Subject	Grade 8- Science
Nine Week	1st
Embedded Inquiry, Technology and engineering (ongoing)	SPI 0807.Inq.1 (Variables and Controls) Design a simple experimental procedure with an identified control and appropriate variables. SPI 0807.Inq.2 (Tools and Procedures) Select tools and procedures needed to conduct a moderately complex experiment. SPI 0807.Inq.3 (Interpret Data) Interpret and translate data into a table, graph, or diagram. SPI 0807.Inq.4 (Cause and Effect) Draw a conclusion that establishes a cause and effect relationship supported by evidence. SPI 0807.Inq.5 (Bias or Error) Identify a faulty interpretation of data that is due to bias or experimental error. SPI 0807.T/E.1 (Prototype Testing) Identify the tools and procedures needed to test the design features of a prototype. SPI 0807.T/E.2 (Engineering Design Process) Evaluate a protocol to determine if the engineering design process was successfully applied. SPI 0807.T/E.3 (Intended/ Unintended Consequences) Distinguish between the intended benefits and the unintended consequences of a new technology. SPI 0807.T/E.4 (Adaptive/Assistive Bioengineering) Differentiate between adaptive and assistive bioengineered products (e.g., food, biofuels, medicines, integrated pest management). Reporting Category One: Inquiry and Technology & Engineering SPI 0807.5.1 (Classification Keys) Use a simple classification key to identify an unknown organism.
Standard	**SPI 0807.5.1** Use a simple classification key to identify an unknown organism. **SPI 0807.5.**2 Analyze structural, behavioral, and physiological adaptations to predict which populations are likely to survive in a particular environment. **SPI 0807.5.**4 Identify several reasons for the importance of maintaining the Earth's biodiversity. **SPI 0807.5.5** Compare fossils found in sedimentary rock to determine their relative age. **SPI 0807.5.3** Analyze data on levels of variation within a population to make predictions about survival under particular environmental conditions.
Objectives	0807.5.1.A Select characteristics of plants and animals that serve as the basis for developing a classification key. 0807.5.2 Compare and contrast the ability of an organism to survive under different environmental conditions. 0807.5.3 Collect and analyze data relating to variation within a population of organisms 0807.5.4.A Make a poster that illustrates the major factors responsible for reducing the amount of global biodiversity. 0807.5.4.B Create a graph that demonstrate how the amount of biodiversity has changed in a particular continent or biome. 0807.5.5 Create a timeline that illustrates the relative ages of fossils in sedimentary rock layers.

Topics	(1) Inquiry and Technology & Engineering. (2) Biodiversity and Change
Major Assignment/s	Labs Diagnosis Pretest Posttest CFA 1
Instructional Materials	Science Book Computer Projection Device Smart Board Science Notebook Science Starter BrainPop - Classifications Learn360 - Classification Video Quiz - Classification Webquest - Classification of Life Learn360 - Plant Adaptations The Animal Kingdom Hands On Activity - Blubber Glove BrainPop - Genetic Mutations Learn360-Intro to Biodiversity Biodiversity Learn 360 - Fossils

Assessment(s)	Diagnostic Test Pretest Biodiversity and Change Posttest Biodiversity and Change
Field Trip/s	N/A