

ACE Education Curriculum Choices

<u>TOPIC</u>	<u>DESCRIPTION</u>	<u>ACTIVITIES</u>	<u>GRADES</u>
Adaptation	Games and activities to focus on a definition and understanding. Includes the concept of camouflage.	Adaptations and Nest Building Animal Tracks Bat & Moth Birds & Caterpillars Birds & Worms Relay Macroinvertebrate Mayhem Nature Center Thicket Game Wildlife and Adaptations Hike	K-2 3-8 1-5 K-2 K-4 3-8 K-8 3-8 K-8
Bird Study	Includes bird adaptation, identification, habitats, behavior, and bird watching skills.	Binocular Use & Birding Birding Early a.m. Evening Birding Field Marks & Binoc Use	K-8 3-8 Overnights 3-8 Overnights 3-8
Constellation Study	Includes identification; mythology – Native American, Greek, Roman; and astronomy.	Constellations, Mythology, and More Daytime Constellation Stories	3-8 Overnights K-8
Cycles	What is a cycle? Explore how nature constantly cycles and recycles.	Incredible Journey (Water Cycle) Rock Cycle Tree Lifecycle Scavenger Hunt Who ate Roger Williams? (Nutrient Cycling)	3-8 3-8 2-4 4-8

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Ecosystems	Be scientists investigating the biotic and abiotic factors of different ecosystems. Compare and contrast.	Ecosystem tools Ecosystems Envirocups Swamp Excursion Wetland Metaphors	4-8 4-8 K-5 4-8 3-8
Endangered & Threatened Species	What is an endangered species? A threatened species? Do we have any at Agape? Explore factors that lead to both decline and recovery of a variety of species. (Availability of bald eagle observations depends on the whim of the eagles.)	Deadly Links Macroinvertebrate Mayhem Migration Headache Oh, Deer Swamp Excursion	2-8 3-8 2-8 2-8 4-8
Environmental Values	Activities in which the students are challenged to consider how they depend on and value the natural environment. (See also: Swamp Excursion and World Population.)	Edible Landfill Ethi-Reasoning Fossil Fuel Game In the Driver's Seat Lifestyle Relay Lifestyle Role-play Nature Center Recycling Relay They Want to do What? Trash Stash Timeline Weighing Waste Wetland Metaphors What Can We Do?	3-8 5-8 3-8 6-8 K-3 K-3 K-8 3-6 7-8 K-8 3-8 K-8 8

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Food Web/Food Chain	Games and activities to focus on a definition and understanding.		
		Deadly Links	2-8
		Pond Life/Food Web	K-8
		Stream Life/Food Web	K-8
		Webbing pictures	K-6
		Webbing Yarn	3-8
Habitat	(See Wildlife & Habitat)		
Forest Study	Explore the dynamics of a Mixed Forest Ecosystem. Compare the effects of forest management and post-hurricane management and recovery. Investigate diversity, complexity, and forest values. (See also: Trees.)		
		Forestry Practices	5-8
		Mixed Forest Ecosystem	3-8
		Rotting Log	K-8
		Tree ID	4-8
Geology Explorations	Learn the rock cycle. Explore interesting land forms, rock formations, quartz veins, and a magnetite mine pit. This is a good companion activity with Soil Study.		
		Rock Cycle Simulation	3-8
		Land Forms Hike - short	3-8
		Land Forms Hike - long	5-8
Insect Study	Includes adaptations, food chains, life cycles, insect observation, and collecting techniques.		
		Bugs 'n' Stuff	K-8
		Insect Relay	K-4
Local History	Explore the history of people and the land at Agape. May include a log cabin, homestead site, moonshine still remains, slave cemetery, fields, and a Civil War mining site. (Extent of sites visited depends on time available.)		
		Living History - Mamie Douglas	4-8
		Local History Hike	4-8

