Marietta City Schools
2023-2024 District Unit Planner

3rd Grade

Topic Title:	*#4 Plant and Animal Survival in Georgia's Natural Habitats*	**Unit Duration**	*4 Weeks*

Mastering content and skills through KNOWLEDGE-BUILDING (establishing the purpose of the unit):

What enduring understandings will students gain from this unit? Plants and animals native to Georgia have developed a variety of ways to survive and thrive in its natural habitats.

GSE Standards

ELA

ELAGSE3RI1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.

ELAGSE3RI2 Determine the main idea of a text; recount the key details and explain how they support the main idea.

ELAGSE3RI3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.

ELAGSE3RI7 Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).

ELAGSE3W2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

Science

S3L1. Obtain, evaluate, and communicate information about the similarities and differences between plants, animals, and habitats found within geographic regions (Blue Ridge Mountains, Piedmont, Coastal Plains, Valley and Ridge, and Appalachian Plateau) of Georgia.

a. Ask questions to differentiate between plants, animals, and habitats found within Georgia's geographic regions.

b. Construct an explanation of how external features and adaptations (camouflage, hibernation, migration, mimicry) of animals allow them to survive in their habitat.

c. Use evidence to construct an explanation of why some organisms can thrive in one habitat and not in another.

S3P1. Obtain, evaluate, and communicate information about the ways heat energy is transferred and measured.

a. Ask questions to identify sources of heat energy. (Clarification statement: Examples could include sunlight, friction, and burning.)

Essential Questions

Factual—

What are the regions of Georgia?

Which plants and animals live in each region?

Inferential—

How do the region's features and climates impact the plants and animals that live there?

How do animals adapt to permanent and changing aspects of their environment?

Critical Thinking-

Which region of Georgia has the most biodiversity?

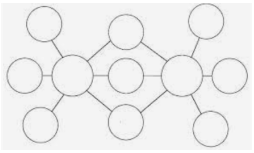
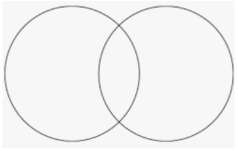
How can we ensure that Georgia's native plants and animals survive in their environments?

Tier II Words- High Frequency Multiple Meaning	**Tier III Words-** Subject/ Content Related Words
camouflage, hibernation, migration, mimicry, adaptation, feature, habitat	Geographic terms related to Georgia regions

Assessments- 3rd-5th Social Studies and Science assessments are available through AMP. Please see your instructional coach for support if needed.

Transfer of Integrated Skills:

- Compare Georgia Living Things
  1. Provide students with a Double Bubble Map or Venn Diagram and review its use for comparing similarities and contrasting differences between objects or ideas.

  2. Have students choose two of the native Georgia animals or plant to compare and contract based on physical characteristics, adaptations, needs, and habitat using any available resources from this unit

  EELAGSE3RI1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
  ELAGSE3RI3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.
  ELAGSE3RI7 Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).

- Mapping Georgia's Habitats
  1. Provide students with hard copies of the Google Doc above and the link to the Google Site Georgia's Geographic Regions and Habitats.
  2. Allow students to work individually or in pairs to complete the prompts on the performance task.

  ELAGSE3RI1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
  ELAGSE3RI3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.
  ELAGSE3RI7 Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).
  ELAGSE3W2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

Content-Specific GSE/Skills:

- MCS 3 Georgia Habitats Summative Assessment (S3L1.c) - AMP
- MCS 3 Georgia Habitats Summative Assessment (S3L1) - AMP
- DE Shelter and Defense Summative Assessment

- DE Survival Summative Assessment

Writing Task and Rubric:

After researching the geographic regions of the state of Georgia, write a comparing and contrasting statement about the regions describing why some animals are better suited to survive in one region versus another region. Provide students with an Information Writing Checklist to guide their work and score final products using the Information Writing Rubric.

ELAGSE3W2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
ELAGSE2RI3 Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.

