

Lesson Plan Template

Date: 04/10/2022

<p>Grade: Preschool</p> <p>Materials: Plastic tub, water, blue koolaid mix, shells, sand, Swedish fish, spoons, cotton balls, sponges, oil, cocoa powder, plastic cups.</p> <p>Instructional Strategies:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Direct instruction <input checked="" type="checkbox"/> Guided practice <input type="checkbox"/> Socratic Seminar <input checked="" type="checkbox"/> Learning Centers <input type="checkbox"/> Lecture <input type="checkbox"/> Technology integration <input type="checkbox"/> Other (list) </td> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Peer teaching/collaboration/cooperative learning <input type="checkbox"/> Visuals/Graphic organizers <input type="checkbox"/> PBL <input type="checkbox"/> Discussion/Debate <input type="checkbox"/> Modeling </td> </tr> </table>	<input type="checkbox"/> Direct instruction <input checked="" type="checkbox"/> Guided practice <input type="checkbox"/> Socratic Seminar <input checked="" type="checkbox"/> Learning Centers <input type="checkbox"/> Lecture <input type="checkbox"/> Technology integration <input type="checkbox"/> Other (list)	<input type="checkbox"/> Peer teaching/collaboration/cooperative learning <input type="checkbox"/> Visuals/Graphic organizers <input type="checkbox"/> PBL <input type="checkbox"/> Discussion/Debate <input type="checkbox"/> Modeling	<p>Subject: Science</p> <p>Technology Needed: N/A</p> <p>Guided Practices and Concrete Application:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Large group activity <input type="checkbox"/> Independent activity <input checked="" type="checkbox"/> Pairing/collaboration <input checked="" type="checkbox"/> Simulations/Scenarios <input type="checkbox"/> Other (list) Explain: </td> <td style="width: 50%; vertical-align: top;"> <input checked="" type="checkbox"/> Hands-on <input type="checkbox"/> Technology integration <input type="checkbox"/> Imitation/Repeat/Mimic </td> </tr> </table>	<input type="checkbox"/> Large group activity <input type="checkbox"/> Independent activity <input checked="" type="checkbox"/> Pairing/collaboration <input checked="" type="checkbox"/> Simulations/Scenarios <input type="checkbox"/> Other (list) Explain:	<input checked="" type="checkbox"/> Hands-on <input type="checkbox"/> Technology integration <input type="checkbox"/> Imitation/Repeat/Mimic
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<p>Standard(s)</p> <p>Goal P-APL 11. Child shows interest in and curiosity about the world around them.</p> <p>Goal IT-C 6. Child learns to use a variety of strategies in solving problems.</p> <p>Goal P-SE 4. Child engages in cooperative play with other children.</p>	<p>Differentiation</p> <p>Below Proficiency: Child manipulates the tools provided and attempts to clean up alongside their peers.</p> <p>Above Proficiency: Child can be asked what other tools in the environment they would use to try and solve the problem.</p> <p>Approaching/Emerging Proficiency:</p> <p>Modalities/Learning Preferences:</p> <ul style="list-style-type: none"> • Visual: Teacher will demonstrate the activity for the students first so that they can see how the process works. • Auditory: Teacher will verbally explain the process of the activity and the rules that go along with dealing with the materials. • Kinesthetic: Learners will get a chance to practice the activity themselves and the motions that go along with the cleanup process. • Tactile : Learners can manipulate the materials in an appropriate manner. So long as everything that is in the Tupperware container stays in the container (besides the oil) then they are free to explore the materials with their hands. 				
<p>Objective(s)</p> <p>Students will work together using problem solving skills to try and clean up their little ocean.</p> <p>Bloom's Taxonomy Cognitive Level: Understand</p>					
<p>Classroom Management- (grouping(s), movement/transitions, etc.)</p> <p>After afternoon recess the students will be seated at their table spots. There should be two to four students per table. Students will be paired up in sets of two and each set of two will have one Tupperware container with their little ocean.</p> <p>Groups: (Afternoon should only have 8 learners who will all be preschool aged.) N,E S,L M,Kj B,Ki</p>	<p>Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules and expectations, etc.)</p> <p>Hands in your lap and eyes on the teacher as they explain the activity. Once the teacher says so, learners can begin manipulating the materials. The water should stay in the Tupperware container as much as possible. There will be towels to clean up any potential spills though.</p>				
Minutes	Procedures				
	<p>Set-up/Prep: Fill the clear bin with water and color the water blue. Take olive oil/vegetable oil and add some cocoa powder to it to make it dark and brown. Place sand and shells on the bottom of the bin. Place fish in the bucket as well. Set the sponges, cotton balls, and spoons to the side for easy access.</p>				
2 mins max.	<p>Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.)</p> <p>“When we make a mess what do we have to do?” “We have to clean it up! We clean up our messes to keep everyone safe. What do you think would happen if we never cleaned up?” Allow time for answers. “Good thinking. If we never ever cleaned up, then there would be no room to walk and we’d all trip and fall! That would not be very safe would it? The same way that we have to clean up messes we make in our classroom, we need to clean up messes we make in the environment, the world around us.”</p>				

