Animal Habitats
Lesson on Ocean Layers (Readers Theater)

Objectives: The students will each play an individual role in The Magic School Bus: The Ocean Floor, by Joanna Cole.
The students will listen for their parts to be told to the class.
The students will learn the layers of the ocean.
The students will actively participate in the activity.
The students will create two complete sentences about oceans and what they learned.

Grade Level: First Grade

Standards Addressed:

NY- New York State Common Core Standards (2011)

Subject: English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects

Grade : Grade 1 students:

Content Area: Literature K–5

Strand: Reading

Domain: Key Ideas and Details

Standard: 3. Describe characters, settings, and major events in a story, using key details.

Content Area: Foundational Skills (K–5)

Strand: Reading

Domain: Fluency

Standard: 4. Read with sufficient accuracy and fluency to support comprehension.

Indicator: a. Read on-level text with purpose and understanding.

Indicator: b. Read on-level text orally with accuracy, appropriate rate, and expression on successive readings.

Strand: Writing

Domain: Research to Build and Present Knowledge

Standard: 8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

Domain: Responding to Literature

Standard: 11. Create and present a poem, dramatization, art work, or personal response to

a particular author or theme studied in class, with support as needed.

NYS Science Key Ideas:

NY- New York State Content Area Standards

Subject : Science

Grade Range : Elementary Science

Standard : STANDARD 6—Interconnectedness: Common Themes Students will understand the relationships and common themes that connect mathematics, science, and technology and apply the themes to these and other areas of learning.

Area : Models

Key Idea : Key Idea 2: Models are simplified representations of objects, structures, or systems, used in analysis, explanation, or design.

Indicator : analyze, construct, and operate models in order to discover attributes of the real thing

Indicator : discover that a model of something is different from the real thing but can be used to study the real thing

Indicator : use different types of models, such as graphs, sketches, diagrams, and maps, to represent various aspects of the real world

Materials:

Scripts (per student), Picture Diagram of the ocean floor, Book: The Magic School House: The Ocean Floor, by Joanna Cole, vocabulary note cards for ocean diagram, character slips, Welcome to the Magic School Bus sign, school bus cut outs.

Seating Arrangement:

(23 students, 1 teacher, and 1 aid) Each student will sit in a chair in rows, similar to how a school bus will be set up.

UDL Considerations:

Students will have an opportunity to read the script, hear the script, and view the information from the script on the diagram activity after the reading. The students who may not be able to see well can sit closest to the map. The vocabulary words will be addressed verbally and will visually be presented on board in large letters.

Introducing:

The anticipatory set for the class will be to view the sign when walking into the classroom. They will be required to take their seats aboard the Magic School Bus for an underwater adventure. The students will be presented with

the book, The Magic School Bus: The Ocean Floor, They will have to discuss what animal habitat they are going to enter together.

Procedure:

1. Have the students seated at each individual chair, resembling a bus.
2. Introduce The Magic School Bus: The Ocean Floor, by Joanna Cole to the class. Remind students to pay attention to the key vocabulary in the story such as: (open ocean, coral reef, hot-water vent, deep ocean floor, continental slope, continental shelf, intertidal zone, shore) for an activity that will be held after reading.
3. Hand out scripts to each student
4. Assign roles. Note: There are two main characters in the script. Ask for volunteers for those parts. Allow the students to pick out of a hat for the remaining parts.
5. ON THE CLOCK for 3 minutes: The students need to highlight or mark their parts on the script, so they do not skip over them.
6. The class will begin to read the script. When the class comes upon a various vocabulary words through out the reading, the teacher will place a yellow paper bus on the part of the diagram where the bus is entering. For example: if the bus is entering the "deep ocean floor", a yellow bus will be placed on the diagram at the deep ocean floor. This will help the students remember that there is an important vocabulary word that must be remembered.
7. After reading, ask the students

- What new places in the ocean did they visit?
-What new creatures/animals did they meet that live in the ocean?
-Is there anything else that you might have learned through out the reading?

Bridge into the vocabulary learned. Show the class the cards and ask what they remember about each word.

8. Have the students raise their hand to place the vocabulary word on the appropriate spot on the diagram.

For example: The shore will go first on the left and so on.

9. See closure activity.

Closure:

Based on what was learned in the lesson for a ticket out the door: The students must write two things they learned about the ocean. This must be done in **COMPLETE** sentences. WRITE these directions on the board before assigning. The vocabulary words will be present on the board so the students can refer to them while writing their sentences.

