

Lesson Plan	Key Concepts and Skills	Vocab	NGSS	CC
Unit 1 Lesson 1: Animal Tracks	Learn about animal tracks, read about tracks, examine, measure, compare tracks	Track, Plantigrade, digitigrade	4-LS1-1	K.CC.C.7, K.MD.A.1, K.MD.A.2, RL.K.1, RL.K.2, RL.K.3, RL.K.4, RL.K.7, SL.K.1, SL.K.2, RL.1.1, RL.1.2, RL.1.3, RL.1.7, SL.1.1, SL.1.2, 2.MD.A.1, RL.2.1, RL.2.7, SL.2.1, SL.2.2, 3.MD.B.4, RL.3.1, RL.3.7, SL.3.1, SL.3.2, RL.4.1, RL.4.2, RL.4.7, SL.4.1, SL.4.2, RL.5.1, SL.5.1, SL.5.2
Unit 1 Lesson 2: Scent Stations	Learn about habitats, 4 things habitat needs, what animals live where, Build scent station, measure area, examine tracks, "investigate", record on data sheet, compare tracks in guide, graph results	Habitat, Habitat Specialists vs Habitat Generalist, diversity, nocturnal	K-LS1-1, K-ESS3-1, K-2-ETS1-2, 2-LS4-1, 3-LS4-3, 3-5-ETS1-2, 3-5-ETS1-3, 4-LS1-1, 4-LS1-2	K.MD.A.1, K.G.B.5, 1.MD.C.4, 2.MD.A.1, 2.MD.D.10, 3.MD.B.3
Unit 1 Lesson 3: Indoor Track Casting	Animal Signs, animal tracks, creating a track story	All Above	K-2-ETS1-2, 3-LS4-3, 4-LS1-1	RI.K.1, RI.K.2, RI.K.3, RI.K.4, W.K.2, W.K.3, SL.K.1, SL.K.2, RI.1.1, RI.1.2, RI.1.3, RI.1.4, RI.1.7, SL.1.1, SL.1.2, RI.2.1, RI.2.2, RI.2.4, RI.2.7, SL.2.1, SL.2.2, 3.MD.A.2, RI.3.1, RI.3.2, RI.3.4, RI.3.7, SL.3.1, SL.3.2, RI.4.1, RI.4.2, RI.4.3, RI.4.4, SL.4.1, SL.4.2, RI.5.1, RI.5.2, RI.5.4, SL.5.1, SL.5.2
Unit 1 Lesson 4: Outdoor Track Casting	Animal signs, tracks, plaster casting outdoors, using real environment. Following a protocol, steps	All Above	K-ESS3-1, K-2-ETS1-2, K-ESS2-2, 3-LS4-3, 4-LS1-1	K.G.B.5, 3.MD.A.2
Unit 1 as a whole			K-LS1-1, K-ESS2-2, K-ESS3-1, K-2-ETS1-2, 2-LS4-1, 3-LS4-3, 3-5-ETS1-2, 3-5-ETS1-3, 4-LS1-1, 4-LS1-2	K.CC.C.7, K.MD.A.1, K.MD.A.2, K.G.B.5, RL.K.1, RI.K.1, RL.K.2, RI.K.2, RL.K.3, RI.K.3, RL.K.4, RI.K.4, RL.K.7, RI.K.7, W.K.2, W.K.3, SL.K.1, SL.K.2, 1.MD.C.4, RL.1.1, RI.1.1, RL.1.2, RI.1.2, RL.1.3, RI.1.3, RI.1.4, RL.1.7, RI.1.7, W.1.7, SL.1.1, SL.1.2, 2.MD.A.1, 2.MD.D.10, RI.2.2, RI.2.4, RL.2.1, RI.2.1, RL.2.7, RI.2.7, W.2.7, SL.2.1, SL.2.2, 3.MD.A.2, 3.MD.B.3, 3.MD.B.4, RL.3.1, RI.3.1, RI.3.2, RI.3.4, RL.3.7, RI.3.7, SL.3.1, SL.3.2, RL.4.1, RI.4.1, RL.4.2, RI.4.2, RI.4.3, RI.4.4, RL.4.7, RI.4.7, SL.4.1, SL.4.2, RL.5.1, RI.5.1, RI.5.2, RI.5.4, SL.5.1, SL.5.2

