

## Stage 1 - Learning Objectives for your Unit

Standards (NGSS or CCSS)	Learning Progression (I can... or Student will...)
<ol style="list-style-type: none"> <li>1. As written in the documents.</li> <li>2. Your unpacked standards.</li> </ol>	<p>Unpacked standards broken into teachable steps. These become objectives for your lessons.</p>
<ol style="list-style-type: none"> <li>1. * HS-LS4-2 Construct an explanation based on evidence that the process of evolution primarily results from four factors: (1) the potential for a species to increase in number, (2) the heritable genetic variation of individuals in a species due to mutation and sexual reproduction, (3) competition for limited resources, and (4) the proliferation of those organisms that are better able to survive and reproduce in the environment.               <ul style="list-style-type: none"> <li>● SWBAT explain using evidence that evolution is the result of four factors.</li> </ul> </li> <li>2. HS-LS4-4 Construct an explanation based on evidence for how natural selection leads to the adaptation of populations.               <ul style="list-style-type: none"> <li>● SWBAT explain how natural selection leads to population adaptation.</li> </ul> </li> <li>3. * RST .11-12.1 Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.               <ul style="list-style-type: none"> <li>● SWBAT compare and contrast two texts to determine the reliability of sources and information.</li> </ul> </li> <li>4. RST .11-12.8 Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.               <ul style="list-style-type: none"> <li>● SWBAT read scientific texts to understand the different parts of an experiment.</li> </ul> </li> </ol>	<p>SWBAT</p> <ol style="list-style-type: none"> <li>1. SWBAT fully explains how reproduction and genetic variability result in evolution.</li> <li>2. SWBAT fully explains how environmental factors result in the continuation of species.</li> <li>3. SWBAT fully explain how natural selection leads to population adaptation</li> <li>4. SWBAT read scientific texts to understand the different parts of an experiment.</li> <li>5. SWBAT conduct an experiment and compare their results to existing data and conclusions.</li> <li>6. SWBAT cite textual evidence correctly.</li> <li>7. SWBAT analyze science and technical texts.</li> <li>8. SWBAT determine the reliability of sources and information.</li> <li>9. SWBAT write a scientific paper using evidence from collected data as well as other texts.</li> </ol>

<ul style="list-style-type: none"> <li>SWBAT conduct an experiment and compare their results to existing data and conclusions.</li> </ul> <p>5. * WHST .9-12.2 Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.</p> <ul style="list-style-type: none"> <li>SWBAT write a scientific paper using evidence from collected data as well as other texts.</li> </ul>			
<b>Big Ideas (students' enduring ideas)</b>	<b>Essential Questions (teacher's guiding questions)</b>		
<b>Stage 2 - Learning Plan - Developed from the Learning Progression</b>			
Duration	Learning Objective	Instructional Strategy	Formative Assessment
Anticipated Time Frame of the lesson	Use the I can or Student will statement from the progression	Best Practice Strategy	How will you measure the learning of the day? Have students met the lesson objective?
<p>5 hours/days/class periods</p> <p>Kim ;)</p>	<p>SWBAT fully explains how reproduction and genetic variability result in evolution.</p>	<ul style="list-style-type: none"> <li>- Cues, Questions, and Advanced Organizers</li> <li>- Cooperative Learning</li> <li>- Generating and Testing Hypotheses</li> <li>- Identifying Similarities and Differences</li> <li>- Nonlinguistic Representations</li> </ul>	<p><u>3-2-1 Exit Slip:</u> After the lecture portion of this lesson, students will write down 3 things they learned, 2 interesting facts, and 1 question they still have. These will be collected before the end of class and the questions will be reviewed at the start of next class.</p> <p><u>Gallery Walk:</u> Groups will set up their phylogenetic trees around the room and visit each one as a class. Each</p>

			group will present when it is their turn and answer questions about the process of building their phylogenetic tree.
2-3 classes Laura, back from the dead	SWBAT fully explains how environmental factors result in the continuation of species.	-Summarizing and Note-Taking -Generating and Testing Hypotheses -Cooperative Learning	-There will be questions in the lecture to check for understanding -An exit slip will be filled out after the 1st day of the lesson to discuss their hypothesis -When they have completed the lab they will turn in the lab worksheet
one week Jess :)	SWBAT fully explains how natural selection leads to population adaptation.	<ul style="list-style-type: none"> <li>- setting objectives and providing feedback</li> <li>- Summarizing and note-taking</li> <li>- assigning homework and providing practice</li> <li>- generating and testing hypotheses</li> </ul>	<p><u>Practice:</u> Students will be given practice sheets that go along with the different interactive sites that were used in class, and if they choose they can complete the worksheets in a group of 2-3.</p> <p><u>Quiz:</u> Students will be given a short quiz and for any question that students have trouble with we can go over as a class and I can give proper feedback</p>
	SWBAT read scientific texts to understand the different parts of an experiment.		
	SWBAT conduct an experiment and compare their results to existing data and conclusions.		

	SWBAT cite textual evidence correctly.		
	SWBAT analyze science and technical texts.		
	SWBAT determine the reliability of sources and information.		
	SWBAT write a scientific paper using evidence from collected data as well as other texts.		

**Stage 3 - Evidence that Learning has Occurred**

**Students will demonstrate mastery of every learning objective in the unit. Assessment Summary Below**

Assignment Description: Students will choose one aspect of evolution and either explain why it is important for the continuation of a species or compare past views to how we view the subject today. They will research their topic and present it using one of the presentation types from the list below. Students must use at least one primary source and two secondary sources to support their research and give a 5-10 minute presentation. The purpose of this project is to demonstrate an understanding of how evolution takes place while also demonstrating how to conduct research.

Presentation types: slideshow/PowerPoint, children's/pop-up book, song/rap/poem, diorama/model, reader's theater/skit, video/movie, comic book, news article, scrapbook, diary/journal entries, social media page, etc. (cleared by a teacher)

