## **School Programs by Season**

Season	Grade & Standard	Title and Description	Duration	Location
Fall (Aug-Nov)	Pre-K ECOT 2.1,10.1, 14.1-16.1, 20.1	Apples, Apples! Children learn about an apple's life cycle through kinesthetic movement, tactile creative exploration, and press apples into juice.	~ 1 hour	LA Nature Center, or Los Luceros Historic Site
Fall (Aug-Nov)	Pre-K ECOT 2.1,10.1, 14.1-16.1, 20.1	Friends and Flowers Learn about the insects that use incredible ways to pollinate flowers.	~1 hour	LA Nature Center or other natural area
Fall (Aug-Nov)	Kinder K-ESS3-1	Patterns and Numbers in Nature Students use their senses and active play to describe how patterns and colors help living things survive.	~2 hours	LA Nature Center or other natural area
Fall (Aug-Nov)	1st 1-LS3-1	Plant Power-Ecology Hike Students will explore trails to learn ways plants meet their needs so they can grow and survive.	~1 hour	Trail near School or other natural area
Fall (Aug-Nov)	2nd 2-LS2-2	Seeds on the Move-Ecology Hike Students will explore trails near their school to discover the ways plants have adapted to disperse their seeds.	~1 hour	Trail near School or other natural area
Fall (Aug-Nov)	3rd 3-LS4-3 3-LS4-4	Thrive in the Dry During this program, students will examine adaptations that help plants conserve water through classroom discussion and exploration in an open space near your school.	~1 hour	Trail near School or other natural area
Fall (Aug-Nov)	5th 5-ESS3-1	Bird Banding Students will observe scientists banding birds as well as practice science skills by banding and collecting data on a mock bird. This is an immersive field science experience that includes	~2.5 hours	Alamo Boundary Trailhead, Bandelier NM

		a pre and post-classroom lesson.		
Fall (Aug-Nov)	6th MS-ESS2-2	Rocks and Rifts Geology-Caldera formation and geology of the Jemez Mountains or Geology and Hydrology of the Rio Grande Rift	~2.5 hours	Valles Caldera or Los Luceros Historic Site
Fall (Oct-Nov)	7th MS-LS2-1 MS-LS2-4	Forest Fire Ecology This 7th-grade program engages students in field data gathering to learn about forest ecology and what role fire plays in that system.		Forested area near your school
Winter (Dec-Mar)	Pre-K ECOT 2.1,10.1, 14.1-16.1, 20.1	To Hibernate or Not? Children will learn how bears, tree squirrels, and groundhogs survive during the winter months and explore animal tracks.	~1 hour	School site or other natural area
Winter (Dec-Mar)	Pre-K ECOT 2.1,10.1,14. 1-16.1, 20.1	Snow, Ice, and Water Students will learn all about snow and measure how much water there is in snow.	~1 hour	LA Nature Center or other natural area
Winter (Dec-Mar)	Pre-K ECOT 2.1,10.1,14. 1-16.1, 20.1	Day and Night on Earth Explore the difference between night and day in the planetarium and participate in hands-on activities to learn why we see day and night.	~1 hour	LANC Planetarium
Winter (Dec-Mar)	Kinder K-2-ETS1-2	Shapes in Space "Fly to the Planets in our Solar System!" Students will explore how the shape of an object influences its ability to move when pushed or pulled.	~1 hour	LANC Planetarium
Winter (Dec-Mar)	1st 1-ESS1-1	Seasonal Changes in the Night Sky Discover how our Sun moves across the sky and learn about different constellations that appear during different seasons.	~1.5 hours	LANC Planetarium
Winter (Dec-Mar)	2nd 2-ESS1	Out of this World Weathering Explore the surfaces of our Moon, Earth, and Mars to learn why erosion and weathering are different on each surface.	~1.5 hours	LANC Planetarium

