

KINDERGARTEN

WHERE DO I LIVE?

STEAM LESSON

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Lesson overview:

STEAM Lesson Plan

Content Area: Science Fine Arts Area: Lesson Title: Where do I live?

Grade Level: Mini Unit Kindergarten Duration: Mini Unit 3-4 days Erinjean Patrick

Standards and Alignment

Content Area Standard(s):

K-ESS3-1 Earth and Human Activity:

Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live

Fine Arts Standard(s):

VA: Cr2.1.K

Through experimentation, build skills in various media and approaches to art making

VA: Cr2.3.K

Create art that represents natural and constructed environments

Big Idea: Animals live in specific

and lines.

habitats so that they have the things that they need to live and survive. We can use different art materials to create an animal's habitat by using different colors, shapes **Essential Ouestion:**

What do animals need to survive in their habitats? How can I choose the best materials to show what an animal needs to survive?

21st Century Skills:	Creativity, Critical Thinking, Evaluate information, Collaboration		Key Vocabulary:	Habitat, survival, animal & habitat names, forest, desert, water, underground, relationship, color, line, shape, texture, materials, water color, clay, recyclable material	
Vertical Alignment		Before Lesson: Investigation of animals and their habitats. Students have worked with all of the necessary material in different art projects – recycled materials, watercolor, clay – with in each of these materials the different ways to use color, line and texture have been explored, discussed and created Students explore and discuss the different art materials and	During Lesson: Application and creation of the relationships between animals and their habitat Investigation of color, shape and lines with in different art pieces – why do artists choose the specific color, line, shape and texture to represent different places Students construct a diorama based or color, line, shape and texture of the habitat that their animal would live in while exploring different materials	n ee ee	After Lesson: Use the knowledge they have learned to speak about their chosen animal and their habitat. Speak about their diorama – color, line, shape and texture and WHY they choose the specific art element in relationship to the habitat

	how they are used in regards to color, line, shape and texture.			
Materials List:	Pre and post assessments, pencils, habitats and animal sort photos, book: animals at home, art materials: recyclable materials, clay, water colors, colored pencils and crayons			

Instructional Delivery (guided, collaborative, and self-directed)

Student Learning Outcome(s):

I can use different materials (using colors, lines, shapes and textures) to create a piece of art that represents what different animals need to survive.

Pre-Engagement:

Pre-assessment:

Diagnostic: Students will get a sheet of paper with animals on one side and habitats on the other. Students will be asked to match each animal to where they live.

Students will be asked to discuss HOW we used different materials throughout the year.

Pre-Engagement:

Art: Students will investigate color, line, shape and texture based on 3 different pieces of art. Students will be asked WHY the artist chose the design that they did and HOW it helps us to understand the piece of art.

Science: Students will attend a field trip to the Museum of Nature and Science. Students will be asked to investigate the question: Where do animals live and what do they need to survive? Chaperones will be asked to ask questions to the students such as: Where is this animal living? Why do you think they need to live here? How does this animal survive? Student groups will be given Polaroid cameras to take photos and document the animals they see and where they live.

Focal Lesson:

Investigation Continued:

Science: As students enter the room they will be asked to walk around and look at the photographs that they took at the Museum of Nature and Science. They should be noticing: What animals do you see? Where are they living? Why do you think they need to live there? What are essential things that they need to survive? (This will be supported with visuals on a chart on the board)

Art: Students will Investigate art materials using centers and the habitats. Each center will have a different habitat with the above connections they made from the museum. Students will have materials on the table – clay, recycled materials, watercolors. At each different habitat students will explore and investigate on which materials make the most sense to convey color, line, shape and texture of that specific habitat. After students will discuss which materials work best and WHY.

Discover:

Science: Students will be asked to work collaboratively in small groups. Each group will be given a different habitat (desert, water, forest, underground) along with visual cutouts of different animals. Each group will be asked to glue the animals that they think live in their given habitat. They must talk with their group about WHY they think the animal would live in their given habitat. What does that animal need in their habitat in order to survive? How do you know?

Art: Once students have explored these habitats, as a group, they will choose two elements in their given habitat and try to make them using the different art materials. They will share their art habitat element within their group as well as with the class. With the support of their classmates they will determine which element most closely matches the real thing and why. How does this best show the real color, line, shape or texture?

Polaroid pictures will be taken of the elements that most closely resembled by using the art materials. These photos will be placed in a habitat chart where students can refer back to for support if needed as they are working independently on their projects.

Connect:

Students will read the book, Animals at home. During the reading we will ask questions about each different habitat and different animals. Student will connect their knowledge they have gained about animals and their habitat to the story and where animals live.

Together as a class, students will choose one of the animals they read about in the book (this animal will not end up being one of the 4 choices for the students final project) and use the art materials given (recyclable materials, clay and watercolors) to create a habitat diorama to connect their understanding of the animals habitat (science knowledge) and different possibilities of how to use the art materials (art knowledge) to create that habitat. This lesson will be teacher lead – but student centered as all of the ideas of how to create will be from the students while the teacher is supporting their connection of science and art.

