

Name
TA

Science 10
2022-2023



Learning Guide # 15: Natural and Artificial Selection

BIG IDEA: Natural, Artificial Selection, Population Genetics.

Fundamental Knowledge (I know)

- What **Artificial Selection** is AND can explain what it is/means. Use an example.
- What **Natural Selection** is AND can explain what it is/means. Use an example.
- How to explain how adaptive radiation has led to multiple species.

Curricular Competencies (I can)

	Proficiency Scale Teacher and Student self assessment (Circle one)	Evidence (How do you know?)
I can: Express and reflect on a variety of experiences, perspectives, and world views through place.	Emerging (EMG) Initial Understanding Developing (DEV) Partial/Near Complete Understanding Proficient (PRF) Complete Understanding Extending (EXT) Sophisticated Understanding	
Contribute to finding solutions to problems at a local and/or global level through inquiry.	Emerging (EMG) Initial Understanding Developing (DEV) Partial/Near Complete Understanding Proficient (PRF) Complete Understanding Extending (EXT) Sophisticated Understanding	

Student Signature:

Teacher Signature:

Date:

Instructions To help guide your learning, make your way through the activities in Option 1, Option 2, or Option 3. You may “mix and match” between the different Option columns.

TOPIC	OPTION 1 (Worksheet)	OPTION 2 (Textbook)	OPTION 3
Artificial and Natural Selection	<p>Find appropriate resources to start to building your understanding of artificial and natural selection:</p> <p>Crash Course</p> <p>Stated Clearly</p> <p>Define the following terms: Evolution, natural selection, artificial selection, fitness, population, traits</p>	<p>Find, source, and share appropriate resources with your teacher to gather knowledge of natural and artificial selection. Create a “MindMap” of the following terms: Evolution, natural selection, artificial selection, fitness, population, traits</p>	<p>Choose your own adventure!</p> <p>Pick up a planning sheet from the Science Kiosk.</p> <p>Create a plan! Make sure you read through the first page of this LG, as you will need to design ways to learn/practice and show your understanding of the topic(s) and skill(s) (competencies.)</p> <p>You will need to have a teacher approve your plan before beginning the LG.</p>
	<p>Create a Similarities and Difference “T” Chart to show your understanding of natural and artificial selection.</p>	<p>Compare natural and artificial selection using a Venn diagram.</p>	
	<p>Complete the Darwin’s Natural Selection Worksheet.</p>	<p>Write a summary of the process of natural selection and use examples to show your understanding. Specify 2 different types of adaptations in your summary.</p>	
Adaptive Radiation	<p>Visit the following link and review adaptive radiation in Darwin’s finches and then watch the video: Galapagos Finch Evolution</p> <p>Write a summary in which you discuss how adaptive radiation has led to the many different species of finches on the Galapagos islands.</p>		
Lab	No lab.		
Self Assessment	Reflect on the Fundamental Knowledge and Curricular Competencies. Use the rubric and make goals to improve for your next learning guide.		
Interview or Quiz	See you teacher for an interview or to have a quiz slip signed for the test center. Bring your work and staple it to your quiz when complete.		

Resources can be found at www.THSSscience.com or the Science Kiosk

User: **THSS**

Password: **science**