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| **3Unit Information** |
| **Unit Theme: Unit 4****Adapting** |  | **Grade****Level:** | **5** |
| **Integrated Subject/Topic:** | **English Language Arts / Science / Social Studies** |
| **Length (in weeks/days):****1st 2nd 3rd 4th**  |  |
| **Developers:** | **Kelly Mayer, Gale Flowers, & Katelyn Dwyer** |

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| **What’s The Big Idea (s)?** |
| **I can integrate several resources to read and report about ecosystems and apply concepts of adaptation between animals and humans in their environment.**  |
| **Essential Questions** |
| Where can we find various resources about ecosystems?How do people and animals adapt to different situations?How can we compare and contrast the interconnected relationship of plants and animals to their ecosystem? |
| **Priority Standards** | **Supporting Standards** |
| 5.L.2- **Understand** the interdependence of plants and animals with their ecosystemRI.5.5-**Compare** and **contrast** the overall structure and relationships in two or more textsRL.5.5- **Explain** overall structure of a textRI.5.9- **Research** in order to write or speak about a topic5.G.1- **Understand** how human activity has and continues to shape the United States | RL.5.9-**Compare** and **contrast** stories in the same genre (i.e. similar themes and topics)RI.5.4- **Determine** the meaning of words and phrase in a fifth grade academic text5.L.2.3-**Infer** the effects that may result from the interconnected relationship of plants and animals to their ecosystem5.G.1.2- **Explain** the positive and negative effects of human activity on the physical environment of the United States past and present |
| **Possible Minilessons Statements** |
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| **Possible I Can Statements** |
| **Priority Standards**5.L.2- I can **understand** the interdependence of plants and animals with their ecosystemRI.5.5-I can **compare** and **contrast** the overall structure and relationships in two or more textsRL.5.5- I can **explain** overall structure of a textRI.5.9- I can **research** in order to write or speak about a topic5.G.1- I can **understand** how human activity has and continues to shape the United States**Supporting Standards**RL.5.9-I can **compare** and **contrast** stories in the same genre (i.e. similar themes and topics)RI.5.4- I can **determine** the meaning of words and phrase in a fifth grade academic text5.L.2.3-I can **infer** the effects that may result from the interconnected relationship of plants and animals to their ecosystem5.G.1.2- I can **explain** the positive and negative effects of human activity on the physical environment of the United States past and  present |
| **Problem-Based / Hands-On Learning Activities** |
| **-**Diorama based on one of the ecosystems studied - Habitat Photo Album: Students will use a variety of books and online sources to put together a photo album about the variety of habitats and ecosystems in the world. They can also use a camera to take pictures of the nature around the school to include in this album. The students will be responsible for labeling the animal and what ecosystem they belong to as well as its role in the food chain. (LearnNC.org)-Brochure: students will be in groups and each given a specific animal group. They will complete a brochure by adding pictures and information about their particular animal group. Each student in the group will be assigned to a specific ecosystem. After this project is completed they will present their information to the class. At the very end of the activity these brochures will be displayed in the room by ecosystem in addition to a visible representation of each biome. This would be available for students and teachers from other classes to tour and experience.  |
| **Essential Vocabulary** |
|  | **Ecology Vocabulary:**HabitatPopulationCommunityEcologyAbiotic factorsBiotic factorsEstuaryFood webFood chainOrganismsOceansBiosphereBiomeClimateDeciduous forest | PhotosynthesisGrasslandsDesertTundraTaigaTropical rainforestProducersConsumersPrimary consumerSecondary consumerHerbivoresCarnivoresOmnivoresPredatorPreyDecomposer | SymbiosisMutualismParasitismCommensalismParasiteHostCarrying capacityScavengerEnergy pyramidAdaptationNiche |
| **Resources** |
| McGraw Hill Leveled book series (Antarctica, Operation Migration, Let’s Go Spelunking!, & Chilled to the Bone) Everest Adventures by Claire OwenWhat is an amphibian? By Feana Tu’akoi (Scholastic)Habitats by Tony HareiOpeners Living Through a Natural Disaster & Survival Animal AdaptationsPearson Leveled Readers (Amazing Ants, Changing for Survival: Bird Adaptations, Surviving the Elements: Animals in their Environments, Moving, Making New Friends, & The New Kid at School)Animals and their Adaptations: National Geographic online lesson plansClassScapeLearnNC.orgSmartboard  |
| **Achievement Targets- Assessment****What are the tasks implied by the verbs in the standards? What will the student be able to do?** |
| **Diagnostic** | **Informal** | **Formal** |
| Pre-Assessment: Give the students a scenario about a location they may be. Their assignment is to think about the climate, animals, and overall surroundings of the ecosystem. They would have to write way they would adapt in order to survive.**OR**The arctic ecosystem has sent a message discussing the rise in climate due to global warming. The water levels are rising due to a melting glacier. How would you save the animals that live there and protect from damage?Other diagnostic assessments:-Venn Diagram comparing two ecosystems**-**Diorama based on one of the ecosystems studied -ClassScape - Habitat Photo Album: Students will use a variety of books and online sources to put together a photo album about the variety of habitats and ecosystems in the world. They can also use a camera to take pictures of the nature around the school to include in this album. The students will be responsible for labeling the animal and what ecosystem they belong to as well as its role in the food chain. (LearnNC.org)-Brochure: students will be in groups and each given a specific animal group. They will complete a brochure by adding pictures and information about their particular animal group. Each student in the group will be assigned to a specific ecosystem. After this project is completed they will present their information to the class. At the very end of the activity these brochures will be displayed in the room by ecosystem in addition to a visible representation of each biome. This would be available for students and teachers from other classes to tour and experience.  | Around the World game-teacher calls off questions about the topic being discussed to review vocabulary and contentInteractive Smartboard activitiesScavenger Hunt: taking a nature walk and observing the surroundings (take notes and talk about what you observe) Specific guidelines would be given to guide students for what they will be looking for using all of their senses (climate, plants, animals, etc.) | Post-Assessment: Ecosystem Chart(see attached)This is where students will be able to show their knowledge of the ecosystems by filling in a table. They will list the climate, characteristics, animals, plants, and food chain of the five ecosystems learned. At the end they will have a writing prompt to answer:Using the chart compose a scenario/situation that occurred in one of the ecosystems. Explain how you would live/survive in the ecosystem and not be consumed by the environment itself. \*Keep in mind your surroundings and the food chain present there. Other formal assessments (lower level students)Writing Frame: students will fill in a piece of writing discussing a specific animal, their adaptation, and the reasoning for this adaptation |