Integrated Assessment and Extension

Assessment:

Create: Where do I live?!

**Present students with 4 animals that we have discussed and studied. Students have to create a habitat based on what they know about animals and their relationship to the environment and they need to answer the question – where would I live and what materials can I use to show my habitat?! The animals will be cut outs that they students will be able to attach to their final diorama creation.

Students will be asked to choose an animal. They will need to create a diorama habitat for their animal based on what that animal needs. The habitat can be created using a variety of familiar art materials including: water color, recyclable materials and clay. The students must choose 2 materials to show the color, line, shape and texture of their habitat. Students will need to be able to discuss why they chose the art materials they did to support their understanding of their chosen animal and what they need to survive. Students could consider the following questions when making choices about their habitat: Where would this animal live? Why? What does their body look like? How does that inform where this animal lives? What does your animal need to survive? How does the habitat you are creating give your animal what they need to survive? Why is this habitat the best fit for this animal? What color, line, shape and texture best represents this habitat? How can I use my materials to best show that color, line, shape and texture?

*The project MUST include at least 2 different materials, representation of 2 color, line, shape or texture AND a minimum of 2 things that their animal would need to survive in their habitat.

Differentiation:

- Students could have a visual picture of the animal they are creating a
 habitat for
- Questions are on the board along with visual supports
- Students are given specific scaffolding steps to help students complete the habitat art.

Revise: Students will be given the opportunity to revise with in their own habitat groups. Students should give feedback based on how closely the students were able to create the color, lines, shape and texture of the real components of the actual habitats in nature.

Students will share feedback using inside/outside circles (the students are familiar with this process). This discussion technique gives students the opportunity to respond to questions and/or discuss information with a variety of peers in a structured manner. Students form two concentric circles and exchange information with a partner until the teacher signals the outer circle to move in one direction, giving each student a new peer to talk to.

The teacher will pose a new question with each new partner to ensure

students are getting the feedback they need.

Suggested Extensions:

Students can write a sentence or paragraph discussing why they made specific choices for their piece of art based on what their animal needs. Differentiation and scaffolding with sentence stems and visual support can and should be provided for students.

Each habitat can get together to observe other animals that are also in the habitat. How are these animals similar? How are the animals different? How are the habitats the same and different?

Students can present their work to another class or to another habitat group to support their speaking and listening skills.

Students can go back to the photos taken in the museum and write a story about each animal in their habitat.

Reflection Opportunities				
Student Reflection Prompts:	Key Questions to Ask Students: HOW do you know what habitat is right for your animal to live in? What do they need to survive? How can you use art — color, line and texture to accurately create a habitat for your animal? How does color, line, shape and texture play a part in nature? What materials did you use to best create a habitat?	Teacher Reflection Prompts:	Key Questions to Ask Yourself: Was there a seamless connection between science and visual arts? Were students able to articulate WHY they made the choices that they did using the science to support their choices in the art? What moments were challenging? What moments were the most engaging?	

Post Assessment Reflection:

Content Area Standard(s):	Fine Arts Standard(s):
K-ESS3-1 Earth and Human Activity:	VA: Cr2.1.K
Use a model to represent the relationship	Through experimentation, build skills in
between the needs of different plants and	various media and approaches to art
animals (including humans) and the places	making
they live	VA: Cr2.3.K
	Create art that represents natural and
	constructed environments
	Constructed chrinomicality
Student Assessment:	
Animal Name:	
Draw a picture of 2 things your animal needs to	survive in their habitat that you included in your
diorama	our vivo in their number that you included in your

Circle the two materials that you used to create your diorama:







**Students will verbally share about their diorama for the teacher rubric below

Habitat Diorama Teacher Rubric

	4 Exceeds	3 meets	2 almost	1 not yet
Animal needs	Diorama includes more than 2 things that the animal needs in their habitat	Diorama includes 2 things that the animal needs in their habitat	Diorama includes 1 thing that the animal needs in their habitat	Diorama does not include any things that the animal needs in their habitat
Materials	Student used multiple materials to create their habitat diorama	Student used 2 different materials to create their habitat diorama	Student used 1 material to create their habitat diorama	Student did not use any of the materials to create their habitat diorama
Color, line,	Student used	Student used 2	Student used	Student did not
shape and	color, line, shape	color, line, shape	one – color, line,	use color, line,
texture	AND texture (all 4) to represent nature in their habitat	or texture to represent nature in their habitat.	shape or texture – to represent nature in their habitat.	shape or texture to represent naturein their habitat.
Share	Student can state what their animal needs to survive and how they decided to best represent that using the given materials in regards to color, shape and line.	Student is able to speak about what their animal needs to survive and how they decided to best represent that using the given materials.	Student is able to speak about EITHER the animal and habitat relationship OR the art choices they made.	Student is not able to speak about their project.