video about plants needed sunlight. Ask discussion questions: <ul style="list-style-type: none"> <li>• Why did the little tree grow when the big tree fell over?</li> <li>• What do you notice about the shadow of the big tree?</li> </ul> *Guide them to the fact that the big tree was blocking the sunlight of the little tree and now the little tree has the sunlight to grow.* Discussion questions: <ul style="list-style-type: none"> <li>• Can you guys think of an experiment that we can do to prove our theory that plants need sunlight to grow?</li> </ul> To try to prove our point that sunlight is necessary for plant growth, we're going to plant radish seeds and put some of them in the sunlight, and some		

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	<p>of them in a dark place where they won't get any sun.</p> <p>When I tell you to, I'm going to have you pick your partner, and then we're going to help each other through setting up the experiment.</p>		
10	<p><b>Explore: (independent, concrete practice/application with relevant learning task -connections from content to real-life experiences, reflective questions- probing or clarifying questions)</b>            During this time the students will be planting their seeds and working together:            Steps:</p> <ol style="list-style-type: none"> <li>1. Get supplies- each student gets a cup with dirt and a label- each table gets plate with seeds</li> <li>2. Write names on label</li> <li>3. One student puts an "X" by their name- Have one partner raise their hands and they put the X by their name</li> <li>4. Have everyone count out 10 seeds and put them in the soil</li> <li>5. Use spray bottle to squirt 2 squirts in the cup- pass it around and let them do it</li> <li>6. Place cup without X on it in the sunlight- Call quiet sitters who are ready to go- one at a time to not let the chaos go</li> <li>7. Cover cup without x on it with tin foil- One partner holds the cup, the other one covers it with tin foil</li> <li>8. Put tin foil cups in a box- Bring the box around and have them set the cups in it</li> <li>9. Put the box in the cupboard- teacher does this</li> </ol>		
3	<p><b>Review (wrap up and transition to next activity):</b>            Bring them back to the carpet and ask: "Based on what we learned about plants and what they need to grow, which seeds do you think will grow the best? The ones in the sunlight, or the ones without the sunlight? Why do we think that? What did we learn in the videos that might help us to form our predictions?"</p>		
<p><b>Formative Assessment: (linked to objectives)</b>  <b>Progress monitoring throughout lesson- clarifying questions, check-in strategies, etc.</b>            Thumbs up thumbs down, finger on your nose when you're ready to move on</p> <p><b>Consideration for Back-up Plan:</b>            If things are going badly drop it, move onto the next activity, and come back to it another day. This one is extremely important and has to be done in the right way in order to work well and they'll get more out of it if they are able to enter in and fully participate</p>		<p><b>Summative Assessment (linked back to objectives)</b>  <b>End of lesson:</b>            They'll cover this when the experiment is finished in 4 days. They'll talk about their predictions and which one grew better and why.</p> <p><b>If applicable- overall unit, chapter, concept, etc.:</b></p>	
<p><b>Reflection (What went well? What did the students learn? How do you know? What changes would you make?):</b></p>			