Assessment:

The students will hand in their tickets out the door to be evaluated. There will be a checklist for the students to view before writing their sentences

down. The students will also be observed for participation in the script as well. (See attached checklist)

Checklist for Reader's Theatre (Ocean)

Students' name _____

____ The student wrote in complete sentences

____ The student capitalized the first letter in each sentence

____ The student has a period at the end of each sentence

____ The student has correct sentence structure

____ The student has **two** sentences

____ The student participated in the class activity

____ The student participated in reading their part of the script

The Magic School Bus: On the Ocean Floor Script

Narrator: Teacher's Alternate
Ms. Frizzle
Fish 1
Fish 2
Pelican 1
Pelican 2
Photographer
Student 1
Student 2
Student 3
Student 4
Student 5
Student 1
Student 2
Student 3
Student 4
Student 5
Student 6
Student 7
Student 8
Student 9
Student 10
Student 11
Student 12
Student 13
Student 14
Student 15
Student 16
Student 17
Student 18
Lenny the Lifeguard
Beach People (5 volunteers)

Narrator: It was the end of the day, and it was *hot* in school. We had been working for hours on our ocean science projects. All our work made Ms. Frizzle very happy. But it made *us* very tired and hot.

Student 1: WOW. It's hot today.

Student 2: Not Ms. Frizzle's dress!

Student 3: Yeah, It's cool, man.

Ms. Frizzle: *(excitedly)* Doesn't learning about oceans make you happy, Arnold?

Student 4 (Arnold): Actually, it makes me feel kind of crabby.

Narrator: We were putting the finishing touches on a display about how ocean animals swim when someone said

Student 5: I wish *we* could go swimming!

Narrator: Ms. Frizzle looked up. Without warning, she said:

Ms. Frizzle: As a matter of fact, children, I've been planning a class trip to the ocean for tomorrow!

Narrator: Sometimes having a weird teacher isn't so bad.

Student 6: Did she say OCEAN?

Student 7: Where we can swim and play?

Student 8: Is she serious?

Student 9: *(excitedly)* Don't ask, just pack your beach bag!

Student 10: Most of the salt in the ocean is the same kind we put on food.

Narrator: The next day, everyone showed up in a bathing suit. We boarded the old school bus, and Frizzie started the engine. We were ready for a day of fun in the sun!

Student 11: I can't wait to go swimming!

Student 12: I'm going to build a sand castle.

Student 13: Boy, are we lucky!

Narrator: When we finally came to the beach, we wanted to jump off the bus. But guess what? Ms. Frizzle didn't stop. She kept right on going—past the lifeguard station, across the sand, and down to the water's edge.

Lenny the Lifeguard: Hi! I'm Lenny the lifeguard. Here's a picture of me saving a third-grader last summer.

Beach People: Mm-Hm.

Student 14: Hey, where are we going?

Student 15: Isn't she supposed to park in the parking lot?

Ms. Frizzle: We are now in the intertidal zone! That is the part of shore that is covered with water at high tide, and uncovered at low tide.

Lenny the Lifeguard: Here I am saving a grandmother…and this is my famous rescue of Muffy, a beloved family pet!

Beach People: Mm-Hm.

Narrator: Out the windows we saw tide pools—puddles of water left on shore when the tide goes out. We were hoping the Friz would let us out, but no such luck. She kept driving full speed ahead.

Student 16: She <u>said</u> we were going to the beach.

Student 17: No, she didn't. She said we were going to the OCEAN!

Student 18: I guess she really meant it!

Narrator: As the bus splashed through the waves, the lifeguard blew his whistle. Frizzie didn't stop. So he came rushing out to rescue us.

Lenny The Lifeguard: Pardon me, please. I have to rescue a school bus.

Beach people: Mm-hm

Narrator: Suddenly a mysterious wave rose up. Ms. Frizzle opened the door of the bus, and the lifeguard was swept inside. Outside the windows we saw nothing but rushing water. We screamed and closed our eyes.

Lenny The Lifeguard: Hi. I'm Lenny The Lifeguard.

Student 1: Oh great. I feel safer already.

Ms. Frizzle: Class, the best way to learn about the ocean is to see in close up.

Student 2: Not THIS close!

Student 3: We're going under!

Narrator: When we finally opened our eyes, everything was quiet. We were under the ocean, and there had been a few small changes. The bus has turned into a submarine, and everyone was wearing a diving suit. We should have known. We were on another one of Ms. Frizzle's crazy class trips.

Lenny The Lifeguard: Don't worry kids, ill save your lives. That's my job.

Student 4: Maybe later

Student 5: Ms. Frizzle's just getting started.

Student 6: Nothing can stop her now!

Narrator: Right away, Ms. Frizzle started talking about the ocean.

Ms. Frizzle: We are now passing over the continental shelf. That's the area that stretches from the shore to where the water is four hundred to six hundred feet deep. Class the water is getting deeper and deeper

Student 7: Ocean science is to deep for me.

Narrator: Ms. Frizzle decided this was a good moment for us to get out of the bus. Thank goodness we had air tanks. All around us were fish, fish, and more fish.

Ms. Frizzle: Many kinds of fish swim in large groups called schools.

Student 8: Look! A school of fish!

Fish 1: Look! A school of children!

Fish 2: I wish <u>we</u> had a bus.

Narrator: Down below, on the muddy bottom, lobsters were catching crabs. Starfish used their arms to pry open clamshells. And jellyfish floated past, catching small fish with their stinging tentacles. The ocean was teeming with life!

Ms. Frizzle: Most of the seafood we eat comes from here on the continental shelf!

Student 9: I thought it came from the Supermarket Shelf.

