

3rd GRADE 5E MODEL LESSON

Teacher: Heather Yarbrough	Expected Length of Lesson: 2-3 60 minute lessons	Lesson Topic: Camouflage and Mimicry	Unit: Adaptations
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<p>Targeted Content Standards/Element: (Include the entire standard)</p>	<p>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.</p> <p>b. Construct an explanation of how external features and adaptations (camouflage, hibernation, migration, mimicry) of animals allow them to survive in their habitat.</p>
<p>Targeted Literacy Skills or Standards: (include as many as your lesson incorporates)</p>	<p>Literacy skills are embedded in the standards. Please refer to the link below. https://www.georgiastandards.org/Georgia-Standards/Frameworks/ELA-Grade-3-Developmental-Progressions-R-W-SL-L.pdf</p>
<p>Inquiry Question (or what you would like the students answer)?</p>	<p>How can camouflage and mimicry help animals survive in different habitats?</p>
<p>Key Vocabulary: Words important for understanding content and skills (ex: Tier 2 and 3 words)</p>	<p>camouflage mimicry adaptation</p>
<p>Learning Targets (I-Can Statements) ***At the end of the week, what will students know and what will students be able to do?</p>	<p>Foundational:</p> <ul style="list-style-type: none"> ● I can understand the relationship between predator and prey. <p>Mastery:</p> <ul style="list-style-type: none"> ● I can recognize mimicry and camouflage are types of adaptations by reading a text and completing a lab. ● I can explain how mimicry and camouflage aid in an animal's survival by designing an animal and writing about it. <p>Extension:</p> <ul style="list-style-type: none"> ● I can differentiate between different types of mimicry (Batesian and Mullerian) by locating specific examples of each.
<p>ENGAGE Describe how the teacher will capture students' interest. What kind of questions should the students ask themselves after the engagement?</p>	<ul style="list-style-type: none"> ● Pair up students who can write well with students who don't write as well. ● Play a game called "Do You See What I See?" Tell students that you will be showing them a series of pictures and they are to look for animals in the pictures. When/if they see the animal, one of them should write down the general name of the animal they see (i.e. bird, snake, etc). ● Show each picture on the Smartboard for 10-15 seconds each and

	<p>give the student pairs a few seconds to write before moving on to the next picture. Continue until all pictures have been shown.</p> <ul style="list-style-type: none"> ● Allow the students to verbally make “If, then” statements as the teacher writes them for the class to view. For example, a student may say, “If the giraffe wasn’t behind the trees, then I would’ve been able to see it better. OR If the white bird were a different color, then it wouldn’t blend in.” The goal is for the students to begin to figure out why animals look they way they do. ● Go back through each picture and allow the students to point out the location and name of the animal.
<p>EXPLORE Describe what hands-on/minds-on activities students will be doing.</p> <p>List “big idea” conceptual questions the teacher will use to encourage and/or focus students’ exploration</p>	<p>EXPLORE 1- Camouflage</p> <ul style="list-style-type: none"> ● The teacher will slowly read <u>How to Hide an Octopus and Other Sea Creatures</u> by Ruth Heller. without showing the pictures to the students. Students will have a list of the animals mentioned in the book and will pick one (or be assigned one). They will write down 1-2 things they heard in the reading and will form a visual of the animal in their minds. ● After the reading, they will sketch a picture (on white typing paper) of how they think the animal and its environment appears. When all students are done, have them pair up with others that had the same animal. Have them compare and contrast their drawings with their peers to and to use the “Flip Card” strategy to write about the animal. Each student will be given an index card. On one side of the card only, they are to write as much as they can about the animal based on what they heard in the text and in their peer discussion, including 1) a description of the animal and its environment, and 2) why they think the animal looks the way it does. (Now refer to EXPLAIN 1) <p>EXPLORE 2-Mimicry</p> <ul style="list-style-type: none"> ● Before class, fill small cups (one for each student) halfway full with Sprite and label them Butterfly A. Fill additional small cups (one for each student) with Seltzer water and label them Butterfly B. Fill 1 cup with Seltzer water and another with Coke (or any dark soda) and label them “Butterflies - Day 2.” ● Give each student a “Taste and See” handout, a Butterfly A and a Butterfly B cup. Tell them they are birds looking for something to eat and the 2 cups represent different types of butterflies. In groups, have them record their observations. Discuss and list the observations on the board. They should notice that both are clear liquids, and both have bubbles/gas. ● Tell them to “eat” Butterfly A and record how it tastes (it should taste good!)