Objective or Content	Learning Experiences	Differentiation Considerations
Daily Lessons for Text Comprehension	*20-day plan: Plant and Animal Survival in Georgia's Natural Habitats*	
Connected Language Acquisition Experiences	**Picture Word Induction Model Center/ individual Activity: Regions of Georgia**	The linked center is for Level 1 ESOL students to help scaffold content.
Connected SS/Sci Experiences *(omit this row if KBU does not contain SS or Sci connections)*	***Exploration I*** In this activity, students simulate how animals survive in changing ecosystems. They also model how being part of a group helps them obtain food and cope with environmental changes. Materials: strips of paper in three different colors representing food, water, and shelter stopwatch Student investigation Sheet This activity should happen in a location where students have room to walk around without bumping into each other or to furnishings—outside, for example, or in the gymnasium. Prior to class, distribute some of the different colored strips of paper around the location; some should be hidden and some should be in plain sight. An appropriate ratio to begin with is to distribute 15 times as many food strips as you have students, 10 times as many water strips as you have students, and 5 times as many shelter strips as you have students.	

	Explain that in this activity students are organisms competing for resources in the same environment. Have students work together to find food, water, and shelter in groups. Students will model how being part of a group helps organisms obtain food and cope with environmental changes. Groups of students may vary in size from 3 to 6 members per group. Each organism in the group may also have a different function, for example, one group member may be solely responsible for gathering food while another gets shelter. Every 30 seconds, groups will need to collect 3 food strips, 2 water strips, and 1 shelter strip. Ask students what would likely happen to an organism that is unable to locate enough food, water, and shelter each day? Explain that if students cannot locate the required number of strips in 30 seconds, their organism will become weak; if they cannot locate the required number of strips in the next 30 seconds, their organism will die and they will have to give up their strips. (Note: Adjust the 30 second time as necessary as appropriate for the size of your space.) Have the students spread out from each other. Remind them that they must walk to collect their strips— any students who run will be removed from the activity—and that the first student who touches a strip gets it; be on the lookout for students struggling to claim a strip, and separate them immediately. Start the stopwatch and give students 30 seconds to locate strips. Stop them after 30 seconds; any groups who do not have 3 food strips, 2 water strips, and 1 shelter strip should place one arm behind their back to simulate a weakened state. Start the stopwatch and give students another 30 seconds to locate strips. Stop them after 30 seconds; determine whether any weakened groups have not collected enough strips; these students should place their strips on the ground and stand to the side for the remainder of the activity. Ask students what would happen if they kept collecting strips like this. Guide them to understand that more and more students would fail to find enough strips to survive. Ask students to brainstorm how changes to the environment could make some organisms less likely to survive and how other changes could make some students more likely to survive. At this point, begin introducing changes to the process to make some students more likely to find enough strips and other students less likely to find enough strips. Some possible changes include: Remove some strips from the location; explain that these strips represent resources that have been polluted. Add some strips to a certain location that only some students are allowed to access (on top of a chair, for instance); explain that these students represent organisms that have a special adaptation that allows them to access these resources (for example, sharper claws or longer necks).	

	Announce that certain students need to find fewer strips to survive; explain that these students represent organisms that have a special adaptation that allows them to survive on fewer resources (for example, the ability to store water for later use). After several more rounds, have the students collect any strips still lying around and regroup as a class. Have students write a journal entry describing how this activity was an accurate representation of what happens to organisms in real life and how this activity was an inaccurate representation of real life. Ask volunteers to share their entries. ***Communicating and Evaluating*** 1. What happened when some of the food, water, and shelter resources were removed from the ecosystem? There were less resources, so some animals became weak or died. 2. What happened when some of the organisms in your group had special adaptations to meet their needs? Possible answer: Organisms may have adaptations that help them survive. If group members who are responsible for gathering food become weak or die, it will make their group less likely to survive. ‘ 3. How did being part of a group help you obtain food and survive in a changing environment? In groups, animals share the jobs that are required for survival. Some may capture food, while others may find shelter. Sharing the jobs benefits all members of the group.	
	Exploration II In this activity, students will conduct an experiment about animal defenses in which they role play predators and prey in a closed habitat. In order to survive, each predator animal must catch (tag) three prey animals in 1 minute. Once a prey animal is tagged, it must sit down. Both predators and prey must hold their cards above their heads where they are easy to see. Materials Per Student: colored card stock: use one color for predator and one for prey. Label cards with the word predator or prey. Make one card per child. There should be 3 prey cards for each 1 predator. Per Class: data chart with columns labeled across the top (Predator Survival Predictions, Actual Predator Survival, Prey Survival Predictions, and Actual Prey Survival) and rows labeled across the side (Round 1, Round 2, and Round 3) markers whistle or bell teacher’s list of safety rules for running, walking, and tagging	

