

## ECO4: Biology Lesson Plans

Teacher : JOHNSTON, HARDMAN, CANNON, HAWTHORNE, HAMILTON, CARMACK	
Course/ Subject: Biology	
Date of Instruction: 12/8/2022	
<p><b>Opening (I Do)</b> An engaging process for lesson introduction that is specifically planned to encourage equitable and purposeful student participation. Describe the instructional process that will be used to introduce the lesson. <b>TKES 1, 2, 3,4,5, 8,10</b></p>	<p><b>SB5. Obtain, evaluate, and communicate information to assess the interdependence of all organisms on one another and their environment.</b></p> <p><b>5b Explain the flow of matter &amp; energy through ecosystems by: Arranging components of a food chain according to energy flow; Comparing the quantity of energy in the steps of an energy pyramid</b></p> <p>Explaining the need for cycling of major nutrients (CHNOP)</p>
	<p><b>Learning Target:</b></p> <p><b>I will understand and explain how energy and matter move in an ecosystem</b></p>
	<p><b>Success Criteria:</b></p> <ul style="list-style-type: none"> <li>• I can differentiate between how energy and matter/nutrients move in an ecosystem.</li> <li>• I can construct a food chain and food web.</li> <li>• I can differentiate between a food chain and a web</li> <li>• I can demonstrate the 10% rule and understand what happens to the remaining 90%</li> <li>• I can differentiate between how energy and matter/nutrients move in an ecosystem.</li> <li>• I can explain the importance of the cycling of nutrients</li> </ul>
	<p><b>Introduction/Connection:</b></p> <p>Water cycle song</p>
	<p><b>DIRECT INSTRUCTION:</b></p> <p>Energy cycles slides Video: Biogeochemical cycles</p>
<p><b>Work Period (We Do, You Do)</b> Students learning by doing/demonstrating learning expectations. Describe the instructional process that will be used to engage the students in the work period. <b>TKES 1, 2, 3, 4, 5, 7, 8,10</b></p>	<p><b>GUIDED PRACTICE:</b></p> <p>Guided notes energy cycles</p> <p>Handout relating to photosynthesis and cellular respiration</p>

	<b>INDEPENDENT/COLLABORATIVE PRACTICE/DIFFERENTIATION:</b>  <b>NOTES</b> <b>VIDEO</b> <b>HANDOUT</b> amoeba sisters cycles of matter  Usa test prep Ecology 1
<b>Closing (We Check)</b> Describe the instructional process that will be used to close the lesson and check for student understanding . <b>TKES : 1,2,3, 4,5,6,7,8</b>	<b>SUMMARIZE/CHECK FOR UNDERSTANDING:</b>  <b>EOC REVIEW</b>