Eco-llapse	Living and non-living things make an Ecosystem, Producers and Consumer interactions, if species disappear the whole excosystem can collapse	Ecosystem, producer, consumer, secondary consumer, individual, population, community,	K-LS1-1, K-ESS3-1, K-ESS3-3, 2-LS4-1, 3-LS4-3, 5-PS3-1, 5-LS1-1, 5-LS2-1	K.CC.B.4, K.CC.B.5, K.CC.C.6, K.OA.A.5, K.MD.A.2, K.MD.B.3, RF.K.1, RF.K.2, RF.K.3, W.K.2, W.K.3, SL.K.1, L.K.1, L.K.2, 1.OA.C.5, 1.OA.C.6, 1.NBT.C.4, 1.MD.C.4, RF.1.1, RF.1.2, RF.1.3, W.1.2, W.1.3, SL.1.1, L.1.1, L.1.2, 2.OA.B.2, 2.NBT.A.2, 2.MD.D.10, RF.2.3, W.2.2, W.2.3, SL.2.1, L.2.1, L.2.2, 3.MD.B.3, RF.3.3, W.3.2, W.3.3, SL.3.1, L.3.1, L.3.2, RF.4.3, SL.4.1, RF.5.3, SL.5.1
Coloration Exploration	Different coloration strategies affect an animals behavior and survival. Student make graphs with data, use art and dramatic play to understand concepts.	Coloration, Aposematic coloration, cryptic coloration, sexual dimorphism	K-LS1-1, 1-LS1-2, 3-LS4-2, 4-LS1-1	K.CC.A.3, KCC.B.4, K.CC.B.5, K.CC.C.6, K.CC.C.7, W.K.2, W.K.3, L.K.1, L.K.2, RF.K.1, RF.K.2, RF.K.3 1.MD.C.4, SL.1.5, W.1.2, W.1.3, L.1.1, L.1.2, RF.1.1, RF.1.2, RF.1.3, 2.MD.D.10, W.2.2, W.2.3, L.2.1, L.2.2, RF.2.3, 3.MD.B.3, 3.G.A.2, 3.OA.A.1, 3.NBT.A.3, 3.NF.A.1, W.3.2, W.3.3, L.3.1, L.3.2, RF.3.3, 4.NF.A.1, 4.NF.C.5, RF.4.3, RF.5.3
Unit 2 Lesson 1: Be a Tooth Sleuth	Look at skulls and teeth to figure out eating habits. Different animals have different teeth for different habits.	Carnivores, omnivores, and herbivores	K-LS1-1, K-ESS3-1, 4-LS-1	RF.K.1, RF.K.2, RF.K.3, L.K.1, L.K.2, RF.1.1, RF.1.2, RF.1.3, SL.K.1, L.1.1, L.1.2, SL.1.1, RF.2.3, L.2.1, L.2.2, SL.2.1, RF.3.3, L.3.1, L.3.2, SL.3.1, RF.4.3, SL.4.1, RF.5.3 SL.5.1
Unit 2 Lesson 2: Poster Exploration of Food Webs	Make list of foods and decide if its a producer or consumer, look at food web and put animals into correct categories	Producer, consumer, primary, secondary, tertiary consumers, detritivores	K-LS1-1, K-ESS3-1, 5-PS3-1, 5-LS2-1	L.K.1, L.K.2, L.1.1, L.1.2, L.2.1, L.2.2, L.3.1, L.3.2
Unit 2 Lesson 3: Student Investigations of Food Webs	String activity connecting the food web. Discover what happens when producers are lost.	same as above	K-LS1-1, K-ESS3-1, 5-PS3-1, 5-LS2-1	2.MD.A.3
Unit 2 Lesson 4: Energy Flows and Food Webs	Owl pellet dissection	owl pellet	K-LS1-1, K-ESS3-1, 5-LS2-1	K.CC.A.3, K.CC.B.4, K.CC.B.5, K.CC.C.6, K.CC.C.7, L.K.1, L.K.2, RK.K.1, RF.K.2, RF.K.3, SL.K.1, 1.MD.C.4, L.1.1, L.1.2, RF.1.1, RF.1.2, RF.1.3, SL.1.1, 2.MD.D.10, 2.NBT.A.2, L.2.1, L.2.2, RF.2.3, SL.2.1, 3.MD.B.3, L.3.1, L.3.2, RF.3.3, SL.3.1, RF.4.3, SL.4.1, RF.5.3, SL.5.1

