Grade 11 Environmental Science B
Marking Period 1

STANDARDS (Key Ideas, Major Understandings, Performance Indicators, Competencies)	PACING DAYS	RESOURCES (Print, Visual, Technology, Manipulatives)	ASSESSMENT (Evidence & Scoring Guides)
Unit 1: Introduction to Safety and Scientific Decision Making			
• The students will review basic safety procedures within a science laboratory. • Science is a necessary part of environmental decision making. • Scientific method is the means that scientists use to make sound decisions.	5	o Lab Safety Sheets o Lab Safety Lab o Lab Scientific Method o Interactive Website: Using the Scientific Method www.homepage.mac.com/cohra/ext/scimeth.html	o Safety Posters (students design their own experiment)
Unit 2: The Global Environmental Picture			
• The Earth is a finite system and creating a sustainable lifestyle will allow for a continuation of the human species and all of the Earth's ecosystems. • All of our natural resources come from the Earth and its surroundings.			
• The concept of conservation implies the management and use of Earth's natural resources so as not to adversely affect the sustainable development of the human species and Earth's ecosystems. • All use of a country's natural resources has environmental, political, economic, and social costs.	10	o The Lorax - Lorax Lab - Lorax Video o The Earth Day Special (1990) o Planet Earth Series o Story of Stuff	o Lab Write Up o Video Comparison o Planet Earth Video Sheets

Grade 11 Environmental Science B
Marking Period 1

STANDARDS (Key Ideas, Major Understandings, Performance Indicators, Competencies)	PACING DAYS	RESOURCES (Print, Visual, Technology, Manipulatives)	ASSESSMENT (Evidence & Scoring Guides)
• It is difficult to predict the impact that changes in the environment will have on Earth's future. Humans are dependent on the natural world for survival, especially for such basic needs as clean air and water.		(www.storyofstuff.com)	
• Natural ecosystems are sustainable systems.			
• Climate is the major abiotic system which affects the ecosystems.			
Unit 3: Ecosystems – Basic Units of the Natural World			
• All biospheres are composed of species, populations, communities, ecosystems, and biomes.		o NOVA World in the Balance Redefining Progress: Have and Have-Not www.earthday.net www.rprogress.org	o Blackline Masters for US Videos
• Within every ecosystem there are producers, consumers, and decomposers.	15	o United Streaming Video and Blackline Masters: - Ecosystems: Organisms and their Environment - Ecosystems: The Role of Abiotic Factors	o Biomes Graphic Organizer o Biosphere Summary Packet o Ecosystem and Communities Packet
• The trophic relationships may be described by a food chain or a food web. The process of biomagnifications is evident in all food chains and food webs.			
• Within the ecosystem there are symbiotic relationships, such as mutualism, commensalism, and parasitism.			

Grade 11 Environmental Science B
Marking Period 1

STANDARDS (Key Ideas, Major Understandings, Performance Indicators, Competencies)	PACING DAYS	RESOURCES (Print, Visual, Technology, Manipulatives)	ASSESSMENT (Evidence & Scoring Guides)
• Habitats and niches help create diversity within the ecosystem. • There are environmental factors, limiting factors, which control every ecosystem. These limiting factors are climate, water, temperature, etc. • The energy flow of an ecosystem is driven by the producers and photosynthesis. • Consumers oxidize glucose to produce energy through the process of respiration. • Decomposers use forms of abiotic respiration to return nutrients to soil in a cyclical process.		o Biomes Websites: www.ucmp.berkeley.edu/exhibits/biomes/index.php www.waynesword.palomar.edu/biomes.html www.teachersdomain.org/resource/tdc02.scie.life.eco.lp_biomes/ www.bellmuseum.org/distancelearning/prairie/build/index.html o Project WET: - Piece it Together - Water Works o United Streaming Video and Blackline Masters: - Biomes: The Adaptations of Organisms - Biomes: Our Earth's Major Life Zones	o Lab Write Up

Grade 11 Environmental Science B
Marking Period 1

STANDARDS (Key Ideas, Major Understandings, Performance Indicators, Competencies)	PACING DAYS	RESOURCES (Print, Visual, Technology, Manipulatives)	ASSESSMENT (Evidence & Scoring Guides)
		o The Hidden Dangers in Food Webs Lab	
Unit 4: Human Population			
• The human population has expanded due to improvements in agriculture, sanitation, and medicine. • There are great disparities between rich nations and poor nations in terms of population growth, fertility, and stewardship of the environment. • The age structure and fertility rate of a population can be used to predict the future size of the population. • Demographics such as the following: birthrates and death rates, medical developments, and fertility profiles can be used to predict carrying capacities for a population.	10	o Human Population Growth: ESA21 www.esa21.kennesaw.edu - Population Basic Statistics - Population Growth - Population Age Structure o Human Population o Growth/Earth's Carrying o Capacity Activity	o Population Growth Packet o Activity Responses o Graph and Questions o Quarterly Assessment