

Biology Course 2 Proficiency Sheet: Cellular Genetics & Heredity 23% of Milestones Assessment		
fsicourses.net Biology Course 2 Cellular Genetics & Heredity	<i>Score</i>	<i>Date Passed</i>
2.1 Protein Synthesis		
a. The Structure and Function of DNA & RNA LT 1: I can construct an explanation of how the structures of DNA and RNA lead to the expression of information within the cell via the processes of replication, transcription, and translation.		
b. DNA Replication Heredity, & Cell Division LT 2: I can explain the role of DNA in heredity. I can explain the process of DNA replication and its role in cell division.		
c. Protein Synthesis LT 3: I can construct an explanation of how the structures of DNA & RNA lead to the expression of information within the cell via the process of replication, transcription, and translation.		
2.2 Genetic Mutations		
a. Genetic Mutations LT 4: I can identify and explain gene mutations. I can explain how mistakes in DNA replication can lead to mutations.		
b. Human Genetic Disorders (Chromosomes mutations) LT 5: I can identify and explain chromosome mutations. I can explain how mistakes in crossing over during meiosis can lead to chromosome mutations.		
c. Analyzing Karyotypes LT 6: I can analyze and use karyotypes to determine different types of chromosome mutations.		
2.4 Mendel's Laws		
a. The Work of Gregor Mendel LT 7: I can describe Mendel's laws and recognize how they can be used to explain the role of meiosis in reproductive variability.		
b. Applying Mendel's Principles LT 8: I can use mathematical models to predict and explain patterns of inheritance.		
c. Non-Mendelian Genetics LT 9: I can determine how models can be used to explain patterns of inheritance.		
2.5 Other Patterns of Inheritance		
a. Sex-linked Inheritance LT 10: I can determine how models can be used to explain patterns of inheritance.		
b. Pedigrees LT 11: I can determine how models can be used to explain patterns of inheritance.		