

A Sense of Place: Sustainable Living Is Rooted in a Deep Knowledge of Place and Self

Theme 1: Grades 3–5

Strand	Topic	Learning Outcomes	Garden Activities	Classroom Extension (Suggestions for Teachers)	Common Core ELA	Common Core Math	NGSS	NHES
Weather and Seasonality	Names and patterns for local weather	<p>Assess natural weather events as they occur.</p> <p>Interpret observations of weather and how it affects human behavior.</p> <p>Recognize Hawaiian names, mo'olelo (stories) and oli (chants) for local weather patterns and phenomena.</p>	<p>Keep daily journal to record weather patterns. Graph or model these weather patterns.</p> <p>Introduce and encourage quantitative and qualitative weather observations. Investigate weather patterns over time; compare and contrast to current patterns to create and interpret a graph used to make predictions and draw conclusions about local weather.</p> <p>Research, discuss and analyze both oral and literal historical knowledge of the names and patterns for local weather unique to the school's ahupua'a and moku (place and district).</p> <p>Hypothesize local weather patterns using traditional mo'olelo, oli, 'ōlelo no'eau (stories, chants, proverbs).</p> <p>Construct and design signage in garden using 'ōlelo no'eau, traditional names and sayings for weather patterns.</p>	<p>3 RI.1 3 RI.7 4 RI.1 4 RI.7 5 RI.1 5 RI.7</p>	<p>3 SL.1 4 SL.1 5 SL.1 3 SL.4 4 SL.4 5 SL.4</p>	3.MD.3	3-ESS2.1 5-ESS1.2	NA
	Seasons and place	Recognize farming	Recognize and	3 RI.1	3 SL.1	NA	3-ESS2.1	NA

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		cycles in relationship to seasons and the role of the sun.	<p>understand Makahiki (annual festival) season. Introduce Makahiki season concepts as a traditional practice to recognize and maximize seasonality. Critique this practice to prove how it is still relevant today.</p> <p>Log temperature, rainfall, and weather patterns. Use data collection to design a seasonal calendar for your school garden.</p> <p>Identify Hawaiian seasonality using the Hawaiian moon calendar and apply to garden practices and activities.</p> <p>Analyze other seasonal calendars to apply relevant concepts in developing a calendar unique to your place.</p>	<p>4 RI.1 5 RI.1</p> <p>3 RI.7 4 RI.7 5 RI.7</p>	<p>4 SL.1 5 SL.1</p>		5-ESS1.2	
	The lunar cycle	Interpret the Hawaiian moon calendar. Recognize both the nightly and monthly names of the moon phases and how they affect farming.	<p>Use Hawaiian moon calendar to guide and track planting practices in the garden; make observations to understand relationships of moon phases to land, water, and self.</p> <p>Compare and contrast Hawaiian moon calendar with the western calendar.</p>	<p>3 RI.1 4 RI.1 5 RI.1</p> <p>3 RI.7 4 RI.7 5 RI.7</p>	<p>3 SL.1 4 SL.1 5 SL.1</p>	NA	5-ESS1.2	NA

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			<p>Design a model of a moon calendar and use to collect data during different moon phases. Compare and contrast with other moon calendars.</p> <p>Investigate the moon's function and influence on Earth and living things in the garden.</p>					
Place names, stories, and history (grounding)	Local and regional place names	<p>Know the name of your ahupua'a and its meaning.</p> <p>Using a map, reference place names within an ahupua'a and their relationship to the landscape.</p> <p>Recount mo'olelo (stories) from places within the moku (district).</p>	<p>Use historical and modern texts to compare and contrast with oral history about place, names, ahupua'a, introduce map, identify on map where your garden is and what ahupua'a you live in.</p> <p>Conduct an interview with a family or community member about traditional place names in your area and how they have or have not changed over time and share these stories.</p> <p>Investigate place names in your school's ahupua'a and create an index of place names of your area.</p>	<p>3 RI.9</p> <p>4 RI.1</p> <p>4 W.8</p>	<p>3 SL.1</p> <p>4 SL.1</p> <p>5 SL.1</p>	NA	NA	NA
	Relationship of self to place	Investigate your personal relationship to the garden.	<p>Write a response to a prompt or essential question: ("I am the land, the land is me.")</p> <p>What plant in the garden do you identify most with?)</p>		<p>3 W.1</p> <p>4 W.1</p> <p>5 W.1</p>	NA	NA	NA

