

Unit 2: Animals Surviving and Thriving

WEEK 7 Lesson 1

<h2 style="margin: 0;">Science and Engineering</h2> <h3 style="margin: 0;">Predators and Prey</h3>
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S & E Big Idea	Different animals have different ways of bringing up their offspring.				
S & E Guiding Question	How do different animals take care of their offspring?				
Content Objectives	<p>I can apply information from text and media about how animals care for their offspring to play a game. (1-LS1-2)</p> <p>I can collect and analyze data. (Practice 5)</p>				
Language Objective	I can sort animals into the categories “predator” and “prey,” based on the knowledge I am building through texts and discussions. (L.1.5a)				
Vocabulary	<p>predator: an animal that hunts and catches other animals for food</p> <p>prey: an animal that is hunted by another animal</p>				
Materials and Preparation	<ul style="list-style-type: none"> ● Forest Food Web to project for children, also a few hard copies for children to reference ● 4 hula hoops or another way to signify nests, such as chalk or lengths of rope with ends tied together ● 100 (about) objects to signify earthworms, such as short sections of string or yarn, strips of paper, cubes or other small items ● 2 strips/pieces of cloth or bandanas (used to designate children as hawks) ● chart paper, 2 pieces <p>Prepare the following Predator/Prey and scoring charts.</p> <table border="1" style="margin-left: auto; margin-right: auto; text-align: center;"> <thead> <tr> <th style="width: 50%;">Predator</th> <th style="width: 50%;">Prey</th> </tr> </thead> <tbody> <tr> <td style="height: 80px;"></td> <td style="height: 80px;"></td> </tr> </tbody> </table>	Predator	Prey		
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	<table border="1" data-bbox="500 186 1365 674"> <thead> <tr> <th data-bbox="500 186 924 254">Score (how many worms)</th> <th data-bbox="924 186 1143 254">Hawks</th> <th data-bbox="1143 186 1365 254">Adult Robins</th> </tr> </thead> <tbody> <tr> <td data-bbox="500 254 924 394">Round 1: 100 worms 2 hawks 4 adult robins</td> <td data-bbox="924 254 1143 394"></td> <td data-bbox="1143 254 1365 394"></td> </tr> <tr> <td data-bbox="500 394 924 535">Round 2:</td> <td data-bbox="924 394 1143 535"></td> <td data-bbox="1143 394 1365 535"></td> </tr> <tr> <td data-bbox="500 535 924 674">Round 3:</td> <td data-bbox="924 535 1143 674"></td> <td data-bbox="1143 535 1365 674"></td> </tr> </tbody> </table> <p data-bbox="443 716 1393 751">Set up the game space: Set up the “nests” around the whole group space.</p> <p data-bbox="443 793 1360 898">Note: Weather permitting, this investigation could take place outdoors, with plenty of space to run around. It can be modified to take place indoors.</p> <p data-bbox="443 940 1365 1016">Safety Precaution: Clearly and very visibly, such as with orange cones or flags, indicate the boundaries of the large play space.</p>	Score (how many worms)	Hawks	Adult Robins	Round 1: 100 worms 2 hawks 4 adult robins			Round 2:			Round 3:		
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<p data-bbox="203 1052 318 1119">Opening 1 minute</p>	<p data-bbox="537 1052 1409 1194"><i>We have been learning about how animals take care of their offspring. Two important jobs of animal parents are feeding their babies and keeping them safe from predators. Today we’re going to play a game about predators and prey!</i></p>												
<p data-bbox="203 1234 334 1302">Text 5 minutes</p>	<p data-bbox="443 1234 1360 1377">Show the Forest Food Web. <i>Here the diagram tells us that hawks are predators of birds and chipmunks. Other small animals that are prey for hawks include mice, snakes, and rabbits.</i></p> <p data-bbox="443 1419 1349 1562">Refer to the Predator/Prey chart. <i>Which animals do we know that are predators? Which animals are their prey? Can we think of any other predator/prey relationships?</i></p> <p data-bbox="443 1572 1349 1715">Invite children to draw on unit texts and prior discussions to add a few examples to the chart quickly. <i>Here are two more examples we will use today: Hawks and robins and earthworms.</i></p> <p data-bbox="443 1726 1360 1831">Add “hawks” to the Predator column, and “robins” to the Prey column; then add “robins” to the Predator column and “earthworms” to the Prey column.</p>												

	<p><i>Many animals, including robins, are both predator and prey. What does that mean?</i></p>
<p>Game 20 minutes</p>	<p>Invite children to sit around the perimeter of the game space. Introduce the game, Food Web Tag.</p> <p><i>In this game, we will have predators, prey, and parents trying to care for their offspring.</i></p> <p>Refer to the chart.</p> <p><i>One predator is a hawk. It preys on robins. The robins are also predators; they prey on earthworms. The robins want worms to feed their babies. The earthworms are prey.</i></p> <p><i>The goal of the hawk is to catch robins (by tagging them). The goal of the robins is to collect worms for food for their chicks. The goal of the chicks is to become adults and leave their nest. They do this by eating enough earthworms!</i></p> <p>Set up:</p> <ul style="list-style-type: none"> ● Assign roles: two hawks, four adult robins, and all other children chicks. Tie cloth strips onto the arm or around the waist of each hawks. ● Just before beginning the game, spread the “worms” around on the ground or floor. ● Direct children to their starting places: Hawks stand to one side of the game space; one adult robin stands at the edge of each nest; and chicks are distributed among the nests. <p>Play:</p> <ul style="list-style-type: none"> ● Adult robins fly around to collect worms. They bring them back to their chicks. ● Once a chick has three worms, it becomes an adult. It can leave the nest and fly around to collect worms for other chicks in any nest. ● Hawks fly around to catch (tag) robins. When a robin is tagged, the hawk takes any worms the robin has, and the robin becomes a chick; it must return to a nest to collect worms. ● Hawks may not take worms from the ground. ● All chicks and robins hold onto the worms they get, until a hawk takes them. Then the hawks hold them. <p>End of play: All the worms have been collected from the ground. Either the robins (chicks and adults) or hawks have them in possession.</p>

	<p>Scoring: Count the worms that both of the hawks have, and then the worms that all of the robins have. Record the scores, and play again.</p>
<p>Closing 4 minutes</p>	<p>Look at the scores (data). <i>How could we change the game to change the outcome (score)?</i> <i>What would happen if we started with more hawks?</i> <i>What would happen if we started with fewer worms?</i></p> <p>Hang the Predator/Prey chart for children’s reference.</p> <p><i>How can humans impact a food chain? If humans disrupt a food chain or web, how would other animals be impacted?”</i></p>
<p>Standards and Practices</p>	<p>L.1.5a. Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent. 1-LS1-2. Obtain information to compare ways in which the behavior of different animal parents and their offspring helps the offspring to survive. Practice 5. Mathematical and Computational Thinking</p>
<p>Ongoing assessment</p>	<p>As students complete the debrief, check for understanding and opportunities for reteaching.</p>

Notes