

<b>Topic/Objectives:</b> 8-4 Changing Populations; (1) Explain how the process of natural selection influences the evolution of species; (2) Determine how invasive species can result in biodiversity loss; (3) Give examples of adaptations in diverse marine ecosystems.	<b>Name:</b>
	<b>Date:</b>
	<b>Period:</b>

**Essential Question:** How does natural selection drive the ever-changing marine populations?

<b>Questions:</b>	<b>Notes:</b>
	<p>All species experience _____, or change over time.</p> <ul style="list-style-type: none"> <li>◦ This process is observable in _____ - _____ organisms like bacteria.</li> <li>◦ One example of evolution in bacteria is the increased presence of _____ in bacteria populations.</li> </ul> <p>All living things share similar _____ and basic needs such as water, shelter and nutrients.</p> <ul style="list-style-type: none"> <li>◦ Since basic needs may be limited, organisms must compete for them.</li> <li>◦ Some groups of organisms compete more successfully than others, and are able to pass on their traits to their offspring (_____).</li> </ul>
	<p>The Theory of Evolution by Natural Selection is a well-developed and supported explanation of events in the _____.</p> <p>Evidence that scientists use to support this _____ include:</p> <ol style="list-style-type: none"> <li>1. The _____ – the collective, fossilized history of different groups of living organisms.           <ul style="list-style-type: none"> <li>◦ _____, with exceptions of their fossils, are gone from the Earth.</li> <li>◦ “In-between” organisms (_____) help link fossils to modern forms.</li> </ul> </li> <li>2. Sharing of similar body structures (_____) indicate that a species may share a common ancestor.</li> <li>3. Genetic observations, including _____, help determine whether organisms may be closely related. _____, changes that occur in the genes, are very common and account for continued variation amongst individuals in a population.</li> </ol>

