AP Environmental Science Scope & Sequence

Days	Unit	Standard(s)/Outcome(s)	Essential/Guiding Questions
8	**Unit 1 - The Living World: Ecosystems** *You'll begin to explore a view of planet Earth as one system made up of regional ecosystems composed of interdependent environmental features, processes, and relationships between species.*	**BIG IDEAS:** ● Energy Transfer ● Interactions Between Earth Systems **SCIENCE PRACTICES:** ● Concept Explanation ● Visual Representations ● Environmental Solutions	**How does energy change forms?** **How old is the water you drink?**
6	**Unit 2 - The Living World: Biodiversity** *You'll learn about the importance of biodiversity within ecosystems and the impact of outside factors on the evolution of organisms.*	**BIG IDEAS:** ● Interactions Between Earth Systems **SCIENCE PRACTICES:** ● Concept Explanation ● Text Analysis ● Data Analysis	**Can an invasive species be considered a native species if it occupies a place for a long time?**
7	**Unit 3 - Populations** *You'll examine how populations within ecosystems change over time, and the factors that affect population growth.*	**BIG IDEAS:** ● Interactions Between Earth Systems ● Interactions Between Different Species and the Environment **SCIENCE PRACTICES:**	**How do changes in habitats influence changes in species over time?** **How is educational**

		• Concept Explanation • Data Analysis • Mathematical Routines • Environmental Solutions	**opportunity for women connected to human population changes?**
6	**Unit 4 - Earth Systems and Resources** *You'll study the natural components that make up the environment, from geologic features to the atmosphere and climate.*	**BIG IDEAS:** • Energy Transfer • Interactions Between Earth Systems **SCIENCE PRACTICES:** • Concept Explanation • Visual Representations • Scientific Experiments • Environmental Solutions	**How does energy from the sun influence the weather?** **How can earthquakes be predicted?**
13	**Unit 5 - Land and Water Use** *You'll examine how humans use and consume natural resources, and the ways in which we disrupt ecosystems, both positively and negatively.*	**BIG IDEAS:** • Interactions Between Different Species and the Environment • Sustainability **SCIENCE PRACTICES:** • Concept Explanation • Text Analysis • Scientific Experiments • Data Analysis • Environmental Solutions	**How does your use of natural resources impact the world?** **Why are sustainable practices difficult to implement?**
11	**Unit 6 - Energy Resources and Consumption** *You'll learn about renewable and nonrenewable sources of*	**BIG IDEAS:** • Energy Transfer **SCIENCE PRACTICES:** • Concept Explanation • Visual Representations • Data Analysis	**Why are fossil fuels the most widely used energy resources if they are nonrenewable?**

	energy, where they're used, and their impact on the environment.	• Mathematical Routines • Environmental Solutions	
6	**Unit 7 - Atmospheric Pollution** *You'll learn more about air pollution, including how human actions can cause it, and you'll analyze legislation intended to regulate emissions and improve air quality.*	**BIG IDEAS:** • Sustainability **SCIENCE PRACTICES:** • Visual Representations • Text Analysis • Scientific Experiments • Data Analysis • Environmental Solutions	**Where does air pollution go once it is airborne?**
14	**Unit 8 - Aquatic and Terrestrial Pollution** *You'll examine the impact of pollution on ecosystems and learn how to determine its source.*	**BIG IDEAS:** • Interactions Between Different Species and the Environment • Sustainability **SCIENCE PRACTICES:** • Concept Explanation • Visual Representations • Scientific Experiments • Data Analysis • Mathematical Routines • Environmental Solutions	**How does pollution impact your health?** **How can you decrease your waste?**
14	**Unit 9 - Global Change** *You'll come to understand the global impact of local and regional human activities and evaluate and propose solutions.*	**BIG IDEAS:** • Interactions Between Different Species and the Environment • Sustainability **SCIENCE PRACTICES:** • Concept Explanation • Visual Representations	**Why are laws created to protect endangered species?** **How can local human activities have a global impact?**

		• Text Analysis • Scientific Experiments • Data Analysis • Mathematical Routines • Environmental Solutions	