Narrator: Ms. Frizzle said there was life in the water we couldn't even see. She pulled out a microscope and made us look at the seawater. Under the microscope we saw strange creatures.

Ms. Frizzle: Girls and Boys, these tiny living things are called plankton! There are two kinds of plankton, children. Some are plants and others are animals.

Student 10: WOW! A plankton animal is eating a plankton plant.

Student 11: Oh, yummy.

Narrator: We tried to listen, but we felt nervous. We noticed some dark shapes coming closer and closer.

Student 12: Where have I seen that scary shape before?

Student 13: Does the word SHARK mean anything to you?

Lenny the Lifeguard: Oh no! Children should not be swimming in shark-infested waters.

Student 14: Thanks for the tip, Lenny.

Narrator: Oh, no! The shapes were tiger sharks! Ms. Frizzle told us not to worry. She said most sharks will not eat people.

Ms. Frizzle: The number of people killed by sharks every year is very, very small. Humans are not the main diet of tiger sharks, but they may attack if humans are nearby

Narrator: We panicked anyway.

Student 15: *(frightened)* Uh-Oh! We're nearby!

Narrator: Then an enormous whale shark slid by.

Ms. Frizzle: Whale sharks never hurt people. They eat nothing but plankton!

Narrator: The giant shark swam down, and we went along. We were leaving the continental shelf, following a steep cliff called the continental slope. We were on our way to the deep ocean floor.

Lenny the Lifeguard: Hey shark! Come back! I'm supposed to rescue the kids!

Ms. Frizzle: Here we go!

Narrator: After a while, the whale shark swam away, but the Friz kept going down. The water was bitter cold and pitch-dark. Sunlight could not shine down so deep. Ms. Frizzle switched on her flashlight. As we swam onto the bus, we noticed that it changed again.

Student 16: You're not afraid of the dark, are you?

Student 17: Who me? I love the dark. The dark is my friend. Can we go home now?

Narrator: This time is was a submersible, a vehicle made for exploring the deep ocean floor.

Ms. Frizzle: The pressure down here would crush an ordinary submarine.

Narrator: …and she drove all the way to the bottom.

Ms. Frizzle: There is not enough food here for large animals. Most deep-sea fish are tiny.

Narrator: The deep ocean floor was as empty as an underwater desert!

Student 18: Angler Fish, Lantern Fish, Hatchet fish and Swallowers are tiny deep-sea fish that can glow in the dark!

Student 1: They have their own special light, just as fireflies do on land.
Narrator: Then up ahead, we saw a spot that was full of life. It looked like an undersea garden with all kinds of strange animals in it.

Ms. Frizzle: This is a hot-water vent, class! A vent is opening in the ocean floor. Flowing from the vent is super-hot water mixed with hydrogen sulfide gas.

Student 2: These tube worms look like huge lipsticks.

Student 3: At a hot-water vent, there is enough food for many animals.

Student 4: That dandelion animal is like a little flower!

Student 5: Those worms look just like spaghetti

Student 6: Did we have lunch?

Student 7: Please. I just lost my appetite.

Narrator: Soon we were motoring over the open ocean toward a sun-drenched island. The bus had changed into a glass-bottom boat. Through the glass, we saw what looked like a wall made of colorful rocks. Ms. Frizzle said it was a coral reef, made of tiny animals called coral polyps. We dove overboard and began to explore.

Lenny the Lifeguard: Don't swim far! I haven't finished saving you yet!

Student 8: Oh, has he started already?

Student 9: I'm sure he's doing his best.

Narrator: The reed was made of many different kinds of corals. Some looked like trees with branches. Others looked like fans or fingers. Some even looked like human brains!

Student 10: Look! It's your brain!

Student 11: No, It's yours. I heard It's been missing for years.

Ms. Frizzle: Brain coral is not really a brain, children. It just happens to look like one. A coral reed makes a good home for many ocean plants and animals!

Narrator: We saw crabs and lobsters, huge eels and octopuses, slimy sea slugs and spiny sea urchins, and the most colorful fish in the world. Too soon, Ms. Frizzle said it was time to go. No one wanted to be left behind so we all climbed aboard. Frizzie stepped on the gas, and the bus chugged away from the coral reef.

Fish 1: It took thousands of years to build this reef.

Fish 2: Please don't break it… or pollute it.

Fish 1: Be careful of our home!

Lenny the Lifeguard: Don't worry kids, we'll soon be home.

Student 12: Which way is home?

Narrator: Nearby, a school of dolphins leaped past. In the distance, we saw a whale. Everything seemed normal. Then we noticed something weird was happening. The bus was getting flat. As usual, Ms. Frizzle was the only one who stayed calm. She drove us to an ocean current, and we were swept along in the fast-moving water for thousands of miles. After awhile, we saw our beach again.

Lenny the Lifeguard: Tell me, kids, is your bus ALWAYS like this?

Student 13: Well, it's never been a boat before…

Student 14: and it's never been flat before…

Student 15: but otherwise it hasn't changed.

Ms. Frizzle: Keep your balance, class! Everyone stay on the bus!

Narrator: On the bus was right, It had turned into a giant surfboard! We had to stand on top of it. And we were riding a wild wave straight toward shore!

Pelican 1: Congratulations, Lenny!

Pelican 2: We knew you could do it!

Student 16: Hooray! We're surfing!

Student 17: COWABUNGA!

Ms. Frizzle: Hang ten, class!

Student 18: Could I just hang one?

Narrator: Oh, no! It was a giant wipeout! The whole class went under. The next thing we knew, we were washed up on the sand.

Lenny The Lifeguard: Thanks to me, you're safe now children.

Photographer: Tell me, does your teacher always dress like that?
Student 1: Not always… sometimes she looks totally outrageous.

Narrator: Our diving suits were gone, and the bus was its old self again. There it was, sitting in the parking lot as if nothing had happened. We thanked Lenny for everything and hit the road.

Lenny The Lifeguard: Could you take a picture, please? I've never saved a whole class before.

Photographer: Okay, everybody. Smile and wave.

Narrator: Back in our classroom, we made a terrific chart of the ocean for the bulletin board.

Narrator: By then we were definitely ready to go home. Thank goodness it was Friday! After that class trip we really NEEDED a weekend off!

Student 2: I'm exhausted… and my dad's taking me to the beach tomorrow.

Student 3: Don't worry, its supposed to rain.

Animal Habitats
Lesson on ocean geography

Objectives: The students will learn why the ocean matters by watching a National Geographic Ocean Video.
The students will create and label the five oceans on a map.
The students will actively participate in a sing along about the five oceans.
The students will construct one sentence of what ocean is their favorite and why.

Grade Level: First Grade

Standards Addressed:

NY- New York State Common Core Standards (2011)

Subject: English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects

Grade : Grade 1 students:

Strand: Speaking and Listening

Domain: Comprehension and Collaboration

Standard: 2. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

Domain: Presentation of Knowledge and Ideas

Standard: 5. Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.

Standard: 6. Produce complete sentences when appropriate to task and situation. (See grade 1 Language standards 1 and 3 on page 26 for specific expectations.)

NYS Social Studies Key Ideas:

Subject : Social Studies (June 1996)

Standard : Standard 3: Geography

Level : Elementary

Key Idea : 1. Geography can be divided into six essential elements which can be used to analyze important historic, geographic, economic, and environmental questions and issues. These six elements include: the world in spatial terms, places and regions, physical settings (including natural

resources), human systems, environment and society, and the use of geography. (Adapted from The National Geography Standards, 1994: Geography for Life) Students:

Performance Indicator : draw maps and diagrams that serve as representations of places, physical features, and objects

Key Idea : 2. Geography requires the development and application of the skills of asking and answering geographic questions; analyzing theories of geography; and acquiring, organizing, and analyzing geographic information. (Adapted from: The National Geography Standards, 1994: Geography for Life) Students:

Performance Indicator : ask geographic questions about where places are located; why they are located where they are; what is important about their locations; and how their locations are related to the location of other people and places (Adapted from National Geography Standards, 1994)

Materials:

You will need access to the internet, the video "Why Oceans Matter" (http://video.nationalgeographic.com/video/environment/habitats-environment/habitats-oceans-env/why-ocean-matters/), the video "The Five Ocean Song for Kids" (http://www.youtube.com/watch?v=9IAQTtXqcNA), Map hand out for each student, Big map for the front of the room, each ocean name on a card to use as labels of the big map (each ocean name should be on five cards), post it notes.

Seating Arrangement:

(23 students, 1 teacher, and 1 aid) The students will be seated on the carpet for both videos. When it's time for the students to color and label their own map, they will transition back to their seats.

UDL Considerations:

Students will have an opportunity to listen about the oceans, watch the video that label the oceans, and then label the oceans on their own. The students who may not be able to see well can sit closest to the map. The ocean names will be labeled in large letters on the big map at the front of the room. The students can use this as a reference when labeling their own personal map.

Introducing:

The teacher will display the big classroom map. She will ask the students to come up and point to land on the map, and then to point to oceans on the map. She will then ask the students to write on a post it note how many oceans they think there are. The students will then stick their post it notes on the front board.

Procedure:

1. The students will watch the video, "Why the ocean matters".
2. They will then discuss as a class why they think the ocean matters. (Using facts from the video)
3. The students will listen to the video/song "The Five Oceans Song".

4. The class will just listen to the song the first time.
5. The teacher will then pull out the Ocean name cards. They will go over the five ocean names and the cards will be distributed among the students.
6. The class will sing along to the song a second time.
7. When the song comes to an ocean name, the students with that ocean card name will come up to the big map and place that ocean card name on the map where that ocean is. (During this time the song will be paused)
8. This will continue until the song is over.
9. After the song, the teacher will ask the students, "How many oceans are there?" (5)
10. As a class they will count to see how many predictions (post it notes) said five oceans.
11. See closure activity

Closure:

The students will go back to their seats and they will receive a map hand out. There job is to label the oceans on the map and then they can color it. (They can use the map at the front of the room as a reference). They will then have to fill in the sentence at the bottom of the sheet. "My favorite ocean is _____ because _____"
(This map handout will be their assessment)

Assessment:

The assessment will be the map handout sheet. Each ocean label will be worth a point. Also, if the teacher is able to read what ocean is their favorite and why they will receive a point.