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Marsh and Swamp Excursion	A comparison study of marsh and swamp habitats, how they develop, and their residents.	Marsh & Swamp Ecosystems Marsh Study Marsh Visit Migration Headache Swamp Excursion Wetland Metaphors	4-8 3-8 K-2 2-8 4-8 3-8
Native Americans	Explore Native American games, hunting techniques, edible and medicinal plants. Build a temporary shelter.	Going Hunting? (a.k.a. Native Americans) Native American Games Plant Uses	K-8 K-6 4-8
Plant Study	Includes identification and edible/medicinal/utility uses. Wildflowers included according to season.	Create a Tree Let's Make a Flower Plant Uses Rotting Log Tree ID Tree Lifecycle Scavenger Hunt Wildflower Study	K-8 K-5 4-8 K-8 4-8 2-5 4-8
Pond Study	A study of its residents and features of a pond habitat. May include aquatic food chain/web. Longer activities include study of microscopic pond life. (Offered March through mid-November.)	Pond Life Pond Life/Food Web Pond Water Quality - Abiotic & Biotic Pond Water Quality - Biotic	K-8 K-5 7-8 3-8
Pond Study – Microlife	Go beyond the macrocritters of the pond into the microscopic world. See a variety of microlife and get a close-up look at some familiar creatures and plants of the pond. (Offered March through October.)	Pond Microlife	3-8

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Predator/Prey Relationships	Games and activities to focus on a definition, the concept of interdependence, limiting factors, and human involvement.	Bat and Moth Birds and Caterpillars Birds and Worms Relay Deadly Links Deer and Wolf Muskox Maneuvers Predator-Prey Game Predators - That's Incredible Quick Frozen Critters Thicket Game	1-5 K-2 K-4 2-8 K-8 3-8 3-8 K-8 2-8 3-8
Seasonal Changes	Observation of natural changes occurring with the passing seasons.	Envirocups - Seasonal Seasonal Changes Hike	K-7 K-8
Sensory Awareness	Using all the senses to develop a new awareness of the natural world.	Envirocups - Sensory Sensory Awareness Hike Sounds - Evening/Night Hike	1-7 K-6 3-8 Overnights
Settlers/Pioneers (see Local History)		Pioneer History Hike	4-8
Snake Presentation	Meet Ashley, Waldo, and RC: our resident rat snakes. Learn about snakes and other reptiles. Hold or touch Ashley (if desired).	Ashley of Agape & Friends	K-8
Soil Study	Comparison of soil in different habitats: composition, life in the soil, types, and uses.	Magic Soil Bag Soil Compaction Soil Composition Soil Layering Soil pH Stop the Drop	K-6 3-8 5-8 3-8 5-8 K-6

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Stream Study	A study of its residents and features of moving water as connected with the habitat. Longer studies may include comparison of different sized streams.	Comparisons Between Streams	7-8
		Macroinvertebrate Mayhem	3-8
		Stream Life/Food Web	K-5
		Stream Water Quality	3-8
		Water Quality - Abiotic/Biotic	7-8
Survival Skills	Learn outdoor living skills, build a temporary shelter.	How Many Bears...?	2-8
		Survival Skills (a.k.a. Lost in the Woods)	3-8
Swamp Excursion	Explore the plant and animal life unique to the swamp. Compare soil and plant life of the swamp with upland areas. See the beaver dam and tour the white-tailed deer "living room."	Swamp Excursion	4-8
Trees	Activities include identification, games to teach tree parts, folklore, value to humans, and conservation. (See also: Forest Study.)	Create a Tree	K-8
		Tree ID	4-8
		Tree Lifecycle Scavenger Hunt	2-4
		Tree Uses	5-8
Water Quality	Explore the pond and stream. Use the biotic index to determine water quality. May include microscopic examination of pond life.	Water Quality - Biotic Index	3-8
Water Quality - Advanced	Explore the pond and stream. Use the biotic index and analyze abiotic factors to determine water quality. Includes microscopic examination of pond life.	Water Quality - Biotic Index, Abiotic Factors	7-8
		Water Quality - Pond Microlife	7-8
Weather	Learn about weather instruments, the causes and effects of weather, and weather folklore (or is it?).	Weather Gizmos and Folklore	K-4

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Wildlife/Habitat Study	Introduces animals of the woodlands, adaptations, homes, and habitat needs. May include observation of animal tracks.	Animal Tracks Habitat Lapsit How Many Bears...? Macroinvertebrate Mayhem Migration Headache Nature Center Oh, Deer Population Circle Timber! Wetland Metaphors Wildlife & Habitat Hike	3-8 3-8 2-8 3-8 2-8 K-8 2-8 4-8 4-8 K-8 K-8
World Population	Activities designed to explore the distribution of population, carrying capacity, growth rates, wealth, energy, food, and human impact. (See also Environmental Values.)	Food for Thought Fossil Fuel Game Population Circle Population Connections & Lorax Lessons Stork & Grim Reaper Timber! Trash Stash Timeline	4-8 3-8 4-8 K-8 3-8 4-8 K-8