

## Expectations and Outcomes

Grade Level/Course: 9-12

Content Area: Science

Unit Title	Guarantees
Unit 1 Water and Weather	Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.
Unit 2 Energy in and Out	Use a model to describe how variations in the flow of energy into and out of Earth's systems result in changes in climate.
Unit 3 Changes and Feedback	Analyze geoscience data to make the claim that one change to Earth's surface can create feedbacks that cause changes to other Earth systems.
Unit 4 Where does carbon come from and go to?	Develop a quantitative model to describe the cycling of carbon among the hydrosphere, atmosphere, geosphere, and biosphere.
Unit 5 Using Data to predict future	Analyze geoscience data and the results from global climate models to make an evidence-based forecast of the current rate of global or regional climate change and associated future impacts to Earth systems.
Unit 6 Human Influence on Climate	Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity.
Unit 7 Climate change and human activity	Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity.