



GSE High School Earth Systems Curriculum Map

These are bundles of core ideas from the Georgia Standards of Excellence related to an anchoring phenomenon. This document is part of a framework that includes lessons and resources.

Instructional Segment	Processes of Our Climate	Surface Processes on Earth	Geologic Processes	Earth's Composition and Structure	The Formation of Our Solar System and the Planets	Resources and Our Environment
Estimated Time	9 weeks	4 weeks	4 weeks	8 weeks	4 weeks	3 weeks
Crosscutting Concepts	<ul style="list-style-type: none"> • Patterns • Cause and Effect • Scale, Proportion, and Quantity • Systems and System Models • Stability and Change 	<ul style="list-style-type: none"> • Patterns • Cause and Effect • Stability and Change • Systems and System Models 	<ul style="list-style-type: none"> • Patterns • Cause and Effect • Stability and Change • Systems and System Models 	<ul style="list-style-type: none"> • Patterns • Cause and Effect • Energy and Matter 	<ul style="list-style-type: none"> • Patterns • Cause and Effect • Scale, Proportion, and Quantity • Systems and System Models • Energy and Matter • Structure and Function • Stability and Change 	<ul style="list-style-type: none"> • Patterns • Cause and Effect • Scale, Proportion, and Quantity • Systems and System Models • Stability and Change
Anchoring Phenomenon	The Sea Island Storm of 1893 1893 Sea Island's Hurricane	Flash Flooding	8.2 Magnitude Earthquake 8.2 Earthquake in Mexico	Volcano Eruption Video of Lava Flow-- 2017	Hurricanes, but more specifically, The Great Red Spot on Jupiter	Hurricane Aftermath Hurricane IRMA Aftermath In Florida Keys
Core Ideas	<ul style="list-style-type: none"> • ESS2.D: WEATHER AND CLIMATE • ESS3.D: GLOBAL CLIMATE CHANGE • ESS2.A: EARTH 	<ul style="list-style-type: none"> • ESS2.C: THE ROLES OF WATER IN EARTH'S SURFACE PROCESSES 	<ul style="list-style-type: none"> • ESS2.B: PLATE TECTONICS AND LARGE-SCALE SYSTEM INTERACTIONS • ESS2.A: EARTH MATERIALS AND SYSTEMS 	<ul style="list-style-type: none"> • ESS2.A: EARTH MATERIALS AND SYSTEMS • ESS1.C: THE HISTORY OF PLANET EARTH 	<ul style="list-style-type: none"> • ESS1.A: THE UNIVERSE AND ITS STARS • ESS1.B: EARTH AND THE SOLAR SYSTEM • ESS1.C: THE HISTORY OF PLANET EARTH 	<ul style="list-style-type: none"> • ESS3.A: NATURAL RESOURCES • ESS3.C: HUMAN IMPACTS ON EARTH SYSTEMS

	MATERIALS AND SYSTEMS		<ul style="list-style-type: none"> PS1.C: NUCLEAR PROCESSES 			
Science and Engineering Practices	Obtain, Evaluate, & Communicate Information					
	<ul style="list-style-type: none"> Developing and using models Analyzing and interpreting data Constructing explanations and designing solutions Engaging in argument from evidence 	<ul style="list-style-type: none"> Asking questions and defining problems Developing and using models Planning and carrying out investigations Constructing explanations and designing solutions Engaging in argument from evidence 	<ul style="list-style-type: none"> Asking questions and defining problems Developing and using models Constructing explanations and designing solutions Engaging in argument from evidence 	<ul style="list-style-type: none"> Asking questions and defining problems Using mathematics and computational thinking Analyzing and interpreting data Constructing explanations and designing solutions Engaging in argument from evidence 	<ul style="list-style-type: none"> Constructing explanations and designing solutions 	<ul style="list-style-type: none"> Asking questions and defining problems Analyzing and interpreting data Constructing explanations and designing solutions Engaging in argument from evidence
GSE	SES5 a,b,c,d,e,f	SES3 a,b,c,d, SES1 b	SES1 b,c SES2 a,b,c,d,e	SES2 d SES4 a, b, c, d, e	SES1 a	SES6 a,b,c,d