Winter (Dec-Mar)	3rd 3-PS2-3 3-PS2-4	Making Magnets Students learn where the electricity in Los Alamos County comes from, and why it is important to conserve electricity through a hands-on activity using electricity to make a magnet and vice versa. Available to LAPS.	~45 min - 1 hour	School classroom
Winter (Dec-Mar)	3rd 3-LS4-3 3-LS4-4	Space Exploration Students visit the LANC planetarium to learn about space exploration: Apollo/Artemis, ISS 360, the Mars rovers, and the James Webb telescope.	~1.5 hours	LANC Planetarium
Winter (Dec-Mar)	4th <u>4-PS3-2</u> <u>4-ESS3-1</u>	Where's the Energy? Students will participate in a skit on power plant energy transformation, and discuss the pros and cons of renewable and non-renewable sources - emphasizing the importance of conserving electricity in Los Alamos County.	~45 min - 1 hour	School classroom
Winter (Dec-Mar)	4th 4-LS1-1	Animals in Winter Snowshoe Hike Students will learn how to safely snowshoe in a group and will use observation skills to notice evidence of animals living in the area.	~2 hours	Los Alamos Golf Course (if snow conditions allow) Option 2: Valles Caldera National Preserve
Winter (Dec-Mar)	4th LARL.4.NM. 3a	Stories in the Sky Students visit the LANC planetarium for a presentation on constellations and their associated myths from different cultures around the world.	~2 hours	LANC Planetarium
Winter (Dec-Mar)	5th 5-ESS2-2	Snow and Aquifers: This is a two-day program that begins with a pre-lesson in the classroom, where students learn the importance of water conservation by constructing aquifer models, engineering water extraction solutions, and observing the consequences of over-pumping.  Day two takes place in the field where students learn the role of snow in nourishing our aquifer through different experiments while snowshoeing.	~1 hour classroom & ~2 hours in Field	School Classroom and Los Alamos Golf Course (if snow conditions allow) Option 2: Valles Caldera National Preserve

Winter (Dec-Mar)	5th 5-ESS1-1	The Spaces between Space. Students visit the LANC planetarium to learn about distances between planets in our Solar System and to certain stars followed by an activity to discover the relative sizes of the planets in our Solar System.	~1.5 hours	LANC Planetarium
Winter (Dec-Mar)	6th MS-ESS1-1	Space Systems and Eclipses Students visit the LANC planetarium to learn about lunar phases, eclipses, and gravity. Students build a model to understand the difference between lunar and solar eclipses.	~1.5 hours	LANC Planetarium
Winter (Dec-Mar)	6th MS-ESS2-4	Water Cycle Snowshoe Hike This is a two-day program that begins with a lesson in the classroom where students will focus on pathways of the hydrologic cycle in their watershed.  Day two while in the field, students will measure snowpack, and snow water equivalent, and learn why snowflakes have different patterns and sizes.	~1 hour classroom & ~2 hours in Field	School Classroom and Los Alamos Golf Course (if snow conditions allow) Option 2: Valles Caldera National Preserve
Spring (Apr-May)	Pre-K ECOT 2.1,10.1,14. 1-16.1, 20.1	A Plant's Life Learn about the life cycle of plants and the insects that prepare soil that plants need and plant a seed to transplant at a later date.	~1 hour	At school site or other natural area
<b>Spring</b> (Apr-May	Pre-K ECOT 2.1,10.1,14. 1-16.1, 20.1	1st Signs of Spring Who's waking up? Focus on the unique life cycle of Mourning Cloak butterflies.	~1 hour	At school site or other natural area
Spring (Apr-May)	Pre-K ECOT 2.1,10.1,14. 1-16.1, 20.1	Everything under the Sun! Discover what solar energy can do and learn how animals regulate their body temperature externally.	~1 hour	LA Nature Center or other Natural Area
Spring (Apr-May)	Kinder K-2-ETS1-2	Patterns and Numbers in Nature Students use their senses and active play to describe how patterns and colors help living things survive.	~2 hours	LA Nature Center or other Natural Area

Spring (Apr-May)	1st 1-LS1-1	Plant Power-Ecology Hike Students will explore trails to learn ways plants meet their needs so they can grow and survive.	~1 hour	Trail near School or other natural area
Spring (Apr-May)	2nd 2-ESS1-1	Land of Change Students will learn how land changes and some processes that can cause a landscape to change.	~2 hours	LA Nature Center or other Natural Area
Spring (Apr-May)	3rd 3-LS4-3 3-LS4-4	Bears, Bobcats and Deer Oh My! – Ecology Hike Students will explore trails near their school to investigate how specific structures in animals' skulls enable them to survive and thrive in particular habitats,	~1 hour	Trail near School or other Natural Area
Spring (Apr-May)	4th	Water Festival Sponsored by the Department of Public Utilities. This is a day for 4th graders to engage in hands-on activities provided by community partners to learn about water conservation.  Available to 4th graders in the LAPS system. No registration required, PEEC staff will contact fourth-grade teachers.	All Day	Fuller Lodge
Spring (Apr-May)	5th 5-ESS3-1	Warmed by the Sun Students will learn how passive solar techniques are used to heat and cool a building without consuming additional energy. This lesson works best if we can go outside to use real solar energy to test the house models.	~1 hour	At school classroom