

Classroom Aquaponics

Date:		Subject:	Science and Art
Grade Level:	Pk-2		
Lesson Title:	Fish Care 101		
Standard(s):	Iowa Core: 1-LS1-1 Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs. K-LS1-1 Use observations to describe patterns of what plants and animals (including humans) need to survive. National Art Standards: VA:CR1.1.1a Engage collaboratively in exploration and imaginative play with materials		
NGSS:	K-LS1-1 From Molecules to Organisms: Structures and Processes: Use observations to describe patterns of what plants and animals (including humans) need to survive.		
Objective (cognitive):	Students will learn about how to care for fish by creating a project and finishing a paper of facts about their tank at 80 percent accuracy.		
Objective (affective):	Students will apply what they learned and gained about taking care of a fish and apply it to their lives about taking care of their own pets at 95 percent accuracy.		
Objective (psychomotor):	Students will be actively engaged in the creation of their fish while being provided materials for the experience at 85 percent accuracy.		

Book(s) or Supported Reading(s):

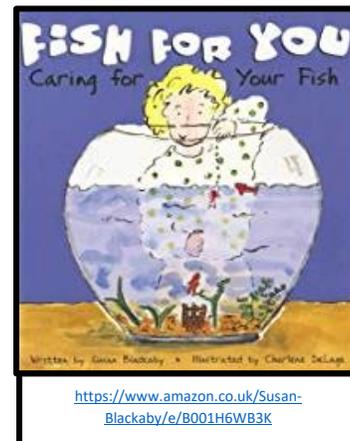
- *Fish for You: Caring of Your Fish*
 - By Susan Blackaby and Charlene Delage

Materials & Supplies:

- Paper plates
 - Paint
 - Scraps
- ALL RECYCLED THINGS

Anticipatory Set/ **Enticement** (Pre-reading & Prerequisite Skills):

- Group Time:
 - Meet at the carpet or the front of the room. Ask Students “Who in here has a pet?” “Who in here has a pet fish?”
 - Teacher writes on the board how the students take care of fish.



Modeling/ **Explanation** (I can):

- Read the book, *Fish for You: Caring of Your Fish*
 - By Susan Blackaby and Charlene Delage
- After reading the book, explain the activity:
 - Show the example: Today we will be making a fish tank and creating some fish to live in there. “What do you think would be good to have in the tank for the fish?”
 - How did they take care of their fish? How do we keep a fish?

Guided Practice/ **Engagement & Exploration** (We can):

- Students will take a paper plate (at their tables will be drops of paint for them to use already set up for them)

Classroom Aquaponics

- The students will then be told the directions
 - You will need to take the paper plate and make a tank for your fish
 - You will first need to paint pebbles at the bottom of the tank (any color)
 - Then add coral or and decoration
 - Add water and other details
 - Now add fish

On a separate piece of paper, they must write 3 sentences about their fish tank and why it will support its fishes' lives.

Independent Practice/ Elaboration (You can):

- Instruct students to begin the painting. Walk around and ask personal questions about their painting
- The paintings will have to be hung up to dry
- After they finish their masterpiece, they will write their 3 sentences

Closure:

Students will do a gallery walk to explore what the other students in the class did today. Compare their tank to the others

Assessment/ Evaluation

- Formative: Paper (3 sentences)
 - Accurate understanding of how to properly take care of fish
 - The steps to make sure the fish don't die

Enrichment/ Extension

Students who are done early they can expand their thoughts and get the creative juices going and come up with a short story about their fish. They can write down the beginning, middle and end

Modification/ Differentiation:

- If there are any physical restraints for a child the lesson can be modified to meet the specific child's needs.