



Science Curriculum Time Line

*Topics in GREEN will be assessed on the PART 1: Performance-Based Assessment
All topics can be accessed on the Part 2: End-Of-Year Assessment

Biology

<p style="text-align: center;">Grading Period One</p> <p style="text-align: center;"><u>Heredity</u></p> <ul style="list-style-type: none">• Cellular Genetics• Structure and function of DNA in cells• Genetic mechanisms and inheritance• Mutations• Modern Genetics
<p style="text-align: center;">Grading Period Two</p> <p style="text-align: center;"><u>Evolution</u></p> <ul style="list-style-type: none">• <u>Mechanisms:</u> Natural selection, Mutation, Genetic drift, Gene flow (immigration, emigration), Sexual selection, History of life on Earth• <u>Diversity of Life:</u> Speciation and biological classification based on molecular evidence, Variation of organism within a species due to population genetics and gene frequency.
<p style="text-align: center;">Grading Period Three</p> <p style="text-align: center;"><u>Diversity and Interdependence of Life</u></p> <ul style="list-style-type: none">• <u>Classification systems</u> are frameworks created by scientists for describing the vast diversity of organisms indicating the degree of relatedness between organisms.• <u>Ecosystems:</u> Homeostasis, Carrying Capacity, Equilibrium and disequilibrium
<p style="text-align: center;">Grading Period Four</p> <p style="text-align: center;"><u>Cells</u></p> <ul style="list-style-type: none">• Cell Structure and Function: Eukaryotic and Prokaryotic cells, interrelatedness of cell organelles• Cell processes• Characteristics of life regulated by cellular processes• Photosynthesis, chemosynthesis, cellular respiration• Cell division and differentiation