

What happened to our aquarium?!



Discovering algae

After a long weekend in our very sunny classroom, it seems the algae has taken over the aquarium.



Algae exploration.
Algae can be brown,
blue, red, or green!

“What happened?!” “What is that?” The children asked when they came back to class.

We took the opportunity to explore it. We made a **KWL** chart to see what we **K**new, what we **W**anted to know, and what we **L**earned.



K Know (examined specimen)	W What do we want to know?	L Learned
Dallas - a ball with strings Neha - green or purple Shaelyn - it didn't turn water green when I shook it.	Does algae help fish swim?	Algae needs water and sun to grow.
Zaylee - water isn't green. Chance - little ball	If there is too much algae will it make crabs and fish sick?	
Emma - squishy Zaylee - stringy	How do you spell algae? How does algae grow?	
Issa - fish eat algae to be healthy and good, I saw it on tv. It melts	What does it look like? 	Looks like a frog Looks like food coloring
Eva - in water	What does it smell like? 	grass Stinks like a pond
Anica - little squishy ball. Gabrielle - looks like strings	What does it feel like? 	Soft - banger snacks Meat - water
Jace - looks like food coloring. It floats.	What does it sound like? 	"skkkk" - nothing No sound
When I shake it, the water turns a little yellow to green.	What does it taste like?  - No. What do you think it tastes like to fish?	
Liam - looks like a snail Zander - looks like a snail		





The fish have been moved to another tank as we observe this algae.

Here is where we voted on names for the fish in our aquarium.

We went online and used books from the library to find out how to keep our fish tank clean.



Rainbow fish had to face his fears by going into a scary cave to get red algae for his bumpy fish friend to get well.

My Five Senses was to prep the children to use their senses to expand our exploration and KWL chart.



We cleaned the tank and talked about what algae needs to grow. Through discussion, we came up with the ideas to put a cover on the back of the aquarium so it wouldn't get so much sunlight, change the filter, and buy a pleco fish to eat the algae. Now we will watch and wait to see if our plan worked!



Using the theme in areas besides science: here a child had marched on the letters of color words related to algae, calling out the letters as she did. After her march, she used a spinner tube to touch the letters and sing the color songs.



Gabrielle steps from letter to letter, spelling the color word. Algae can be red, brown, green, or red, so we focused on these words.



Gabrielle uses her music spinner as a pointer to touch letters as she spells color words. Algae is brown, red, green, or blue so we focused on those color words.
6/19/17



Algae exploration.
Algae can be brown, blue, red, or green!

A child actually asked me how to spell algae so I wrote it and we named the letters. Many realized those letters are in their names as well:
a, l, e, g..



Using the theme throughout the classroom: Water Center



Beneath the bubbles is green water (algae is green, red, blue, or brown, according to our books.)



These boys had dixie cups of water with food coloring in primary colors, they figured out how to make the brown color which was their goal.



The algae exploration prompted other questions such as, “Where is the light coming from? What makes the light?” so we took a look under the cover and found the light bulbs. The wheels in their brain are turning. They are ready to learn about the world around them!



Jace wanted to know how the aquarium was lit up. We took a look at what was under the cover.

Algae Art

algae art

The children used fingerprints to create "algae art" after exploring algae and engaging in discussion with creation of a KWL chart (what we Know, what we Want to know, and what we Learned). Algae can be brown, blue, green, or red. The algae we explored was green.



Using the theme in sand center



The children are digging for algae-green beads and sea shells in which they wash in water, line them up and count them. The water was clear at first but they asked if they could have food coloring the color of algae, too! I was happy to oblige.

Using the algae theme in centers

Dramatic Play

Empty aquarium with cleaning materials to “clean the tank.”

Green, Blue, Red, and Brown yarn and moss to pretend as algae.

Fish, snail, duck, giant water bug, and water strider headbands. (Things that eat algae or live near it.) Act silly with them having an algae dinner.

Pictures posted of algae on polar bears and turtles, in aquariums, ponds, and more.

Block Center

Green material pieces (“algae”)

Blue pond shaped felt to put the green “algae” on

Rubber ducks to eat the algae

Art Easel

Tempera paints: red, brown, blue, green.

