

Activity Plan

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Curriculum Topic: COMMUNITY HELPERS BUBBLY FIRE SCIENCE EXPERIMENT

OVERVIEW/FRAMING				
<p><b>TOPIC</b> <i>Explain how the topic of this activity is developmentally and culturally appropriate for the group of learners for whom you are designing it.</i></p>	<p>Children are interested in learning about their community and community helpers. It will help them to learn about themselves. It will also help them how to tackle challenges, build knowledge, and thrive. Learning about a community and its culture, while also building a partnership of trust with families, can be a vital component to student success.</p>			
<p><b>BIG IDEAS/OVERARCHING QUESTIONS</b> <i>What kinds of questions will be explored and/or what new connections and ideas will be engaged through this activity?</i></p>	<p>What qualities do I bring to my classroom/school community? How are my community helpers making a change in my community? EQ: what makes a community strong? Science activity – How do fires start? What do fireman do</p>			
<p><b>CONTENT FOCUS:</b> <i>Identify which content area(s) will be addressed in this activity</i></p>	<p>Visual Arts</p>	<p>Music</p>	<p>Movement/Dance</p>	<p>Drama</p>
	<p>Emergent Literacy</p>	<p>Mathematics</p>	<p>(Science)</p>	<p>Social Studies</p>
<p><b>LANGUAGE AND CONTENT OBJECTIVES</b></p>				

KNOWING THE LEARNERS	
<p><b>AGE RANGE:</b></p>	<p>kindergarden</p>

<p><b>CURRENT DEVELOPMENT:</b>  <i>What do you know about the current growth of learners in this age range for the content focus?</i></p>	<p>children in Pre-k and kindergarten are developing their sense, Science helps children develop key life skills, including an ability to communicate, remain organized and focused, and even form their own opinions based on observation. Science also helps children develop their senses and overall awareness</p>
<p><i>What misunderstandings might children in this age range have about the topic/content and how do you plan to address this?</i></p>	
<p><b>SOCIO-CULTURAL CONTEXT:</b>  <i>What do you know about this group of children in terms of their cultural backgrounds, learning styles, languages spoken, and learning experiences to date?*</i></p>	<p>Students in this class reflect the immediate neighborhood of the school. About half the class have parents who have recently immigrated to the US from Central America. Students while learning more about their community will know that there are people of different race. They will learn more through science</p>

<b>MATERIALS &amp; LEARNING ENVIRONMENT PREPARATION</b>		
<p><b>MATERIALS</b>  <i>What materials will you need to teach this activity?</i>  <i>List <b>all books and materials</b>, including any used during the launch/reflection and during set up and cleanup</i></p>	<p><b>LEARNING ENVIRONMENT</b>  <i>What modifications will you need to make to the classroom to support this activity? (e.g., centers, bulletin boards, meeting spaces)</i></p>	<p><b>EVENTS/RESOURCES</b>  <i>What events or resources, including people, might you need to arrange in advance?</i></p>
<ul style="list-style-type: none"> <li>• Two plastic or paper cups – clear is best so the kids can see what is happening</li> <li>• Baking Soda – fill the cups 1/3 full</li> <li>• White Vinegar</li> <li>• Optional: Food Coloring (we added yellow and a little orange)</li> </ul>	<p>Art center : The art center will provide students. With materials. Paper cups, baking soda and many more</p>	<p>We will are make our own science project and present it</p>

\* Note: You are designing this activity for the three children observed for your Student Profiles assignment.

to the vinegar in order to create our “bubbly fires”)

- Optional: Flames and Smoke (cut the flames and smoke from the free printable [Smoke and Fire](#) to attach to the plastic cups).

**THE LEARNING EXPERIENCE**

**The launch**

*How will you engage the children in this learning experience? How will you introduce the concepts and vocabulary of the topic? How will you describe the procedures of the learning activity? What will you say and do?*

We will ask each other what's a fire? What causes a fire? What does a fireman do when there is a fire?  
We will then read "firefighter handbook" by Meghan McCarthy

**The activity**

*List the step-by-step procedures.. What will the children be doing? What will you say or do to facilitate and scaffold their learning? Be specific and detailed in your description.*

