



## HUMMINGBIRD MIGRATION SPRING

This lesson plan was created by Kate McKenna as part of the Acadia Teacher Fellows (ATF) program. ATF created lesson plans are created by educators for educators. Any books or links suggested in this curriculum are not an endorsement by the National Park Service.

<b>Title</b>	<b>HUMMINGBIRD MIGRATION SPRING</b>
<b>Grade Span</b>	K-2
<b>Time Span</b>	30 minutes, outdoor reading and physical activity.
<b>Standards</b>	<ul style="list-style-type: none"> <li>• 1-LS1-2: Read texts and use media to determine patterns of behavior and offspring that help offspring survive.</li> <li>• 1.MD.C.4: Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another</li> </ul>
<b>Focus Question</b>	<ul style="list-style-type: none"> <li>• How do animals survive challenges, like changing seasons?</li> <li>• How do animals adapt to their surroundings?</li> </ul>
<b>Overview</b>	This lesson is primarily an information – and exercise lesson. Students will read the <i>Going Home</i> book outside with the teacher, to get background on migrating animals. The students will then play a “Simon Says” – type game to imitate the movements of these migrating animals. There is potential for extension throughout the school year for this activity, by completing the activities at the end of this lesson.
<b>Objectives</b>	Students will be able to: <ul style="list-style-type: none"> <li>• Read texts</li> <li>• Use media to determine patterns and behaviors.</li> <li>• Organize, represent, and interpret data.</li> </ul>
<b>Materials Needed</b>	For Hummingbird Feeding Relay: <ul style="list-style-type: none"> <li>• Open, outdoor area</li> <li>• Half-liter plastic bottles</li> <li>• Scissors</li> <li>• Cellophane Tape</li> <li>• Conical Paper drinking cups</li> <li>• Red fruit punch</li> <li>• Stiff paper</li> <li>• Straws</li> <li>• Fishing Line or String</li> </ul>



<p><b>Vocabulary</b></p>	
<p><b>Teacher Prep</b></p>	<p>The teacher will have to create some props for the nectar game. First, make large flowers from the stiff paper. The flowers can be different colors, but make sure there is at least one red flower. Make one of the petals longer than the rest and cut a hole in the middle to fit the neck of the bottle into. Fill the bottles with different amounts of fruit punch. Place the flowers around the open outdoor space. You can set them on the ground (but beware of spillage!) or hang them using fishing line or string. Cut straws into different lengths and bend some, but not all. Use the small paper drinking cones for the base of the beak. Cut off the tip and thread a straw through. Use tape to secure the straw. Make a beak for each student. The students can place the straw in their mouth and use it to suck up the nectar from the flowers.</p> <ul style="list-style-type: none"> <li>● Outdoor Hummingbird Feeder (<a href="http://www.doityourselfrv.com/homemade-hummingbird-feeder/">http://www.doityourselfrv.com/homemade-hummingbird-feeder/</a>): This is a great, inexpensive DIY</li> <li>● <i>Students can keep track of sightings at the school by logging their sightings on sites such as Journey North, or by working with Signs of the Seasons. (Signs of the Seasons Datasheet: <a href="https://www.usanpn.org/files/shared/observationsheets/species_352.pdf">https://www.usanpn.org/files/shared/observationsheets/species_352.pdf</a></i></li> <li>● <a href="https://www.youtube.com/watch?v=1IpE8NaGVKA">https://www.youtube.com/watch?v=1IpE8NaGVKA</a></li> </ul>
<p><b>Background</b></p>	



<p><b>Procedure</b></p>	<p><b>Engage:</b> Before going outside for this activity, have the students watch this video. Ask the students to pay attention to how the hummingbirds survive and eat. <a href="#">Hummingbird Migration Video</a></p> <p>Video credit: <a href="https://www.youtube.com/watch?v=1IpE8NaGVKA">https://www.youtube.com/watch?v=1IpE8NaGVKA</a></p> <p><b>Explore:</b></p> <ol style="list-style-type: none"> <li>1. Gather the students in a safe outdoor meeting space, away from vehicles and where students can sit. Ask the students what they learned from the video about hummingbird migration. <i>How does this help them survive? How do hummingbirds get the energy it takes to make that flight?</i></li> <li>2. Tell the students they are going to pretend to be hummingbirds who are searching for a snack. Give each child a hummingbird beak. Instruct the students to sample each flower using their beak (these flowers should have been hung and/or placed around the area). Keep in mind that not all students will be able to get nectar from all the flowers. This is important, as it will help the students understand what it takes to make a good food source for a hummingbird. Ask the students to pay attention to how easy or difficult it is for them to get food from each flower and to think about why that might be.</li> <li>3. Give the students a few minutes to sample the “nectar.”</li> </ol> <p><b>Explanation:</b> <i>Now it's time to codify and formalize the students' observations. The following videos can help you elucidate and demonstrate the basic concepts underlying the discoveries students made as they explored.</i></p> <p><b>Extension:</b> <i>There is much potential for extension with these activities. The teacher could arrange for students to search their school grounds for hummingbird-preferred plants.</i></p> <p><i>Technology can be integrated by using iNaturalist to identify these plants.</i></p> <p><i>Students can use binoculars to “spy” out the window on these plants, if visible from that area.</i></p> <p><i>Teachers can also hang a bird feeder at the window for short periods of time, to see if it draws any birds.</i></p>
<p><b>Wrap-Up</b></p>	<p><b>Evaluate:</b> <b>Summative Assessment:</b></p> <ol style="list-style-type: none"> <li>1. Gather the students back in the outdoor meeting area when they have had a chance to play the game. Ask each student to give some details about how they got nectar. Was it easy? Was it hard? Why might that be? (Some students have shorter beaks, some longer, some bent, some straight. Based on their discoveries, ask the students to predict what kind of flower would be best for a Ruby-Throated hummingbird, who has a long, straight beak.</li> </ol>