Genetics Layered Curriculum Lesson Plan -Name_____

Unit of Instruction:	Genetics	
Implementation Dates:	November 17th-December 5th	
Standards:	S7L3	Students will recognize how biological traits are passed onto successive generations.
	S7L3a	Explain the role of genes and chromosomes in the process of inheriting a specific trait.
	S7L3b	Recognize that selective breeding can produce plants or animals with desired traits.

Curriculum Layers	Student Unit Learning Activities	Pts	Ern
EVERYONE MUST DO ALL OF THESE → CHOOSE ENOUGH OF THE FOLLOWING TO SHOW YOU ARE PROFICIENT/ADVANCED ↓	1. Complete the Genetics Study Island Unit 2. Assemble the Genetics Unit Portfolio with assignments from below.	100 50	
1st Layer : Basic knowledge, understanding. The student builds on his/her current level of core information. **Complete 2 assignments.** Bloom's Taxonomy: Knowledge	1. Make vocabulary flashcards for each vocabulary word 2. Create a comic strip with 10 frames giving the different characters different dominant and recessive traits (list of traits will be provided). 3. Complete a graphic organizer comparing genetic engineering & selective breeding. 4. Make an illustrated vocabulary book with genetics unit vocabulary. 5. Write a song that teaches genetics vocabulary. 6. Draw a poster that explains Mendel's pea plant experiment and how traits are passed down to successive generations. 7. Draw a poster that explains how to create and use a Punnett Square. Use genotypes, phenotypes & all other genetic terminology.	10 10 10 10 10 10 10	
2nd Layer : Application or manipulation of the information learned in the 1st layer. Problem solving or other higher level thinking tasks. **Complete 1 assignment.** Bloom's Taxonomy: Application & Analysis	1. Write a letter to a friend describing the differences selective breeding and genetic engineering 2. Describe the importance of genetics and how it has changed the world. Write 2-3 paragraphs. 3. Find 2 current event articles related to genetics; summarize them and give your opinion on the questions raised. 4. Create a "super" animal. Combine traits of at least 3 animals that you believe would be considered genetically superior. 5. Construct a 10-question quiz on genetics	10 10 10 10 10	
3rd Layer : Critical Thinking and Analysis. This layer requires the highest and most complex thought. **Complete 1 assignment.** Bloom's Taxonomy: Synthesis & Evaluation	1. Research a genetic disease. Provide information on the disease: how does it affect humans, is it sex-linked is it a dominant or recessive disorder, are there any cures? Include your sources! 2. Create an ad campaign for a genetics counselor. Include what services would be provided by the counselor and what benefits could they provide their clients. 3. Research the genetic engineering issue. Compare and contrast genetic engineering. How can it benefit society and how can it harm society. Present both sides of the issue and share your opinion on the issue.	10 10 10	