



# Biology Curriculum

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## Reading and Writing Standards

Marking Period	Reading Assessment	Writing Assessment
1	Research and Presentation of organ systems within a frog.	Cell Project: Key containing all functions of each cell structure
2	Cellular Respiration lab: Aerobic vs Anaerobic prelab and analysis	Matter and Energy in an ecosystem Test: Compare and Contrast photosynthesis and cellular respiration.
3	DNA Structure Test: Reading Amino Acid Charts	Inheritance of traits test: CER of Genetic Engineering
4	Interdependent relationships in an ecosystem Quiz: Scenario analysis	Organism Growth and Development Data Infographic

## [Scoring Guide For Written Work](#)



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## Content Topics and Pacing

Topic	Duration	Guiding Questions	Reading/Writing Assignments
<b>Biology Basics</b>	~3 weeks		
<b>Cells to Organism</b>	~5 weeks	What is the importance of cells? How do cells reproduce? What is the structural setup of an organism?	Reading: Relationship between Mitosis and Cancer Reading Analysis Writing: Glow and Grow Project analysis
<b>Frog Dissection</b>	~3 weeks	How do different body systems work within an organism?	Reading: Techniques of dissections Writing: Frog Dissection Lab Analysis
<b>Matter and Energy in an ecosystem (Photosynthesis/ Cellular Respiration)</b>	~5 weeks	How do plants and animals transfer energy through an ecosystem?	Reading: Photosynthesis and Cellular Respiration Reading Analysis Writing: Food Web Reflection
<b>DNA Structure</b>	~3 weeks	How does the structure of DNA influence the traits of an organism?	Reading: Causes of Mutations Writing: DNA Structure Doodle Sheet Notes
<b>Inheritance of Traits</b>	~4 weeks	What are common inheritance patterns? How do traits skip generations?	Reading: Acquired vs Inherited Traits Writing: Family Pedigree Glow vs Grow project analysis



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		How does my family pedigree show dominant vs recessive traits?	
<b>Growth and Development</b>	~3 weeks	How did the chicks develop traits such as fur color?  How do organisms develop over time? Are they all the same?	Reading: Growth and development of Chickens Research assignment  Writing: Growth and development of Chickens Research assignment
<b>Natural Selection and Evolution</b>	~3 weeks	What causes changes in populations over time?	Reading: Charles Darwin Reading  Writing: CER of Moths, Finches, or Bacteria changes
<b>Interdependent Relationships in an Ecosystem</b>	~4 weeks	What determines the health of an ecosystem?	Reading: Carrying Capacity Reading Analysis  Writing: Reducing Human impact on Schoolyard Presentation