





CA Grade 6 Integrated NGSS Storyline: Systems within organisms and between them are adapted to Earth’s climate systems.

Instructional Segment Bundle	Anchoring Phenomena	Life Science (LS)	Earth & Space Sciences (ESS)	Physical Science (PS)	Engineering, Technology, and Applications to Science (ETS)
<i>A cell, a person, and planet Earth are each a system made up of subsystems.</i>					
<p>1</p> <p>MS-LS1-1 MS-LS1-2 MS-LS1-3 MS-LS1-8 MS-ESS2-4 MS-ESS2-6 MS-ETS1-1 MS-ETS1-2</p>		<p>All living things are made of cells.</p> <p>The body is a system made of interacting subsystems.</p>	<p>Water cycles among the land, ocean, and atmosphere.</p> <p>Weather and climate involve interactions among Earth’s subsystems</p>		<p>Design Criteria</p> <p>Evaluate Solutions</p>
<i>Weather conditions result from the interactions among different Earth subsystems.</i>					
<p>2</p> <p>MS-ESS2-4 MS-ESS2-6 MS-PS3-3 MS-PS3-4 MS-PS3-5 MS-ETS1-1 MS-ETS1-3</p>			<p>The movement of water and interacting air masses helps determine local weather patterns and conditions.</p> <p>The ocean has a strong influence on weather and climate.</p>	<p>Temperature measures the average kinetic energy of the particles that make up matter.</p> <p>Energy transfers from hot materials to cold materials.</p> <p>The type and amount of matter affects how much an object’s temperature will change.</p>	<p>Design Criteria</p> <p>Evaluate Solutions</p> <p>Analyze data</p> <p>Iteratively test and modify</p>

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Instructional Segments	Phenomena	Life Science (LS)	Earth & Space Sciences (ESS)	Physical Science (PS)	Engineering, Technology, and Applications to Science (ETS)
Regional climates strongly influence regional plant and animal structures and behaviors.					
<p>3</p> <p>MS-LS1-4 MS-LS1-5 MS-LS1-8 MS-LS3-2 MS-ESS2-5 MSESS2-6 MS-PS3-4</p>		<p>Variations of inherited traits arise from genetic differences.</p> <p>Genetic traits and local conditions affect the growth of organisms.</p> <p>Organisms rely on their body structures and behavior to survive long enough to reproduce.</p>	<p>Energy input from the Sun varies with latitude, creating patterns in climate.</p> <p>Energy flow through the atmosphere, hydrosphere, geosphere, and biosphere affect local climate.</p> <p>Density variations drive global patterns of air and ocean currents.</p>	<p>The type and amount of matter affects how much an object’s temperature will change.</p>	
Human activities can change the amount of global warming, which impacts plants and animals.					
<p>4</p> <p>MS-LS1-4 MS-LS1-5 MS-ESS3-3 MS-ESS3-5 MS-ETS1-1 MS-ETS1-2</p>		<p>Local conditions affect the growth of organisms.</p> <p>Organisms rely on their body structures and behavior to survive, but these adaptations may not be enough to survive as the climate changes.</p>	<p>Human changes to Earth’s environment can have dramatic impacts on different organisms.</p> <p>Burning fossil fuels is a major cause of global warming. Strategic choices can reduce the amounts and impacts of climate change.</p>		<p>Design Criteria</p> <p>Evaluate Solutions</p> <p>Analyze data</p>