Animal Habitats
Lesson on layers of the Rainforest

Objectives:
Students will…

- Identify the four layers of the rainforest
- Identify animals that live in all four layers of the rainforest
- Create their own diagram of the layers of the rainforest

Grade Level: First Grade

Standards Addressed:

Subject : Science **Grade Range :** Elementary Science
Standard : STANDARD 4: The Living Environment Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.

Key Idea : Key Idea 1: Living things are both similar to and different from each other and from nonliving things.
Performance Indicator : PERFORMANCE INDICATOR 1.1 Describe the characteristics of and variations between living and nonliving things.

Major Understanding : 1.1a Animals need air, water, and food in order to live and thrive.
Major Understanding : 1.1b Plants require air, water, nutrients, and light in order to live and thrive.
Key Idea : Key Idea 5: Organisms maintain a dynamic equilibrium that sustains life.
Performance Indicator : PERFORMANCE INDICATOR 5.2 Describe some survival behaviors of common living specimens.

Major Understanding : 5.2g The health, growth, and development of organisms are affected by environmental conditions such as the availability of food, air, water, space, shelter, heat, and sunlight.
Key Idea : Key Idea 3: Individual organisms and species change over time.
Performance Indicator : PERFORMANCE INDICATOR 3.1 Describe how the structures of plants and animals complement the environment of the plant or animal.

Major Understanding : 3.1a Each animal has different structures that serve different functions in growth, survival, and reproduction. wings, legs, or fins enable some animals to seek shelter and escape predators; the mouth, including teeth, jaws, and tongue, enables some animals to eat and drink; eyes, nose, ears, tongue, and skin of some animals enable the animals to sense their surroundings; claws, shells, spines, feathers, fur, scales, and color of body covering enable some animals to protect themselves from predators and other environmental conditions, or enable them to obtain food; some animals have parts that are used to produce sounds and smells to help the animal meet its needs; the characteristics of some animals change as seasonal conditions change (e.g., fur grows and is shed to help regulate body heat; body fat is a form of stored energy and it changes as the seasons change)

Materials:

- The Great Kapok Tree by Lynne Cherry
- Smartboard
- Google images
- Paper/worksheets

Physical and Social Arrangement:

(23 students, 1 teacher, and 1 aide) Students will start this lesson by sitting on the carpet in front of the teacher. After listening to book, talking about the layers of the rainforest and watching the movie, students will return to their seats.

UDL Considerations:

Students will have an opportunity to interact with technology by labeling the parts of the rainforest on the Smartboard. Students will also watch and listen to a film that will be displayed on the Smartboard about the rainforest.

Students will also work in groups to label and add animals to each layer of the rainforest.

Introducing:

The teacher will introduce this lesson by reviewing the habitats that students have already learned about. The teacher will ask students, What do we already know about the rainforest?(students already know about the climate of a rainforest) " What kind of animals do you think live in the rainforest?" Once students give their answer explain to them that they will be learning about a new habitat where animals live.

1. **Show this video about the layers of the rainforest**
   http://www.youtube.com/watch?v=wuHuQwA-y5Y

2. Introduce the book, The Great Kapok Tree, by Lynne Cherry and read to students, stopping and pointing out the animals in the book.

Procedure:

- Explain to students that the Kapok tree was a home to all types of animals and is located in the amazon rainforest(show this on map)
- Today we are looking at the layers in the rainforest. There are four layers where animals live in the rainforest. Each layer is a different environment and is the home to different life forms. Animals and plants support each other.

- Show a picture of the rainforest on the Smartboard and explain to students that, "in the rainforest, different animals live in four different layers of the rainforest."
- After introducing each layer, place a label on the picture to show students where the layer in located. (Teacher will introduce each layer and the animals in beginning with the bottom layer and up)
- **Forest Floor/Ground layer:** The forest floor is where insects live and the largest animals (place label on picture). It is cool and damp, where fungi love to grow (Show a picture of what fungi looks like on google images). Gorillas, anteaters, boars, people and insects like tarantulas live here.
- **Understory:** The understory is on the bottom of the rainforest and is made up of smaller trees. Most of the rainforest is made up of this layer. Animals that like the dark live in the understory. Teacher will introduce animals that live in the understory: jaguar, snakes, beetles, bees, morpho butterflies and small mammals. Ferns, small trees and vines are located in this section of the rainforest. Larger animals like the jaguar like to hide on tree branches and wait for their prey (food they hunt for)(show images from story)

- **Canopy**: The canopy is a thick leafy environment where many animals live. It is the upper part of the trees. Animals that live in the canopy like the light. It is sunny here. Birds (toucans), frogs, sloths, monkeys, orangutans, reptiles like snakes and lizards live here.

- **Emergents/ Overstory:** This is the tops of the tallest trees and is very high. Small insects and birds live hear such as macaws, toucans and parrots.

