## **School Programs by Season**

Season	Grade & Standard	Title and Description	Program Details	Location
Fall (Aug-Nov)	Pre-K ECOT 2.1,10.1, 14.1-16.1, 20.1	Apples, Apples, Apples!  Children learn about an apple's life cycle through kinesthetic movement, tactile creative exploration, and press apples into juice.	Duration: 1–2 classes: ~1 hour 3 classes: ~1.5 hours	Los Alamos Nature Center or other outdoor location  Ask about transportation funding.
Fall (Oct)	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.	Duration: 1-2 classes: ~1 hour 3 classes: ~1.5 hours  Days Offered: Tuesdays & Thursdays	Los Alamos Nature Center or other outdoor location  Ask about transportation funding.
Fall (Aug-Nov)	1st 1-LS3-1	Traits on the Trail-Ecology Explorations  Students will find evidence of how young plants and animals are like, but not exactly like, their parents.	Duration: 1 class: ~1 hr	Trail near school, school playground, or local park
Fall (Aug-Nov)	2nd 2-LS2-2	Seeds on the Move-Ecology Explorations Students will discover the ways plants have adapted to disperse their seeds.	Duration: 1 class: ~1 hr	Trail near school, school playground, or local park
Fall (Aug-Nov)	3rd 3-LS4-3 3-LS4-4	Thrive in the Dry-Ecology Explorations  Students will explore trails near their school to investigate plant adaptations that help them to thrive in the high desert environment.	Duration: 1 class: ~1 hr	Trail near school, school playground, or local park

Fall (Aug-Nov)	4th 4-PS3-2 4-ESS3-1	Where's the Energy? (DPU partner program)  Students will learn about renewable and non-renewable sources of electricity in Los Alamos county as well as ways to conserve energy. Students will perform their own energy conversions with a bike generator as well as other hands-on activities.	Duration: 1-3 classes: ~2.5 hrs  Days Offered: Tuesdays  LAPS Schools only.	Los Alamos Nature Center Transportation costs covered.
Fall (Aug-Oct)	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 a pre-visit to the classroom for an introduction as well as teacher-led post-field trip activities.	Duration: Pre-lesson: ~1 hr In-field: ~2.5 hrs  Days Offered: Wednesdays & Fridays	Alamo Boundary Trailhead, Bandelier NM Transportation provided.
Fall (Sept-Oct)	6th MS-ESS2-2	Rocks, Rifts and Volcanos  History of the Valles Caldera formation and geology of the Jemez Mountains. Teachers will be sent a pre-lesson prior to the field trip to help establish prior knowledge before the field trip.	Duration: 1-3 classes: ~2 hrs  Days Offered: Tuesdays & Thursdays	Valles Caldera National Preserve  Ask about transportation funding.
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.	Duration: 1–2 classes: ~1 hr 3 classes: ~1.5 hrs	Los Alamos Nature Center Planetarium Ask about transportation funding
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.	Duration: 1-2 classes: ~1 hr 3 classes: ~1.5 hrs	Los Alamos Nature Center Planetarium Ask about transportation funding

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.	Duration: 1-3 classes: ~2 hrs	Los Alamos Nature Center Planetarium Ask about transportation funding
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.	Duration: 1-3 classes: ~2 hrs	Los Alamos Nature Center Planetarium Ask about transportation funding
Winter (Dec-Mar)	3rd 3-PS2-3 3-PS2-4	Making Magnets (DPU partner program)  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.	Duration: 1 class:~ 1 hr  LAPS schools only.	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.	Duration: ~2 hrs	Los Alamos Nature Center Planetarium Ask about transportation funding.
Winter (Dec-Mar)	4th <u>4-PS3-2</u> <u>4-ESS3-1</u>	Where's the Energy? (DPU partner program)  Students will learn about renewable and non-renewable sources of electricity in Los Alamos county as well as ways to conserve energy. Students will perform their own energy conversions with a bike generator as well as other hands-on activities.	Duration: 1-3 classes: ~2.5 hrs  Days Offered: Tuesdays  LAPS schools only.	Los Alamos Nature Center Transportation funding covered.
Winter (Dec-Mar)	4th 4-LS1-1	Animals in Winter Snowshoe Hike Students will learn how to safely snowshoe in a group	Duration: 1-3 classes: ~2 hrs	Valles Caldera National Preserve