Unit 2 Mammal Food Webs as a whole			K-LS1-1, K-ESS3-1, 4-LS1-1, 5-PS3-1, 5-LS2-1	K.CC.A.3, K.CC.B.4, K.CC.B.5, K.CC.C.6, K.CC.C.7, L.K.1, L.K.2, RK.K.1, RF.K.2, RF.K.3, SL.K.1, 1.MD.C.4, L.1.1, L.1.2, RF.1.1, RF.1.2, RF.1.3, SL.1.1, 2.MD.A.3, 2.MD.D.10, 2.NBT.A.2, L.2.1, L.2.2, RF.2.3, SL.2.1, 3.MD.B.3, L.3.1, L.3.2, RF.3.3, SL.3.1, RF.4.3, SL.4.1, RF.5.3, SL.5.1
Unit 5 Ashes to Ashes: Lesson 1 Succession and Disturbance	Fire hits plant focused ecosystem	Disturbance, succession, annual, perennial, shrubs, trees, hypothesis, ecosystem	All standards worked for both lessons	All standards worked for both lessons
Unit 5 Ashes to Ashes: Lesson 2 Wildlife Habitat through Succession and Disturbance	Fire hits wildlife and plant ecosystem	same as above	All standards worked for both lessons	All standards worked for both lessons
Unit 5 Ashes to Ashes as a whole			K-LS1-1, K-ESS3-1, 2-LS2-2, 2-LS4-1, 3-LS4-3	K.CC.A.3, K.CC.B.4, K.CC.C.6, K.CC.C.7, L.K.1, L.K.2, RK.K.1, RF.K.2, RF.K.3, SL.K.1, W.K.8, L.1.1, L.1.2, RF.1.1, RF.1.2, RF.1.3, SL.1.1, W.1.8, 2.MD.D.10, 2.NBT.A.2, L.2.1, L.2.2, RF.2.3, SL.2.1, W.2.8, 3.MD.B.3, L.3.1, L.3.2, RF.3.3, SL.3.1, RF.4.3, SL.4.1, RF.5.3, SL.5.1
Unit 4: Mammals and Ecosystems: Lesson 1 Mammal Facts	Get assigned an ecosystem, research 5 mammals, create a paper ecosystem and to scale mammals, present to class	Carnivore, ecosystem, environment, habitat, herbivore, mammal, niche, omnivore, predator, prey	All standards worked for both lessons	See unit as whole - does not include W.K.6-W.5.6
Unit 4: Mammals and Ecosystems: Lesson 2 Advanced Optional Activities	Create a powerpoint of fact of the mammals and ecosystem and present to class	same as above	All standards worked for both lessons	All the same except lesson 2 includes: W.K.6, W.1.6, W.2.6, W.3.6, W.3.6, W.4.6, W.5.6

Unit 4: Mammals and Ecosystems as a whole			K-LS1-1, K-ESS3-1, 2-LS4-1, 3-LS4-3, 4-LS1-1	K.MD.A.1, K.MD.A.2, L.K.1, L.K.2, L.K.6, RF.K.1, RF.K.2, RF.K.3, SL.K.1, SL.K.5, W.K.2, W.K.6, W.K.7, W.K.8, RI.K.7, RI.K.9, RI.K.10, 1.MD.A.2, L.1.1, L.1.2, L.1.6, RF.1.1, RF.1.2, RF.1.3, SL.1.1, SL.1.5, W.1.2, W.1.6, W.1.7, W.1.8, RI.1.7, RI.1.9, RI.1.10, 2.MD.A.4, L.2.1, L.2.2, L.2.6, RF.2.3, SL.2.1, W.2.2, W.2.6, W.2.7, W.2.8, RI.2.7, RI.2.9, RI.2.10, L.3.1, L.3.2, L.3.6, RF.3.3, SL.3.1, W.3.2, W.3.6, W.3.7, W.3.8, RI.3.7, RI.3.9, RI.3.10, L.4.6, RF.4.3, SL.4.1, W.4.6, W.4.7, W.4.8, RI.4.7, RI.4.9, RI.4.10, L.5.6, RF.5.3, SL.5.1, W.5.6, W.5.7, W.5.8, RI.5.7, RI.5.9, RI.5.10
