



Shelton School District  
K-9 FieldSTEM 2019-20



Grade	Field Experience	Overview of field experience	Question to be investigated	Materials or Unit	NGSS Performance Expectations	Performance Task	Career Connections	Community Partners
K	Schoolyard and Twanoh State Park	Gather observations of living things in the school yard and the park and how the living things seem to be meeting their needs.	What do plants and animals need to survive?	FOSS Kit: Animals Two by Two	K-LS1-1 What plants and animals (including humans) need to survive.	Going to the Beach	Shellfish growers Biologists Divers	Mason Conservation District (CD)
1	Arcadia Point and Walker Park	Make observations of plants and animals in different habitats and how their external parts and behaviors help them to survive, grow and meet their needs.	How do plants and animals use their external parts and behaviors to help them survive, grow and meet their needs?	FOSS Kit: Plants and Animals  PEI Fostering Outdoor Observation Skills	1-LS3-1 young plants and animals are like, but not exactly like, their parents. 1-LS1-1 design a solution to a human problem by mimicking how plants and/or animals use external parts to help them. 1-LS1-2 read texts/use media to determine patterns in behavior of parents and offspring that help them.	Off to the Woods	What is a scientist?  Diver	Squaxin Island Tribe
2	Skokomish Estuary  Skokomish Longhouse & Community Center	Gather observations of the types of living and non-living things in two different habitats. Compare forest and estuary or compare wet and dry habitats of the estuary.	What is the diversity of living and non-living things we observe in the estuary and forest habitats?	FOSS Kits: Insects & Plants; Solids & Liquids, Pebbles, Sand & Silt	2-LS4-1 Compare the diversity of life in different habitats. 2-PS1-1 Investigations to describe and classify different kinds of materials by their observable properties.	Estuaries	Shellfish grower and harvester Biologist Engineer Ecologist	Mason CD Skokomish Indian Tribe
3	Little Skookum	Bioblitz at Little Skookum - identifying and counting organisms.	What do organisms need to grow and survive?	FOSS Kit: Structures of Life	3-LS4-3 In a particular habitat, some organisms can survive well, some survive less well, and some cannot survive at all. 3-LS4-2 variations in characteristics among individuals of the same species may provide advantages. 3-LS4-4 make a claim about the merit of a solution to a problem caused when the environment changes and types of plants and animals change.	Bioblitz	Biologist  Research scientist  Shellfish grower and harvester	Mason CD  Little Skookum Shellfish Growers  Pacific Shellfish Institute

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4	Kennedy Creek Salmon Trail (fall) Salmon Release (spring)	Gather observations of how the living things near the salmon trail are being affected by the environment. Investigate riparian area as healthy for salmon to spawn. Observe salmon structures that function in their survival.	Does the stream provide healthy habitat for salmon to spawn?	FOSS Kit: Environments	4-LS1-1 Animals have internal and external structures that function to support survival. 4-LS1-2 Animals receive different types of information through their senses	Save Our Salmon-Clean Water	Fish Biologist  Habitat restoration engineers and technicians	S. Sound Salmon Enhancement Group (SEG),  Hood Canal SEG (Salmon in the Classroom)  HS CTE Students
5	Cranberry Lake Mason Lake Forest Field Day	Gathering information about forest benefits i.e. forest products, recreation, healthy habitats, and water.	Is it possible for people to use the Earth's resources and maintain a healthy environment?	FOSS Kits: Earth & Sun Mixtures & Solutions	5-ESS3-1 Obtain and combine information about ways individual communities use science to protect the Earth's resources and environment. 5-LS1-1 Support an argument that plants get the materials they need for growth chiefly from air and water. 5-LS2-1 Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.	Forests Benefits  Forest Management	Silviculturalist  Biologist  Tree Farmer	Mason CD  Green Diamond Resources  Cranberry Lake Foundation
6	Hilburn Preserve	Gather observations of erosion and land movement and identify human impact and mitigation.	What earth processes have occurred at this site? What have stakeholders done to mitigate negative impacts on this site?	Pearson Elevate Science, Course 1: Earth's Surface and Systems	MS-ESS2-1 Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process. MS-ESS2-2 Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.		Habitat restoration specialists  Conservation specialists	Capitol Land Trust  Mason CD

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7	Bayshore Preserve	Over the course of 2 trips to Bayshore Preserve students will gather data on the changes in the rate of stream flow and on the return of saltwater flow into a newly restored salt marsh. The effect on populations in both habitat types will be observed.	Does the rate of flow in a freshwater stream influence the type and numbers of organisms that can survive there? Will the removal of an old sea wall and new trenches in an estuarine habitat encourage re-population by organisms?	Human Impact on Ecosystem Relationships	MS-LS2-2 Construct an explanation that predicts patterns of interaction among organisms across multiple ecosystems. MS-LS2-3 Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem. MS-LS2-4 Changes to the physical or biological components of an ecosystem affect populations. MS-ESS3-4 Humans impacts Earth's systems.	Change Over Time (WA State History & ELA)  Energizing Ecosystems (Science)  Stream Flow at Johns Creek (Math)	Habitat restoration specialists  Biologists	Capitol Land Trust
8	Cushman Dam: Powerhouse  Fish Hatchery  Pottlatch State Park	Make observations of energy transfers, renewable resources, electricity, engineering, water quality testing.	What are the benefits and impacts of hydropower in our region?	Renewable and Nonrenewable Energy	MS-PS3-2 Develop a model to describe when the arrangement of objects interacting at a distance changes, different amounts of energy are stored in the system. MS-PS3-5 Construct, use, present arguments to support the claim that when kinetic energy of an object changes, energy is transferred to or from the object. LS2-4 Construct an argument with empirical evidence that changes to physical or biological components of an ecosystem affect populations.	Hydropower	Electrician  Water Quality Technicians  Utility workers  Mechanics  Fishery Biologist  Recreation specialists	Tacoma Power  Skokomish Indian Tribe  Squaxin Island Tribe
9	Ecosystem Observation Network sites (forest, freshwater, saltwater)	Gather data and make comparisons of ecosystems.	What can we do to preserve the ecosystem of the Oakland Bay watershed?	Geology - soils subunit  PEI Healthy Waters Healthy Forests	MS-ESS3-4 Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	Ocean Acidification  Phytoplankton  Climate Carbon & Trees	Biologists  Foresters  City Managers	Mason CD  City of Shelton