		and will use observation skills to notice evidence of animals living in the area.	Depending on snow levels snowshoeing can be substituted for a winter hike and location may change.	
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.	Duration: 1-3 classes: ~2 hours	Los Alamos Nature Center Planetarium  Ask about transportation funding.
Winter (Dec-Mar)	5th 5-ESS2-2	Snow and Aquifers (DPU partner program)  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.	Duration: Pre-lesson:~1 hr In-field: ~2 hrs  Depending on snow levels snowshoeing can be substituted for a winter hike and location may change.	Valles Caldera National Preserve or trail near school  Ask about transportation funding.
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.	Duration: 1-3 classes: ~2 hrs	Los Alamos Nature Center Planetarium Ask about transportation funding.
Winter (Dec-Mar)	5th 5-ESS3-1	Warmed by the Sun (DPU partner program)  Students will learn about renewable and non-renewable sources of electricity in Los Alamos county as well as ways to conserve energy. Students will create electricity with generator bikes as well as experiment with passive solar heating in model houses.	Duration: 1-3 classes: ~2.0 hrs  Days Offered: Tuesdays	Los Alamos Nature Center  Ask about transportation funding.

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.	Duration: 1-3 classes: ~2.0 hrs	Los Alamos Nature Center Planetarium Ask about transportation funding.
Winter (Dec-Mar)	6th MS-ESS2-4	Water Cycle Snowshoe Hike (DPU partner program)  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.	Duration: Pre-lesson ~1 hr In-field: 1-2 classes: ~2 hrs  Depending on snow levels snowshoeing can be substituted for a winter hike and location may change.	Valles Caldera National Preserve or trail near school  Ask about transportation funding.
Spring (Apr-May)	Pre-K ECOT 2.1,10.1,14. 1-16.1, 20.1	Everything under the Sun! (DPU partner program)  Discover what solar energy can do and learn how animals regulate their body temperature externally. Learn about ways to conserve energy in their own lives.	Duration: 1-2 classes: ~1 hr 3 classes: ~1.5 hrs	Los Alamos Nature Center or other outdoor location  Ask about transportation funding.
Spring (Apr-May)	Pre-K ECOT	First Signs of Spring Who's waking up? Focus on the unique life cycle of Mourning Cloak butterflies.	Duration: 1-2 classes: ~1 hr 3 classes: ~1.5 hrs	Los Alamos Nature Center or other outdoor location  Ask about transportation funding.
Spring (Apr-May)	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.	Duration: 1-3 classes: ~2 hrs	Los Alamos Nature Center or other outdoor location

				Ask about transportation funding.
<b>Spring</b> (Apr-May)	1st 1-LS3-1	Traits on the Trail-Ecology Exploration  Students will find evidence of how young plants and animals are like, but not exactly like, their parents.	Duration: 1 class: ~1 hr	Trail near school, school playground, or local park
Spring (Apr-May)	2nd 2-ESS1-1	Land of Change - Ecology Exploration  Students will learn how land changes and some processes that can cause a landscape to change.	Duration: 1 class: ~1 hrs	Trail near school, school playground, or local park
Spring (Apr-May)	3rd 3-LS4-3 3-LS4-4	Bears, Bobcats, and Deer Oh My! – Ecology Exploration  Students will explore trails near their school to investigate how specific structures in animals' skulls enable them to survive and thrive in particular habitats.	Duration: 1 class: ~1 hr	Trail near school, school playground, or local park
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.  No registration required, PEEC staff will contact fourth-grade teachers.	Duration: All Day  LAPS schools only.	Fuller Lodge  Transportation provided.
Spring (Apr-May)	5th 5-ESS3-1	Warmed by the Sun (DPU partner program)  Students will learn about renewable and non-renewable sources of electricity in Los Alamos county as well as ways to conserve energy. Students will create electricity with generator bikes as well as experiment with passive solar heating in model houses.	Duration: 1-3 classes: ~2 hrs  Days Offered: Tuesdays  LAPS schools only.	Los Alamos Nature Center Transportation provided.