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	Local legends and stories	<p>Describe how legends relate to agriculture, climate, environment, and natural weather events.</p> <p>Apply mo'olelo (legends) to planting in the garden.</p>	<p>Listen to mo'olelo about native plants and apply concepts to planting, stewardship, or uses of those plants.</p> <p>Recite, chant or illustrate one mo'olelo or story learned in the garden.</p> <p>Introduce story of Hāloa to connect relationship to human and land.</p> <p>Compare and contrast stories of other cultures and their relationships to place (land and plants).</p>		<p>3 SL.1 3 SL.4</p> <p>4 SL.1 4 SL.4</p> <p>5 SL.1 5 SL.4</p>	NA	NA	NA
	Local agricultural history, practices, plants, and people	<p>Define agriculture.</p> <p>Be familiar with your local agricultural history.</p> <p>Illustrate Kona and Kohala Field systems' historical land cultivation.</p>	<p>Create a timeline of agricultural history in your community.</p> <p>Introduce and discuss research from <i>Native Planters</i>.</p> <p>Visit local agricultural sites.</p> <p>Make traditional tools.</p> <p>Introduce, analyze and discuss traditional agriculture practices, resources, plants and people in your area. Compare and contrast traditional to current practices.</p> <p>Steward plants of historical relevance to your area.</p>		<p>3 SL.1 4 SL.1 5 SL.1</p>	NA	NA	NA

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Geography & Directionality	Directionality and orientation	Demonstrate understanding of orientation and directionality and apply to planting.	<p>Identify sun's direction and grow appropriate crops.</p> <p>Point and trace the sun's path in the garden.</p> <p>Use words like mauka/makai, ākau/hema, regional and geographical markers to describe directionality. Model understanding by facing these directions in the garden.</p> <p>Design a garden map incorporating directionality.</p>	<p>Measure area of ahupua'a by counting unit squares.</p> <p>Convert measurements to feet, meters, miles, kilometers.</p> <p>Measure and define school location on ahupua'a map in terms of coordinates.</p>	<p>3 SL.1</p> <p>4 SL.1</p> <p>5 SL.1</p>	<p>3.MD.6</p> <p>4.MD.3</p> <p>5.MD.1</p> <p>5.G.1</p>	<p>5-ESS1.1</p> <p>5-ESS1.2</p>	NA
	Major geographical features	<p>Make and read maps (qualitative and quantitative).</p> <p>Identify districts, mountains, regions, major archaeological and geographic features and how they affect growing conditions in the garden.</p>	<p>Through observation, be able to recognize and name geographical features in your area.</p> <p>Make and read maps to identify districts, regions, and major geographical features.</p> <p>Make a qualitative map of where the garden is within a district, recognizing different geographical features that influence the garden environment.</p> <p>Analyze ahupua'a map, and reproduce map in a model. Label the model to demonstrate directionality and</p>	<p>Measure area of ahupua'a by counting unit squares.</p> <p>Convert measurements to feet, meters, miles, kilometers.</p> <p>Measure and define school location on ahupua'a map in terms of coordinates.</p>	<p>3 SL.1</p> <p>4 SL.1</p> <p>5 SL.1</p>	<p>3.MD.6</p> <p>4.MD.3</p> <p>5.MD.1</p> <p>5.G.1</p>	NA	NA

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			geographical features. Compare and contrast ahupua'a with a map from somewhere else.					
	Relationship of family to "place"	Describe how the 'āina (land) sustains your family, school and community.	Identify family stories and relationship to plants and varieties.		3 SL.4 4 SL.4 5 SL.4	NA	NA	NA
Values	School values	Incorporate school values into the garden.	Incorporate school values into the garden.		3 SL.4 4 SL.4 5 SL.4	NA	NA	NA
	Hawaiian values	Practice Hawaiian values and describe how they relate to the garden. Describe kapu system as a tool for resource management.	Identify and give examples of Hawaiian values at work in the garden. Use Hawaiian values and 'ōlelo no'eau as agreements and assessments in the garden. Investigate Hawaiian resource management practices and compare to modern practices. Read mo'olelo about ancient times and relate kapu system to natural resource management. Investigate indigenous resource management practices and compare and contrast to modern practices. Develop a logical argument that		3 SL.4 4 SL.4 5 SL.4	NA	NA	NA

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			indigenous resource management can or cannot be incorporated today.					
	Best practices	Follow and model garden agreements in order to ensure a respectful, safe, and cooperative learning environment. Understand the consequences of personal actions in the garden.	Demonstrate garden protocol prior to entering garden. Establish or create garden agreements. Participate in recording observations and measurements for a garden log. Follow information from Best Practices HFSSGH poster.		3 SL.1 4 SL.1 5 SL.1	NA	NA	NA