Discovering the Watershed	Learning about watersheds and water quality. Plus how humans impact the watershed.	watershed, indicator species, water quality, erosion, sedimentation, leaching, groundwater	K-LS1-1, K-ESS3-1, K-ESS3-3, 2-ESS2-1, 2-ESS2-3, 3-LS4-3, 3-LS4-4, 4-LS1-1, 4-ESS2-2, 5-ESS3-1	K.CC.B.4, K.CC.B.5, K.CC.C.6, K.OA.A.1, K.OA.A.5, L.K.1, L.K.2, RK.K.1, RF.K.2, RF.K.3, SL.K.1, 1.OA.C.5, 1.OA.C.6, L.1.1, L.1.2, RF.1.1, RF.1.2, RF.1.3, SL.1.1, L.2.1, L.2.2, RF.2.3, SL.2.1, L.3.1, L.3.2, RF.3.3, SL.3.1, RF.4.3, SL.4.1, RF.5.3, SL.5.1
Healthy Water, Happy Home	Making choices to improve water quality, learn how good water quality helps indicator species. Play an interactive game that puts your knowledge to the test.	water quality, runoff, sediment, habitat, dissolved oxygen, amphibian, indicator species, eastern hellbender	K-LS1-1, K-ESS3-1, K-ESS3-3, 2-ESS2-1, 3-LS4-3, 3-LS4-4, 4-LS1-1, 5-ESS3-1, 3-5-ET1-2	K.CC.B.4, K.CC.B.5, L.K.1, L.K.2, L.K.6, RK.K.1, RF.K.2, RF.K.3, W.K.2, W.K.3, W.K.8, SL.K.1, SL.K.5, SL.K.6, L.1.1, L.1.2, L.1.6, RF.1.1, RF.1.2, RF.1.3, W.1.2, W.1.8, SL.1.1, SL.1.5, SL.1.6, 2.MD.D.10, L.2.1, L.2.2, L.2.6, RF.2.3, W.2.5, W.2.8, SL.2.1, SL.2.5, SL.2.6, 3.MD.B.3, L.3.1, L.3.2, L.3.6, RF.3.3, W.3.5, SL.3.1, SL.3.6, L.4.6, RF.4.3, W.4.5, SL.4.1, SL.4.6, L.5.6, RF.5.3, W.5.5, SL.5.1, SL.5.6
Hellbenders Rock!	Learn about hellbenders, their life stages, habitat, relationship with water, and what we can do to keep the water and the species safe and well!	Eastern hellbender, amphibian, larvae, juvenile, sediment, indicator species, habitat	K-LS1-1, K-ESS3-1, K-ESS3-3, 3-LS1-1, 3-LS4-3, 3-LS4-4, 4-LS1-1, 5-ESS3-1	L.K.1, L.K.2, RF.K.1, RF.K.2, RF.K.3, SL.K.1, SL.K.5, L.1.1, L.1.2, RF.1.1, RF.1.2, RF.1.3, SL.1.1, SL.1.5, 2.MD.D.10, L.2.1, L.2.2, RF.2.3, SL.2.1, SL.2.5, 3.MD.B.3, L.3.1, L.3.2, RF.3.3, SL.3.1, RF.4.3, SL.4.1, RF.5.3, SL.5.1