1. invite the kids to pour vinegar slowly from one cup into the cup that contains the baking soda.
2. Invite the kids to observe what happens to the baking soda. As the vinegar and baking soda are combined, a chemical reaction occurs to create a BUBBLY FIRE!
3. Heating the vinegar slightly to see what results we get
4. Pouring the vinegar FAST
5. Using varying amounts of baking soda and vinegar

<p><b>Reflection</b>  <i>As the activity wraps up, what opportunities will you offer the children to respond to and reflect on this activity?</i></p>	<p>Show the completed science activity to the students I will ask them what is happening and how can fireman help.</p>
<p><b>Possible Extensions</b>  <i>What could you do on another day to build on this activity?</i></p>	<p>Children will write about what they love about their project and write about one thing they love about their community helper</p>
<p><b>Multimodal Engagement</b>  <i>Identify and explain the ways in which this activity offers opportunities to use at least three different learning modalities (kinesthetic, tactile, linguistic, visual/spatial, auditory, musical)</i></p>	<p>Learn the benefits of the community helpers</p>
<p><b>Differentiation</b>  <i>How will you modify this activity for learners with different learning styles and/or special needs (SLLs, physically active, etc.)?</i></p>	<p>They will learn more about their community and there community helpers in it</p>

**GROWTH AND LEARNING**

*How will this learning experience support the children's growth and learning in the following domains? Use your knowledge of child development.*

**Cognitive/thinking**

. Children will reflect on their communities and whats make their community unique

**Physical**

Students will develop fine motor skills in a variety of ways by knowing how much do they have to put in the cup for the safe chemical to start bubbling

**Social/emotional**

Children will reflect on their own uniqueness in their classroom community. They will learn more about their community helpers

**Language/literacy**

Through the book discussion, children will discuss how the fire man help the community.  
List 10-15 target vocabulary words:

**Content Area(s)**

**STANDARDS/GOALS**

*What Pre-K Common Core Learning Standards are addressed in this activity?*

*Use the PKFCC to respond.*

*Be specific—choose those standards that are **actually targeted** by this learning activity (e.g., can development in regard to the standard be measured by the evidence gathered (authentic assessment) during this learning activity?)*

**Domain 1:  
Approaches to Learning**

- 1. A. interacts with a variety of materials and peers through play
- 1. E. uses “trail and error” method to figure out a task, problem, etc
- 1 f. demonstrates awareness of connections between prior and new knowledge
- 3a. uses materials/ props in novel ways to represent ideas, characters and objects
- 3b. identifies new or additional materials to complete a task
- 3d. seeks additional clarity to further understanding

**Domain 2:  
Physical Development and Health**

- 2a. demonstrates appropriate body awareness when moving in different spaces
- 2c. demonstrates awareness of spatial boundaries and the ability to work with them

**Domain 3:  
Social and Emotional Development**

- 2a. describes self using several different characteristics
- 2c. demonstrates knowledge of own uniquenesses (

	<p>Self concept and self awareness</p> <p>1. Recognizes himself/herself as a unique individual having his/her own abilities, characteristics, feelings and interests.</p> <p>1c) Demonstrates knowledge of his/her own uniqueness (talent, interests, preferences, gender, culture etc</p>
<p><b>Domain 4: Communication, Language, and Literacy</b></p>	<p>1. Demonstrate that they are motivated to communicate. .</p> <p>1a Participates in small or large group activities for story telling, singing or finger plays.</p> <p>2. 1c. listens attentively for variety of purpose(e.g enjoyment to gain information to perform a task to learn what happened to follow directions)</p>
<p><b>Domain 5: Cognition and Knowledge of the World</b></p>	<p>Viewing</p> <p>3) Demonstrates that he/she understand what they observe.</p> <p>3a ) Uses vocabulary relevant to observations.</p>



**AUTHENTIC ASSESSMENT**

*What will you do to gather evidence to assess each child's developmental progress?*

*How will you determine whether or not individual children are getting the Big Ideas and/or exploring the Overarching Questions?*

*Evidence may include responses recorded during a group discussion, a visual arts project, a performance, etc.*

*Your assessment activity MUST be connected to the Big Ideas and Overarching Questions.*

To gather evidence to assess each child's developmental progress. I will see if the children are able to learn what a fire is and what can the fire men do. The time frame doesn't in which they do this, but it should be in a reasonable amount of time. Without reference (on their own) we can see how it goes

If the child matches look unreasonable and incorrect then we can evaluate why.

The evidence will be recorded with the group activity they do.