	<ul style="list-style-type: none"> ● Then have them write down their group prediction of what they think what Butterfly B (the Seltzer water) will taste like on the “Taste and See” data sheet. Have them give a thumbs up if they think it will taste good and thumbs down if they think it will taste bad. Let them taste it (it should taste horrible!) ● Show them Cup C (Seltzer water) and Cup D (Coke). Tell them to imagine that it is the next day and they are hungry and looking for a meal again. Hold up the cups and tell them that they saw two butterflies go by...one that looked the same as the two that ate yesterday and one that looked completely different. Ask them if they would take a chance on the clear "butterfly" knowing that there was a 50% chance it would be a nasty one or if they would choose the brown "butterfly" (most students will choose the brown one but if you have a brave “bird” let him/her try the clear one). (now refer to EXPLAIN 2)
<p>EXPLAIN Student explanations should precede introduction of terms or explanations by the teacher. What questions, resources, or strategies will the teacher use to help students connect their exploration to the concept under examination?</p> <p>List higher order thinking questions which teachers will use to solicit <i>student</i> explanations and help them to justify their explanations.</p> <p>Describe how the teacher will clarify the content or skill.</p>	<p>EXPLAIN 1- Camouflage</p> <ul style="list-style-type: none"> ● The teacher will re-read the book <u>How to Hide an Octopus and Other Sea Creatures</u> to the students but this time, they will be able to see the pictures. ● On the back of the index card, they will repeat the writing activity, including a description of the animal and its environment and why they think the animal looks the way it does. ● From the 2 sides of their index card, they will write a paragraph to compare and contrast their initial drawings, descriptions, and thoughts to the actual pictures and information. ● Allow students to share their findings with the class and get peer feedback. Students should recognize that camouflage is an adaptation helps a predator to capture food and to allow prey to hide from a predator. <p>EXPLAIN 2 - Mimicry</p> <ul style="list-style-type: none"> ● Show the students a picture of a Monarch and Viceroy butterflies. Complete a quick, “I See, I Think” activity with them based on what they just did with the drinks in the cups. They should “see” that the 2 butterflies look alike. Introduce the term mimicry. ● Tell them that the Monarch tastes bad to birds while the Viceroy tastes good. Have the students write their own definition of mimicry and explain why they think the Viceroy would mimic the Monarch (thinking back to the activity). ● Select students to share their answers so the teacher can clarify or re-direct thinking.

<p>ELABORATE</p> <p>Describe how students will develop a more sophisticated understanding of the concept.</p> <p>What vocabulary will be introduced and how will it connect to students' observations?</p> <p>How will students make real-life connections?</p>	<ul style="list-style-type: none"> ● Students choose a specific geographic region in Georgia and print out scenery from it. Each student will design either a butterfly or a frog that is adapted to live in that region. The requirements are: <ul style="list-style-type: none"> ○ The student will draw and color the animal (refer to the outlines to give to them) to fit into the printed scenery. ○ The animal must display some form of camouflage or mimicry. ○ The student will include a writing that includes: <ul style="list-style-type: none"> ■ A description of the animal and its environment using strong adjectives ■ the type of adaptation being displayed by the animal ■ Specifics on how that adaptation helps the animal to survive
<p>EVALUATE</p> <p>How will students be evaluated THROUGHOUT the lesson?</p> <p>How will students demonstrate that they have mastered the learning target(s)?</p>	<ul style="list-style-type: none"> ● Identifying animals in series of pictures ● <u>How to Hide an Octopus and Other Sea Creatures</u> flip card and compare/contrast paragraph ● Taste and See mimicry activity ● Design an animal for certain region of Georgia













TASTE & SEE

	Butterfly A	Butterfly B
Observations		
Predictions		
Taste		

DAY 2

Which butterfly, C or D, would you choose and why? _____

I SEE	I THINK

I think mimicry means _____

Why would the Viceroy mimic the Monarch? _____