To plan for this activity, be sure to fix safety rules based upon the space you will be using, the systems your students are used to, and the age of your students. Tip:

You may wish to involve the gym teacher in creating the safety rules. You will need use of the cafeteria, auditorium, gym, or playground for a full class period. When setting up the space, make sure that one half of the space is completely clear of obstacles. This may be half the cafeteria with the tables put away, the wide aisles of the auditorium plus the main stage, half of a gym with no equipment, or a clear space outside. The other half should have some obstacles available. This may include playground equipment, cafeteria tables, rows of auditorium chairs, or safe, large gym equipment. These obstacles would represent shelter and safe hiding places for animals. Tip: This activity is more effective with more students, so try to plan it with other classes if possible.

Procedure

1. To begin, have students go to the reserved space and sit where they can all see and hear the teachers. Introduce the activity by explaining to students that they will be conducting an experiment about animal defenses, and they will be the animals. Explain that to do the experiment they will either need to run or walk quickly and then tag each other. Review your school's safety rules for running or walking quickly, for tagging safely, and consequences if students are not safe. Tip: To ensure safety, have students practice just running/walking and then freezing when you blow a whistle before you hand out cards and begin the game.

2. Explain that in order to survive, each predator animal must catch (tag) three prey animals in 1 minute. Once a prey animal is tagged, it must sit down. Explain that both predators and prey must hold their cards above their heads where they are easy to see.

3. In the first round, allow students to only use a wide-open area. Tell students how many predators and prey there are and have students make predictions about how many of each will survive. Take a few volunteers' predictions about the number of predators that will survive (by catching 3 prey) and the number of prey that will survive (by not being caught). Record these predictions on the chart.

4. Allow students to spread out. Then blow a whistle to have students begin tagging. After 1 minute, have students stop and freeze. Have all predators that survived (by catching 3 prey) and all prey that survived (by not being caught) come up to the front. Count how many of each survived and write these numbers on the chart.

5. Before the second round, point out the stars on some of the prey cards. Explain that these prey are poisonous. If a predator eats one the first time, the predator will be hurt and will have to move more slowly. (If students had been running, explain that they will have to walk. If students had been walking quickly, have them only move by jumping

	only. Practicing this without any tagging before beginning the round will help with safety issues.) If a predator eats a poisonous animal a second time, it dies. 6. Have students make new predictions about how this will change the numbers of predators and prey that survive. Record these predictions on the chart. Blow the whistle and allow students 1 minute to play the game, and then count the total number of predator and prey animals that survived. Record these on the chart. Have volunteers discuss how having poisonous prey changed the game. 7. For the third round, remind students that scientists only test one variable at a time. Explain that the “poison” no longer works in this round. However, students may safely go into the part of the area that has obstacles. Ask students what the obstacles represent (shelter). Have students practice moving safely amongst the obstacles before starting the round. Also have students make predictions about how many predators and prey will survive now that prey can hide behind or within the obstacles. Record these in the chart. Allow the predators and prey to play the game for 1 minute, and again tally up the survivors and record in the chart. Have volunteers comment on how it changed the game when the prey could use shelters and hiding places to get away from predators. 8. After finishing the game, have students return to their classes and respond in writing to the Essential Question: How do animals protect themselves? Have students write at least three facts about animal defense and then explain why they are important. ***Communicating and Evaluating*** 1. How easy was it to catch a prey when you were the predator? Answers will vary. Response should articulate the degree of difficulty of the student tagging the prey. 2. Why did fewer students (predators) chase after prey that were poisonous (had a star on their prey card)? After some predators saw the effect of eating (tagging) a poisonous prey, they chose not to run after prey that were supposedly poisonous. 3. How did behaviors change when the prey were allowed to use shelters and hiding places? It took longer for predators to catch the prey when they were hiding in shelters and other places. They were not easy to see. 4. What are some ways animals use to protect themselves? Animals can protect themselves by hiding in hard-to-find places, staying very still and not moving whey predators are around, and by moving around with other animals like themselves; this causes the predators to get confused sometimes.	