**** All of the animals and correct labels for the layers would be placed on the picture that is displayed on the Smartboard. A document would contain these pictures.**

Closure:

Still sitting on the carpet, show students a model of the diorama they will be creating. Go over each layer one more time and explain to students to cut along the black line. Tell students to first color everything before cutting. When they are DONE coloring they can cut along the black line to create their diorama.

- Hand out rainforest layers for students to cut out and paste. Once students have pasted the layers in the correct order allowed students to add animals to the layers with the animal cut out worksheet.

Assessment:

I will observe students by walking around the room to see if they are following the directions I have given. I will assess students by observing their coloring. I will check for correct placement of layers and animals.

Animal Habitats
Lesson review of animals/layers of rainforest(math)

Objectives:

Students will…

- Identify number words to numbers
- Be able to use greater than and less than symbols in a number sentence
- Identify layers of the rainforest

Grade Level: First Grade

Standards Addressed:

Subject : Mathematics (Revised March 2005) **Grade :** Grade 1
Strand : Connections Strand **Standard :** Students will recognize and use connections among mathematical ideas.
Indicator : 1.CN.2 Understand the connections between numbers and the quantities they represent
Standard : Students will recognize and apply mathematics in contexts outside of mathematics.
Indicator : 1.CN.7 Recognize the presence of mathematics in their daily lives
Indicator : 1.CN.8 Recognize and apply mathematics to solve problems

Strand : Number Sense and Operations Strand
Standard : Students will understand numbers, multiple ways of representing numbers, relationships among numbers, ...
Indicator : 1.N.3 Quickly see and label with a number, collections of 1 to 10
Indicator : 1.N.14 Read the number words one, two, three…ten
Indicator : 1.N.22 Use the words higher, lower, greater, and less to compare two numbers

Subject : Science **Grade Range :** Elementary Science
Standard : STANDARD 4: The Living Environment Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.
Key Idea : Key Idea 5: Organisms maintain a dynamic equilibrium that sustains life.
Performance Indicator : PERFORMANCE INDICATOR 5.2 Describe some survival behaviors of common living specimens.

Major Understanding : 5.2g The health, growth, and development of organisms are affected by environmental conditions such as the availability of food, air, water, space, shelter, heat, and sunlight.
Key Idea : Key Idea 3: Individual organisms and species change over time.
Performance Indicator : PERFORMANCE INDICATOR 3.1 Describe how the structures of plants and animals complement the environment of the plant or animal.

Major Understanding : 3.1a Each animal has different structures that serve different functions in growth, survival, and reproduction. wings, legs, or fins enable some animals to seek shelter and escape predators; the mouth, including teeth, jaws, and tongue, enables some animals to eat and drink; eyes, nose, ears, tongue, and skin of some animals enable the animals to sense their surroundings; claws, shells, spines, feathers, fur, scales, and color of body covering enable some animals to protect themselves from predators and other environmental conditions, or enable them to obtain food; some animals have parts that are used to produce sounds and smells to help the animal meet its needs; the characteristics of some animals change as seasonal conditions change (e.g., fur grows and is shed to help regulate body heat; body fat is a form of stored energy and it changes as the seasons change)

Materials:

- Over in the Jungle; A Rainforest Rhyme by Marianne Berkes
- Number and greater than and less than worksheets/flashcards
- Tables for centers

Physical and Social Arrangement:

(23 students, 1 teacher, and 1 aide) Students will start this lesson by sitting on the carpet in front of the teacher. After listening to book reviewing the layers of the rainforest, and listening to directions for centers, students will be assigned to sit at specific tables. Students will return to carpet area when directed after completing both centers.

UDL Considerations:

I will be activating students prior knowledge by reviewing the layers of the rainforest along with the different animals. Students will have the opportunity to work together to figure out problems and have responsibilities to fulfill at the centers.

Introducing:

Ask students, " What are the four layers of the rainforest?"

Procedure:

- Read the book Over in the Jungle A Rainforest Rhyme
- While reading stop on each page, have student hold up the number that is displayed on each page(for instance the number one is displayed on the first page so students should hold up one finger)
- Next point to the animal on the page and discuss where this animal lives in the layer of the rainforest that we have already learned about
    - Marmoset=canopy
    - Morpho butterfly= understory
    - Parrort=canopy
    - Ants=forest floor
    - Honey bears=canopy;understory
    - Boa= canopy;understory
    - Poison dart frog=canopy
    - Ocelots=understory
    - Sloths=canopy
    - Howler Monkey=canopy
- While students are still seating on the carpet tell them that they will be working in two centers today and that you will assign where students will be sitting.(There will be four different groups and only two assignments will be given. Two groups will be working on the same activity)
- Show students the first activity: Rainforest word match-ups
    - Students will use flashcards to fill in the chart
    - Show an example. First pick up a leaf card. I picked up the number 12 so I will write this number on the side of the chart that says "number".
    - I will then find the word that says 12 by looking at the animal cards. I found how to spell twelve on this card, show the card the write the number word on the side of the chart that says "number word". Display this chart the two centers that will have this activity for students to use and fill in rest of chart.
    - Make sure to ONLY FILL IN FIVE BOXES, so your other peers have a chance to work at the center☺
- The second center will be Rainforest greater than/less than
    - Show students the number chart that will be at the center. Model two problems.
    - In the first box I see a snake. Now I have to find the flash card with a snake to find the number. This is 12 so I write 12 next to the snake.