Invasive Plants	Learn about garlic mustard and the impacts of invasive speices. Play a game to watch how quickly invasive plants can take over. Fill out worksheet to support what they learned.	Invasive Plants, native plants, ecosystem, population, community, forest ecosystem	K-LS1-1, K-ESS2-2, K-ESS3-1, K-ESS3-3, 1-LS3-1, 3-LS4-3, 3-LS4-4,4-ESS2-2, 5-LS1-1, 5-ESS3-1	K.CC.B.5, L.K.1, L.K.2, L.K.6, RF.K.1, RF.K.2, RF.K.3, SL.K.1, L.1.1, L.1.2, L.1.6, RF.1.1, RF.1.2, RF.1.3, SL.1.1, L.2.1, L.2.2, L.2.6, RF.2.3, SL.2.1, L.3.1, L.3.2, L.3.6, RF.3.3, SL.3.1, L.4.6, RF.4.3, SL.4.1, L.5.6, RF.5.3, SL.5.1
Unit 3: Reptiles, Amphibians, and Scientific Method Lesson 1: Habitat Selection	filling out worksheets to learn about reptiles, amphibians, and life cycle. Put critters in correct habitat.	herpetologist, reptiles, amphibians, life cycle, thermoregulation, habitat,	K-LS1-1, K-ESS3-1, 2-LS4-1, 3-LS4-3, 3-LS1-1, 4-LS1-1	L.K.1, L.K.2, L.K.6, RF.K.1, RF.K.2, RF.K.3, SL.K.1, L.1.1, L.1.2, L.1.6, RF.1.1, RF.1.2, RF.1.3, SL.1.1, L.2.1, L.2.2, L.2.6, RF.2.3, SL.2.1, L.3.1, L.3.2, L.3.6, RF.3.3, SL.3.1, L.4.6, RF.4.3, SL.4.1, L.5.6, RF.5.3, SL.5.1
Unit 3: Reptiles, Amphibians, and Scientific Method Lesson 2: Icy 'n Hot Crickets	experiment with cold crickets, hot crickets, and control group. Filling out worksheets and making hypothesis	ectotherm, herpetologist	K-ESS3-1, 4-LS1-1, 4-LS1-2	L.K.1, L.K.2, L.K.6, RF.K.1, RF.K.2, RF.K.3, SL.K.1, W.K.8, 1.MD.C.4, L.1.1, L.1.2, L.1.6, RF.1.1, RF.1.2, RF.1.3, SL.1.1, W.1.8, L.2.1, L.2.2, L.2.6, RF.2.3, SL.2.1, W.2.8, L.3.1, L.3.2, L.3.6, RF.3.3, SL.3.1, L.4.6, RF.4.3, SL.4.1, L.5.6, RF.5.3, SL.5.1
Unit 3: Reptiles, Amphibians, and Scientific Method Lesson 3: Hot Rock	Temperature experiment using rock and the areas around the rock. Filling out worksheet and making a hypothesis	ectotherm, thermoregulation, herpetologist	K-ESS3-1, K-PS3-1, 4-LS1-1	K.CC.B.5, L.K.1, L.K.2, L.K.6, RF.K.1, RF.K.2, RF.K.3, SL.K.1, W.K.8, 1.MD.C.4, L.1.1, L.1.2, L.1.6, RF.1.1, RF.1.2, RF.1.3, SL.1.1, W.1.8, L.2.1, L.2.2, L.2.6, RF.2.3, SL.2.1, W.2.8, L.3.1, L.3.2, L.3.6, RF.3.3, SL.3.1, L.4.6, RF.4.3, SL.4.1, L.5.6, RF.5.3, SL.5.1
Unit 3 as a whole			K-LS1-1, K-ESS3-1, K-PS3-1, 2-LS4-1, 3-LS4-3, 3-LS1-1, 4-LS1-1, 4-LS1-2	K.CC.B.5, L.K.1, L.K.2, L.K.6, RF.K.1, RF.K.2, RF.K.3, SL.K.1, W.K.8, 1.MD.C.4, L.1.1, L.1.2, L.1.6, RF.1.1, RF.1.2, RF.1.3, SL.1.1, W.1.8, L.2.1, L.2.2, L.2.6, RF.2.3, SL.2.1, W.2.8, L.3.1, L.3.2, L.3.6, RF.3.3, SL.3.1, L.4.6, RF.4.3, SL.4.1, L.5.6, RF.5.3, SL.5.1