	Exploration III In this activity students will research an animal habitat and make a model of the animal habitat using their knowledge of basic needs of animals and the environment that makes up the habitat. Materials: Library books and reference material about animals and habitats Discarded magazines (preferably science or animals) Craft material (yarn, fabric, straw, decor) Natural objects collected outside (rocks, leaves, twigs) Modeling clay Colored construction paper Tempera paint in many colors For each group: Scissors Glue A cardboard shoebox String or yarn Tape o Markers colored pencils, or crayons Recap with students some of the animals and habitats they have learned about. Ask students to review the basic needs of an organism (food, water, air, shelter). Tell students they will work in groups to develop a model habitat for an animal. Assign students to small groups of three or four students. Tell students that the group must select one animal and find out the location of its habitat, how its needs are met there, and at least one structure or behavior of the animal that enables it to survive in the habitat. Distribute a selection of library books, magazines and other reference materials to each group with their research. If computers are available in the classroom for research, permit students to visit the computer for a short period of time to gather information. Students can use the worksheet below as a guide for research and note-taking. Allow students time to read about the animal they have chosen. Circulate and monitor to assist any students who may need help locating information for their chosen animal. After 15 minutes, have groups come together to share their findings. Then tell each group to complete the worksheet with the information they discovered. Explain to students they will use this information and the materials provided to create a model habitat for their animal that includes things the animal needs to survive.	

Name of Animal:	Animal's Needs:
Habitat Name:	Physical Description of Habitat:
What living and nonliving things are in the habitat?	
How are the animal's needs met by the habitat?	
What specific structures or behaviors does the animal have that help it to survive in this habitat?	

Remind students that the purpose of this project is not to test their art skills. Students will be making a model to demonstrate their scientific understanding of the environment and animal survival in habitats. Prior to distributing materials, encourage students to decide what their animal needs to survive and what is found in its habitat (including other organisms) so that these features can be represented in the model. When presenting their model to the class, students will be expected to discuss both the habitat and the animal including any specific structures or behaviors that help the animal survive in the habitat. They can refer to the resource material and ask each other or other groups for help. Allow students to decide which materials they will use for their habitat model to represent the items that are found in their animal's habitat. You should help students by explaining the materials that are available to them and making them accessible.

Students should be able to create an appropriate habitat for their animal using an empty cardboard shoebox and any of the available materials. Although not all projects will contain everything found in a habitat, student should be able to demonstrate the animal's basic needs by modeling the appropriate food, shelter, water, and air.

After projects are completed, have each group share out to the class. Groups should be able to explain how the basic needs of their animal are met in the habitat they designed.

Communicating and Evaluating
(sample answers)]

	1. What animal did you research? What is its habitat? [I researched the goldfinch. American goldfinches live in overgrown areas close to rivers, ponds, woodlands, or in habitats that have plants with the seeds they like to eat such as thistle and asters and shrubs to build their nests in.] 2. What parts of the environment did you include in your habitat? [I included a pond, cattails, flowers like thistles and asters, and shrubs to make a habitat for a goldfinch.] 3. How does the environment in your habitat support the animal and others like it (called a population) you researched? [The pond is important because it provides water to the habitat. The cattails and flowers are food for the goldfinches because they eat the seeds from these flowers and use them to help build their nest. The shrubs are important because they are the shelter for the goldfinch.] 4. What is one behavior the animal has to have in order to survive in the environment? [Goldfinches make their nests from the flowers and grasses that are in their habitat. They weave their nests from these plants to raise their young and provide shelter for their survival.]	
Connected Tier 1 Unit		
Connected Structured Literacy Activities	Use the Fluency Grids to practice various groups of vocabulary related to this unit: ● *Ridge, Piedmont, Coastal, Valley, Appalachian, Plateau* ● *camouflage, hibernation, migration, mimicry, adaptation, feature* Refer to Tool 4 handouts to break down multisyllabic words in this unit using Syllaboard and Syllable Spelling (pp. 31-32) and bring attention to uncommon spelling patterns using Heart Words routine (pp. 22-25). cam **ou** fl**a**ge *review function of e with soft g sound* Ap p**a** la **chia**n *schwa a and affix -chian are only irregular until explicitly taught*	
Connected Writing Activities	*Insert TWR goal(s) for this planner* ● *Insert title and hyperlink to template populated with anticipated response*	
Additional Planning Resources		

MCS K-5 KBU Overview	KBU as a 15-day Plan (Template)	MCS Structured Literacy Repository	Berger Framework for Comprehension (Template)	The Writing Revolution (Templates)
Additional Instructional Resources				
Suggested High Quality Complex Texts **Suggested Experiential Resources**				