



## 5th Grade Stations

Station (required)	Description	Standards
<b>Be the Biologist: Field Investigations</b>	Explore our estuary through the eyes of a scientist! While experiencing scientific methods of field work, students will learn about the impact water quality has on this important and fragile ecosystem.	<p><b>SC.5.N.1.2</b> Explain the difference between an experiment and other types of scientific investigation. (DOK 2)</p> <p><b>SC.5.N.1.3</b> Recognize and explain the need for repeated experimental trials. (DOK 2)</p> <p><b>SC.5.N.1.5</b> Recognize and explain that authentic scientific investigation frequently does not parallel the steps of "the scientific method." (DOK 2)</p> <p><b>SC.5.L.17.1</b> Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics. (DOK 2)</p>
<b>Marine Biodiversity</b>	What's that?! In addition to meeting our animal ambassadors, this station offers students a peek into an entirely different world - what's in the sea that we cannot see! Students will discover how the littlest things can make a big difference to the health of our waterways and understand how human activities impact the marine environment.	<p><b>SC.4.L.17.4</b> Recognize ways plants and animals, including humans, can impact the environment.</p> <p><b>SC.5.N.1.2</b> Explain the difference between an experiment and other types of scientific investigation. (DOK 2)</p> <p><b>SC.5.L.14.2</b> Compare and contrast the function of organs and other physical structures of plants and animals, including humans, for example: some animals have skeletons for support -- some with internal skeletons others with exoskeletons -- while some plants have stems for support. (DOK 2)</p> <p><b>SC.5.L.17.1</b> Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics. (DOK 2)</p>
Station (teacher selects 2)	Description	Standards
<b>New! Sea Turtles: Rehab or Release?</b>	Sea turtles have washed up on our beach - what do we do?! Learn how marine biologists evaluate the health of sea turtles and determine if they need rehabilitation before they can be released back to their ocean home.	<p><b>SC.5.N.1.1</b> Define a problem, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types such as: systematic observations, experiments requiring the identification of variables, collecting and organizing data, interpreting data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. (DOK 3)</p> <p><b>SC.5.N.1.5</b> Recognize and explain that authentic scientific investigation frequently does not parallel the steps of "the scientific method." (DOK 2)</p> <p><b>SC.5.L.17.1</b> Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics. (DOK 2)</p>
<b>Be a Shark Tagging Researcher</b>	Experience a simulation of what real shark researchers do to study sharks in the field! Also featured are our in-house specimens along with a tour of sharks' spectacular adaptations that make them so impressive.	<p><b>SC.35.CS-CS.1.2</b> Describe how models and simulations can be used to solve real-world issues in science and engineering.</p> <p><b>SC.5.N.2.1</b> Recognize and explain that science is grounded in empirical observations that are testable; explanation must always be linked with evidence. (DOK 2)</p> <p><b>SC.5.L.14.2</b> Compare and contrast the function of organs and other physical structures of plants and animals, including humans, for example: some animals have skeletons for support -- some with internal skeletons others with exoskeletons -- while some plants have stems for support. (DOK 2)</p>
<b>Fish Form &amp; Function</b>	The fish body form is so uniquely fit for lots of variations for different functions! Get to know how they are so adaptable with our FIN-tastic interactive session.	<p><b>SC.5.L.14.2</b> Compare and contrast the function of organs and other physical structures of plants and animals, including humans, for example: some animals have skeletons for support -- some with internal skeletons others with exoskeletons -- while some plants have stems for support. (DOK 2)</p> <p><b>SC.5.L.17.1</b> Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics. (DOK 2)</p>

<p><b>Comparing Marine Mammals</b></p>	<p>We all seem to love marine mammals, but how did they become adapted for life underwater? To find out, you'll piece together a manatee skeleton and compare their adaptations with other marine mammals!</p>	<p><b>SC.5.L.14.2</b> Compare and contrast the function of organs and other physical structures of plants and animals, including humans, for example: some animals have skeletons for support -- some with internal skeletons others with exoskeletons -- while some plants have stems for support. (DOK 2)  <b>SC.5.L.17.1</b> Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics. (DOK 2)</p>
<p><b>Marine Debris: Digging In</b></p>	<p>Dig into an Albatross bolus! Learn about the effects of marine debris on sea birds. Dissect a real bolus packed full of plastics to identify.</p>	<p><b>SC.4.L.17.4</b> Recognize ways plants and animals, including humans, can impact the environment.  <b>SC.5.N.1.2</b> Explain the difference between an experiment and other types of scientific investigation. (DOK 2)  <b>SC.5.N.2.1</b> Recognize and explain that science is grounded in empirical observations that are testable; explanation must always be linked with evidence. (DOK 2)  <b>SC.5.N.1.5</b> Recognize and explain that authentic scientific investigation frequently does not parallel the steps of "the scientific method." (DOK 2)</p>
<p><b>Sustainable Seafood</b></p>	<p>What's for dinner? After learning why some types of seafood are ocean-friendly and some aren't, students will help a "chef" make an ocean-friendly menu, pick out ocean-friendly seafood at a grocery store, and reason why their choices can help bring the ocean back into balance!</p>	<p><b>SC.4.L.17.4</b> Recognize ways plants and animals, including humans, can impact the environment.</p>
<p><b>Where Does the Water Flow?</b></p>	<p>Where does all of the rainwater go? Students learn the effects of non-point source pollution on water bodies and the organisms that inhabit them. Using our interactive watershed model, students will observe and demonstrate water flow over a landscape and discuss how human activities impact water quality.</p>	<p><b>SC.4.L.17.4</b> Recognize ways plants and animals, including humans, can impact the environment.  <b>SC.5.N.1.2</b> Explain the difference between an experiment and other types of scientific investigation. (DOK 2)  <b>SC.5.N.1.3</b> Recognize and explain the need for repeated experimental trials. (DOK 2)  <b>SC.5.N.1.6</b> Recognize and explain the difference between personal opinion/interpretation and verified observation. (DOK 2)  <b>SC.5.N.2.1</b> Recognize and explain that science is grounded in empirical observations that are testable; explanation must always be linked with evidence. (DOK 2)  <b>SC.5.E.7.2</b> Recognize that the ocean is an integral part of the water cycle and is connected to all of Earth's water reservoirs via evaporation and precipitation processes. (DOK 2)</p>
<p><b>STEM Challenge: ROVs</b></p>	<p>Like robotics? With building ROVs as the catalyst, students will decide how they will design their ROVs, and make their ROV be neutrally buoyant. The challenge is to complete the mission in 20 minutes!</p>	<p><b>SC.5.N.1.1</b> Define a problem, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types such as: systematic observations, experiments requiring the identification of variables, collecting and organizing data, interpreting data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. (DOK 3)  <b>SC.5.P.10.4</b> Investigate and explain that electrical energy can be transformed into heat, light, and sound energy, as well as the energy of motion. (DOK 3)  <b>SC.5.P.13.4</b> Investigate and explain that when a force is applied to an object but it does not move, it is because another opposing force is being applied by something in the environment so that the forces are balanced. (DOK 3)</p>