

Biology Course 2 Proficiency Sheet: Cellular Genetics & Heredity 23% of Milestones Assessment		
fsicourses.net Biology Course 2 Cellular Genetics & Heredity	Score	Date Passed
Activities highlighted in Gold are acceleration activities.		
2.1 Protein Synthesis – In this section you will complete remediation and reassess assignments for 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.		
Remediation Activity (15%) - DNA vs. RNA Video Review - DNA vs. RNA Interactive Activity 1 - DNA vs. RNA Interactive Activity 2 - Gizmos Building DNA Lab	Reassess (35%) DNA vs. RNA Reassess Due by January 15, 2021	
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.		
Remediation Activity (15%) - DNA Replication Video Review - DNA Replication Interactive Activity	Reassess (35%) DNA Replication Reassess Due by January 15, 2021	
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.		
Remediation/Acceleration Activity (15%) - Protein Synthesis Video Review - Codon Chart & Codon Wheel Interactive Review - Protein Synthesis Interactive Activity 1 - Protein Synthesis Interactive Activity 2 - Gizmos Protein Synthesis Lab	Reassess (35%) Protein Synthesis Reassess Due by January 15, 2021	
2.2 Genetic Mutations – In this section you will complete remediation and reassessment assignments for 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.		
Remediation/Acceleration Activity (15%) - Gene Mutation Video Review - Gene Mutations Interactive Activity - Gizmos Mutations Lab	Reassess (35%) Gene Mutations Reassess Due by January 22, 2021	

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.			
Remediation Activity (15%) - Chromosome Mutations Video Review	Reassess (35%) Chromosome Mutations Reassess Due by January 22, 2021		
c. Analyzing Karyotypes LT 6: I can analyze and use karyotypes to determine different types of chromosome mutations.			
Acceleration Activity (15%) - Analyzing Karyotypes Video Review - Gizmos Karyotyping Lab	Assess (35%) Analyzing Karyotypes Reassess Due by January 22, 2021		
2.3 Mendel's Laws - In this section you will complete remediation and reassessment assignments for Mendel's Laws.			
a. The Work of Gregor Mendel – Genotypes & Phenotypes LT 7: I can describe Mendel's laws and recognize how they can be used to explain the role of meiosis in reproductive variability.			
Remediation Activity (15%) - Genotypes & Phenotypes Video Review - Genotypes & Phenotypes Interactive Activity	Reassess (35%) Genotypes & Phenotypes Reassess Due by January 29, 2021		
b. Applying Mendel's Principles LT 8: I can use mathematical models to predict and explain patterns of inheritance.			
Remediation Activity (15%) - Gregor Mendel Video Review - Gregor Mendel Interactive Activity - Applying Mendel's Principles Interactive Activity - Applying Mendel's Principles Activity 2	Reassess (35%) Applying Mendel's Principles Reassess Due by January 29, 2021		
c. Non-Mendelian Genetics LT 9: I can determine how models can be used to explain patterns of inheritance.			
Remediation Activity (15%) - Non-mendelian Genetics Video Review - Gizmos Genetic Engineering Lab	Reassess (35%) Non-Mendelian Genetics Reassess Due by January 29, 2021		
2.4 Other Patterns of Inheritance - In this section you will complete remediation and reassessment assignments for other patterns of inheritance.			
a. Sex-linked Traits LT 10: I can determine how models can be used to explain patterns of inheritance.			

Acceleration Activity (15%) - Sex-linked Traits video review - Gizmos Inheritance online lab	Assess (35%) Sex-linked Traits Quiz Due by January 29, 2021		
b. Pedigrees LT 11: I can determine how models can be used to explain patterns of inheritance.			
Acceleration Activity (15%) - Pedigrees Video Review - Gizmos Inheritance online lab	Assess (35%) Pedigrees Sex-linked Inheritance Quiz Due by January 29, 2021		