Now pick up a leaf card with out looking. I picked up the number 23 so I will write it in the dotted black circle.

- What number is bigger? (23)
- Since 12 is first I have to think, is twelve less than 23 or greater than? Good it is less than 23. I have to use the less then symbol in between the two numbers like this…12<23. I can remember the less than sign because if I turn this sign < to this L it is shaped like an L and less begins with the letter L
- Lets try another one. Make sure to ONLY FILL IN FIVE BOXES, so your other peers have a chance to work at the center☺
  - Repeat this step using the box to the right
  - Students will have a greater than and less than signs that are labeled in order to not confuse them with symbols

- Tell students that everyone will have a responsibility to do in their group. Should one person be doing all the writing at the center? (NO) Take turns writing in the answers. There are five problems at each center for you to solve and there are five or six students in a group." We have to take turns and work together as friends. "
- Group students to sit at the tables. Assign three groups of six and one group of five. Two groups will be working on the same activity but at a different table to save time.
- Allow students to work together at centers for 7 minutes at each center(use a timer for this to keep students on track). Total time of 14 minutes since they are only working at two centers

Closure:

Have students come back to the carpet after the centers. Talk about the greater than and less than sign. Hold up this symbol <(less than)(using paper draw it) and ask students to tell me what it means. Then repeat using this sign > (greater than). Write an example on the board and have students answer make it a large number to trick them" HMMM I bet you will never get this one." 540 ____ 1,000….Can any one tell me what symbol I should use in the middle? (540 is less then(<) 1,000

Assessment:

I will walk around and visit all of my groups to make sure they are on track. The teachers aid will also assist in helping students at centers. I will assess students by making sure all students are participating at the centers.

Animal Habitats
Lesson on Characteristics of a Desert

Objectives:

Students will…

- use prior knowledge to make predictions about habitats using pictures of animals and plants.
- use basic informational text features to comprehend reading.
- Identify characteristics of a desert
- Construct and label a diagram of a desert
- Write one to two sentences about the characteristics of a desert

Grade Level: First Grade

Standards Addressed:

NY- New York State Common Core Standards (2011)

Subject: English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects

Grade : Grade 1 students:

Content Area: Informational Text K-5

Strand: Reading

Domain: Craft and Structure

Standard: 5. Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.

Content Area: Informational Text K-5

Strand: Reading

Domain: Key Ideas and Details

Standard: 2. Identify the main topic and retell key details of a text.

NYS Science Key Ideas:

NY- New York State Content Area Standards

Subject : Science

Grade Range : Elementary Science

Standard : STANDARD 6—Interconnectedness: Common Themes Students will understand the relationships and common themes that connect mathematics, science, and technology and apply the themes to these and other areas of learning.

Area : Models

Key Idea : Key Idea 2: Models are simplified representations of objects, structures, or systems, used in analysis, explanation, or design.

Indicator : analyze, construct, and operate models in order to discover attributes of the real thing

Indicator : discover that a model of something is different

from the real thing but can be used to study the real thing
Indicator : use different types of models, such as graphs, sketches, diagrams, and maps, to represent various aspects of the real world

Materials:

- Pictures of animals and plants found in the desert
- A Desert Habitat by Kelley Macaulay and Bobbie Kalman
- Paper plates
- Construction paper
- Craft pipe cleaners
- Markers/crayons
- Glue
- Paper
- Pencils

Physical and Social Arrangement:

(23 students, 1 teacher, and 1 aide) Students will start this lesson by sitting on the rug to participate in the lesson introduction, reading of book, and modeling of activity. Following this, students will sit at their individual desks, which are situated in a horseshoe shape. All materials for the activity will be placed on the back table and students will take turns going to the table to obtain their materials.

UDL Considerations:

Students will have an opportunity to listen about the deserts, list characteristics of the desert in a whole group setting, and then label the characteristics on their own. The characteristics will be listed on the front board and an example diagram will be displayed. The students can use this as a reference when labeling their own diagrams. Students will be using small motor skills while actively engaged in creating their own diagrams.

Introducing:

The teacher will introduce this lesson by showing students pictures of plants and animals that live in the desert and see if the students can predict what habitat will be investigated during this lesson. Examples of pictures could be: camel, cactus, and scorpion.

Procedure:

1. Read the book *A Desert Habitat* by Kelley Macaulay in a whole group setting.
2. This book is an informational text divided into sections based on different characteristics of the desert. Take time to discuss the informational text features on each page that supports understanding. Discuss the purpose of the headings, illustrations, and bolded vocabulary.