Fish-shaped sponge stampers

Music & Movement

Fish song

Name waterlife/show on card and children move their bodies how they think the image would. (fish, shark, snail, crab, algae eater, shrimp, plants in slow water, plants in fast water).

Science/Discovery

Aquarium with algae in it. Magnifying glasses. Magnet glass scrubber.

Experiment with different kinds of water/light to see if results vary.

Make green slime.

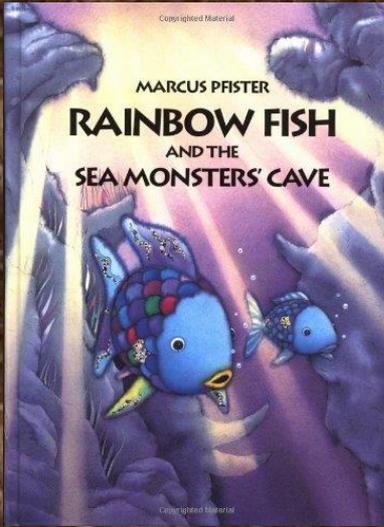
Make water filters (coffee filters, dirty water, rocks and other materials in experimenting how to create a filter for clean water).

Writing Center

Write A for Algae in box with a thin layer of sand using our fingers.

Write about how algae got in our fish tank (children draw and tell us what to write beneath it to explain their thoughts and see writing has a purpose.

Rainbow Fish and the Sea Monster's Cave



A story about Rainbow Fish facing his fear of the Sea Monster's Cave in order to get the red algae that grows within to help his friend get well.

The students engaged in discussion of the many emotions and situations within the story, such as how it feels to help a friend, how to help a friend, being safe, times they have felt scared and what they did about it or what could they do in the future in a scary situation, and more!

The students created their own Rainbow Fish with tissue paper, glue, silver scale, and red chenille stick as the algae. The students explained how their fish carried the "algae" and others wished to add his friend fish so he wouldn't be scared in the cave. The communication during their artwork creation showed me that they listened to the story and understood what was happening.



Arkansas State Standards

Social and Emotional

SE2. Emotional Expression and Understanding

SE2.1 Experiences, expresses, and regulates a range of emotions

SE2.2 Interprets and responds to the feelings of others

The students engaged in discussion about times they wanted to help others, how to help others, when they have been scared and how they dealt with it or how they can in the future, and how their friends feel when you help them, how you feel when you help them given the read aloud *Rainbow Fish and the Cave*.

Cognitive Development

CD1. Approaches to Learning

CD1.1 Shows curiosity and a willingness to try new things

The students show curiosity in their approach to learning given algae to examine and explore using 4 of their 5 senses after a read aloud about our senses.

Physical Development & Health

PH1. Gross Motor

PH1.2 Shows stability and balance

The students jumped from chalk drawn letter to letter as they spell color words blue, brown, green, and red (algae colors).

PH2. Fine Motor

PH2.1 Demonstrates fine-motor strength, control, and coordination

The students use a spoon and shovels to dig up algae-green beads, line them up on the edge of the sand table, and count them.

PH 2. Fine Motor

PH2.2 Adjusts grasp and coordinates movements to use tools

The students modeled grasp and coordination movements given tweezers and an algae sample to examine.

Language Skills

LD3. Communication Skills

LD3.1. Communicates using social and conversational rules

The students engage in discussion of algae and its characteristics as well as come up with a plan to keep the aquarium clean given a sample to examine in whole group activity.

Emergent Literacy

EL1. Engagement in literacy experiences and understanding of stories and books

EL1.2 Engages in read-alouds and conversations about books and stories

The students engage in conversation about emotions given the read aloud *The Rainbow Fish*.

Mathematical Thinking

MT1. Number Concepts and Operations

MT1.1. Demonstrates number sense and an understanding of quantity

The students demonstrate number sense and understanding of quantity given green beads in sand to dig out, clean, line up, and count.

Science and Technology

ST1. Scientific Practices

ST1.1. Engages in the scientific process to collect, analyze, and communicate Information

The students come up with a plan to clean the aquarium and how to keep it clean given discussions after reading books about algae and aquariums and use of websites for information.