

GSE 8th Grade Physical Science 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	Interactions of Energy and Matter	Structure and Properties of Matter	Waves	Forces	Motion
Estimated Time	7 weeks	7 weeks	7 weeks	7 weeks	8 weeks
Crosscutting Concepts	<ul style="list-style-type: none"> Systems and system models Energy and matter Cause and effect Patterns 	<ul style="list-style-type: none"> Structure and function Energy and matter 	<ul style="list-style-type: none"> Cause and effect Structure and function Energy and matter 	<ul style="list-style-type: none"> Cause and effect Structure and function Energy and matter 	<ul style="list-style-type: none"> Cause and effect Energy and matter
Anchoring phenomenon	Year-Long Phenomenon: Human need for energy				
	MagLev: World's Fastest Train	Dinner is ready You are what you eat	Best seats in the house	Seeing is believing: railroad car implosion Aurora Borealis Electrical force fields	Vehicular motion Crashes Runaway truck ramps
Core ideas	<ul style="list-style-type: none"> Energy Energy transformations Heat transfer (conduction, radiation, and convection) Electric and magnetic forces (electromagnets) 	<ul style="list-style-type: none"> Structure and properties of matter Mixtures and solutions Elements and compounds Thermal energy Energy transformations Chemical and physical properties and changes 	<ul style="list-style-type: none"> Waves properties (frequency, amplitude, wavelength, and energy) Energy (electromagnetic spectrum) Light and sound Wave propagation Lenses characteristics 	<ul style="list-style-type: none"> Matter (structure and composition) Energy transformations Forces (friction, gravitational, electrical, and magnetic) Force fields Conductors and insulators 	<ul style="list-style-type: none"> Force and motion Speed and acceleration Speed and distance Newton's Laws of Motion Balance and unbalanced forces Energy transformations Kinetic and potential energy
Science and Engineering Practices	Obtain, Evaluate, and Communicate Information				
	<ul style="list-style-type: none"> Plan and carrying out investigations Engage in arguments 	<ul style="list-style-type: none"> Develop and use models Engage in 	<ul style="list-style-type: none"> Develop and use models Construct 	<ul style="list-style-type: none"> Develop and use models Construct 	<ul style="list-style-type: none"> Plan and carry out investigations Engage in arguments

	<p>from evidence</p> <ul style="list-style-type: none"> Construct explanations and design solutions 	<p>arguments from evidence</p> <ul style="list-style-type: none"> Construct explanations and design solutions Plan and carry out investigations 	<p>explanations and design solutions</p> <ul style="list-style-type: none"> Analyze and interpret data 	<p>from evidence</p>	
GSE	S8P2c,d; S8P5a,b,c	S8P1a,b,c,d,e,f; S8P2c,d	S8P4a,b,c,d,e,f,g	S8P1e; S8P2c; S8P5a,b,c	S8P3a,b,c; S8P2a,b