3. After reading the book, discuss and list important characteristics or elements of the desert on the board under the heading "Desert Characteristics." This will be used as a reference for students as they create their paper plate deserts.
4. Model using a paper plate, construction paper, craft pipe cleaners, crayons, and any other craft supplies to make a paper plate model of the desert habitat.
5. Students can tear apart pieces of the construction paper to make the sand dunes, pipe cleaners for the cacti, and use crayons or paper to form animals. All pieces will then be glued onto the paper plate. Every student must include: 3 characteristics of the land and at least one desert animal on their paper plate. It would be helpful to have a model already made for the students as a reference.
6. Students will label each part of their desert diagram.
7. After all students are finished with the desert habitat plates, model writing a sentence about the desert habitat. Sample sentence, "The desert is hot, dry, and camels live there."
8. Students are to write one to two sentences describing the habitat and using the characteristic words still written on the board. These sentences should be written on a piece of paper that will be glued to the back of their model.

Closure:

Students will share their desert habitat models with the class. Students will read their sentences and describe their model. Students should also be encouraged to discuss why they chose certain supplies.

Assessment:

Assessment will be based on students' desert models. Students will receive a point for correctly displaying and labeling three land features and one animal. Students will also be assessed on their sentences. Students will receive a point for including all features in the sentence. Grammar and sentence structure will not be assessed in this lesson.

Animal Habitats
Lesson on reviewing Habitats

Objectives:

Students will…

- Review the characteristics learned about desert, ocean, and rainforest habitats.

- Navigate the pages of the Ecosystems HD IPad/Ipod application.
- Work in groups to draw one of the habitats previously learned.
- Write sentences describing the characteristics of different habitats.

Grade Level: First Grade

Standards Addressed:

NY- New York State Common Core Standards (2011)

Subject: English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects

Grade : Grade 1 students:

Content Area: Informational Text K-5

Strand: Reading

Domain: Craft and Structure

Standard: 5. Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.

Content Area: Informational Text K-5

Strand: Reading

Domain: Key Ideas and Details

Standard: 2. Identify the main topic and retell key details of a text.

NYS Science Key Ideas:

NY- New York State Content Area Standards

Subject : Science

Grade Range : Elementary Science

Standard : STANDARD 6—Interconnectedness: Common Themes Students will understand the relationships and common themes that connect mathematics, science, and technology and apply the themes to these and other areas of learning.

Area : Models

Key Idea : Key Idea 2: Models are simplified representations of objects, structures, or systems, used in analysis, explanation, or design.

Indicator : analyze, construct, and operate models in order to discover attributes of the real thing

Indicator : discover that a model of something is different from the real thing but can be used to study the real thing

Indicator : use different types of models, such as graphs, sketches, diagrams, and maps, to represent various aspects of the real world

Materials:

- IPads or IPods- one per student or students can share
- Ecosystems HD application on IPad or IPod
- Large pieces of paper (chart paper)
- Coloring supplies (crayons, markers, colored pencils)
- Writing Utensils

Physical and Social Arrangement:

(23 students, 1 teacher, and 1 aide) Students will start this lesson by working individually or in pairs in various places in the room. Later in the lesson, students will spread out around the room at desks and tables to work in small groups of 3-4 students.

UDL Considerations:

Students will have an opportunity to interact with technology by using the IPod application. Students will be able to listen to descriptions of different habitats, look at pictures, and answer questions. For students who struggle to read at the level of text, the application will read aloud for the student, allowing them to listen to the material. Students will also work in groups to collaborate on drawing a picture of a habitat.

Introducing:

The teacher will introduce this lesson by reviewing characteristics of habitats by writing the word "habitat" on the board and asking students to share ideas, concepts, and vocabulary that the class has learned. Students will share the pen by coming up and writing their own answers on the board.

Procedure:

9. Model how to navigate the Ecosystems HD IPod/IPad application. The teacher should model switching between habitat pages and how to start the voice controls so that the text is read aloud.
10. Students will be given sufficient time to explore the application, looking at the pages for each of the habitats discussed in class and playing some of the learning activities. The amount of time should be determined by the progress of the class, but it should be expected to take approximately ten to fifteen minutes.
11. Students will put all electronic devises away and return to the rug for a group discussion of what was discovered.
12. Based on pre-determined groups made by the teacher, the students will be divided up into groups and assigned a habitat.
13. Each group will write the name of their habitat on the top of the paper, draw a picture that includes at least three physical characteristics of the habitat and at least one animal. Groups will also write one to two sentences about the habitat and their picture.

14. Once students are placed in their groups and spread out around the room, the teacher should distribute books about each of the habitats to the groups. These are all books about the group's habitat that have previously been used during the unit. Students will be encouraged to look back into the books for ideas, working on the reading skill of looking back for more detail and examples.

Closure:

Groups will share their habitat drawings with the class. Students will read their sentences and describe their group's drawing. Students should also be encouraged to discuss why they chose certain supplies and how they all helped to make the picture.

Assessment:

Assessment will be based on students' habitat drawings. Students will receive a point for correctly displaying and labeling three land features and one animal. Students will also be assessed on their sentences. Students will receive a point for including all features in the sentence. Students will informally be assessed on using the reading strategy of looking back for more detail.