Career Readiness, Life Literacies, and Key Skills				
Core Ideas	**Performance Expectations**	**Grade 6**	**Grade 7**	**Grade 8**
-Gathering and evaluating knowledge and information from a variety of sources, including global perspectives, fosters creativity and innovative thinking.	9.4.8.CI.1: Assess data gathered on varying perspectives on causes of climate change (e.g., cross-cultural, gender-specific, generational), and determine how the data can best be used to design multiple potential solutions.		**Unit- Maintaining Biodiversity and Climate Change** Students can gather data on climate views and concerns from various backgrouds, ages, etc. Those can then all serve asconsiderations to be used in discussions for designing solutions provided that factual evidence and logic serve as the basis for such views. When appropiate, discussion about sources of misinformation and out of context information may be warrented.	
-Multiple solutions often exist to solve a problem.	9.4.8.CT.1: Evaluate diverse solutions proposed by a variety of individuals, organizations, and/or agencies to a local or global problem, such as climate change and use critical thinking skills to predict which one(s) are likely to be effective. 9.4.8.CT.2: Develop multiple solutions to a problem and evaluate short- and long-term effects to determine the most plausible option (e.g., MS-ETS1-4, 6.1.8.CivicsDP.1).	**"Unit- Weather and climate** Water cycle model, Generation Genius, National Geographic When doing the following design challenge of a model or real living shoreline, rain garden or other solution if students then design a method to monitor data on human impacts, such as pollutants or debris movement the following standards can be met at the same time. (MS-ESS3-3, MS-ESS2-4, MS-ETS1-4, with possible extensions for MS- ETS1-2, MS- ETS1-3, MS- ETS1-4). Ecological solutions can help ensure the water cycle follows in natural path as opposed to one that is impacted by humans and our structures such as paved roads parkinglots, roofs, and other impervious surfaces. Design challenges can include living shoreline investigations and models (spring lake), schoolyard rain gardens designs and actual implementation if time permits. Or others, see NJDEP Education links for various ideas and resources. NJDEP Resources Spring Lake NJ Living Shoreline Design Challenge Installing Rain Gardens to Absorb Rainwater Runoff Wonder of Science: Modeling the Hydrologic Cycle	**Unit- Maintaining Biodiversity and Climate Change** Generation Genius- Maintaining Biodiversity- Read, Watch Respond, Generation Genus- Climates Change- Watch, read respond,	**Unit - Energy Resources** Renewable and Nonrenewable Resources BrainPop - Energy Sources; Conserving Energy; Solar Energy; Wind Energy; Biofuels Bill Nye - Energy **Design Challenge:** Design an Insulator for use in homeas and buildings and assess how environmentally frinedly it is. One of the best ways to reduce emissions from energy consumption (heating, cooling in particular) is to reduce the need for it whcih means better insulating areas we want to control the temperature and humidity of. Designing better insualtion practices can thus help fight climate change, and if we can do so with materials that are less harmful to the environment then that is even better. One idea is green roofs. Video Resource
-Digital technology and data can be leveraged by communities to address effects of climate change.	9.4.8.DC.8: Explain how communities use data and technology to develop measures to respond to effects of climate change (e.g., smart cities).		**Unit- Maintaining Biodiversity and Climate Change** Generation Genius- Maintaining Biodiversity- Read, Watch Respond, Generation Genus- Climates Change- Watch, read respond,	
-Sources of information are evaluated for accuracy and relevance when considering the use of information.	9.4.8.IML.7: Use information from a variety of sources, contexts, disciplines, and cultures for a specific purpose (e.g., 1.2.8.C2a, 1.4.8.CR2a, W.5.8, 6.1.8.GeoSV.3.a, 6.1.8.CivicsDP.4.b, 7.1.NH. IPRET.8). 9.4.8.IML.8: Apply deliberate and thoughtful search strategies to access high-quality information on climate change (e.g., 1.1.8.C1b).		**Unit- Maintaining Biodiversity and Climate Change** Research -- Key Stone Species Investigations- Wolves of Yellowstone, Otters of the Specific, Sea Stars of the Tidepools Students will research threats that keystone species face due to climate change and be touaght thaughful search strategies and techniques to evaluate the quailty of information that they find. (for example: the first thing that shows up on Google is a result of Googles algorithims, that take into account various things that don't always perfectful filter out incorrect or unreliable information).	