

**LESSON PLAN 2: SPECIATION AND DIVERSITY IN APPALACHIA**

**MIDDLE SCHOOL STANDARDS ADDRESSED:**

Tennessee	<p><b>6.LS4: Biological Change: Unity and Diversity</b></p> <ol style="list-style-type: none"><li>1. Explain how changes in biodiversity would impact ecosystem stability and natural resources.</li><li>2. Design a possible solution for maintaining biodiversity of ecosystems while still providing necessary human resources without disrupting environmental equilibrium.</li></ol> <p><b>8.LS4: Biological Change: Unity and Diversity</b></p> <ol style="list-style-type: none"><li>1. Analyze and interpret data for patterns in the fossil record that document the existence, diversity, extinction, and change in life forms throughout Earth's history.</li><li>2. Construct an explanation addressing similarities and differences of the anatomical structures and genetic information between extinct and extant organisms using evidence of common ancestry and patterns between taxa.</li><li>4. Develop a scientific explanation of how natural selection plays a role in determining the survival of a species in a changing environment.</li></ol>
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**HIGH SCHOOL STANDARDS ADDRESSED:**

Tennessee	<p><b>BIO2.LS2: Ecosystems: Interactions, Energy, and Dynamics</b></p> <ol style="list-style-type: none"><li>1. Plan and carry out an ethology investigation of a simple organism. Gather, analyze, and present data in tabular and graphical formats. Draw conclusions based on data and communicate findings.</li></ol>
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