“Alright learners! We are going to start talking about conservation. Does anyone know what conservation is? Conservation is another way to say taking care of the earth. What are some ways you can take care of the earth?” Leave time for answers and ideas. “Today we are going to see what it takes to clean up an oil spill in the ocean. Oil is used a lot in cars, boats, and making energy to keep the lights on. Sometimes there are accidents where oil spills into the ocean, and that’s really yucky. The fish do not like oil, it can make them sick, and sometimes they die. Today we’re going to see how much work it will take us to clean up a teeny tiny part of the ocean.”

2-3 minutes

Explain: (concepts, procedures, vocabulary, etc.)

“There are people who work to clean up the ocean and they use different tools to try and get all of the dirty oil out of the water. I am going to give you all a little container of ocean and you’re going to work with your partner to clean it up.” (Go into some of the ways that the National Oceanic and Atmospheric Administration cleans up oil spills.) “You can talk about your plans with your partner but just remember to keep voice levels quiet.”



1 SHORELINE FLUSHING/WASHING

Water hoses can rinse oil from the shoreline into the water, where it can be more easily collected.

2 BOOMS

Long, floating, interconnected barriers are used to minimize the spread of spilled oil.

3 VACUUMS

Industrial-sized vacuum trucks can suction oil from the shoreline or on the water surface.

4 SORBENTS

Specialized absorbent materials act like a sponge to pick up oil but not water.

5 SHORELINE CLEANERS & BIODEGRADATION AGENTS

Chemical cleaners that act like soaps may be used to remove oil, but require special permission. Nutrients may be added to help microbes break down oil.

6 BURNING

Also referred to as “in situ burning,” freshly spilled oil can be set on fire, usually while it’s floating on the water surface and sometimes on oiled marsh vegetation, in order to effectively remove it.

7 MANUAL REMOVAL

Cleanup crews using shovels or other hand tools can pick up oil from the shoreline. This method is used especially when heavy machinery cannot reach an oiled shore.

8 MECHANICAL REMOVAL

When there is access, heavy machinery, such as backhoes or front-end loaders, may be used.

1. Shoreline flushing/washing
2. Floating booms to minimize spread of oil
3. Vacuums to suction oil from the surface of the water
4. Absorbent materials that act like sponges to pick up the oil
5. Chemical cleaners to break down the oil
6. Burning
7. Shovels and hand tools for manual removal
8. Mechanical removal done by heavy machinery such as backhoes or front-end loaders

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	https://oceanservice.noaa.gov/facts/spills-cleanup.html	
5-8 minutes	Explore: (independent, concrete practice/application with relevant learning task -connections from content to real-life experiences, reflective questions- probing or clarifying questions) Hand out the tubs and materials. Add oil to each of the tubs. Using a separate tub as an example, show them different techniques for removing the oil. Go around the tables and ask about the problem solving process. "What are you using?" "Why are you using that tool?" "Do you think that cleaning up an oil spill is easy or hard?" "How do you think this would work in real life?" "We're only working with a tiny bit of oil, how long do you think it would take to clean up a lot of oil?" "Why do you think that?"	
1 minute	Review (wrap up and transition to next activity): "When you are all finished trying to clean up the oil spill, you can place all of your materials down on your table and go back to free play." "What did you learn from this?"	
Formative Assessment: (linked to objectives, during learning) <ul style="list-style-type: none">Progress monitoring throughout lesson (how can you document your student's learning?) Are they trying different tools and talking about the different techniques? Go around to the tables and observe their work and listen to their conversation. Are they working together? Are they using problem solving skills?	Summative Assessment (linked back to objectives, END of learning) By the end of the lesson, does it appear that the students have learned something about oil spills and the process of cleanup? Do they understand that it is a big job to clean up a mess once it has been made? Cleaning up messes is important to keep people safe.	
Reflection (What went well? What did the students learn? How do you know? What changes would you make?): The students were actively engaged. They learned about oil spills in the ocean, they were able to explain different methods to clean up oil spills and how the oil got there in the first place.		