

## Correlation of Next Generation Science Standards with Growing Up WILD Activities

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This document correlates the activities in the *Growing Up WILD: Exploring Nature with Young Children* guide with the Performance Expectations (PEs) of the *Next Generation Science Standards* (NGSS). The table on the following pages represents an "ongoing correlation" that will evolve based on feedback from educators who are incorporating the new standards into their instruction using Growing Up WILD activities. Additionally, the document will be developed down the road as the activities are further correlated to the three dimensions of NGSS: practices, crosscutting concepts and disciplinary core ideas. The following correlations to the PEs are ranked using a 3-tiered scale outlined below. The column to the left of the correlation ranking shows comments made by the reviewers as they read through the activities and standards. These comments were included in the document to serve as a useful annotation for educators, specifically in cases where modifications are needed to meet the listed PEs. Ideas and feedback regarding the correlations are encouraged; please submit comments to projectwild@fishwildlife.org.

Age levels are designated as:

Years of Age						
3-4	4-5	5-6	6-7			

The 3-tiered scale was incorporated to more accurately capture the correlations between the activities and the NGSS Performance Expectations. The three categories indicate the degree of correlation:

- \*\*\* Three stars indicate the activity **directly addresses** and is well-aligned with the PE
- \*\* Two stars indicate the activity addresses the Performance Expectation, but **some modification is required** to fully meet the PE. Reasons an activity may have been ranked with two stars include the following:
  - The concept of the PE (e.g. resource availability affects organisms and populations of organisms in an ecosystem) is addressed by the activity, but the practice of the PE (e.g. analyze and interpret data to provide evidence) is not included in the activity.
  - The PE is addressed in a small component of the activity, such as an extension.
  - A minor adaptation, such as including a different set of discussion questions, makes the activity correlate to the PE

\* One star indicates the activity connects to some idea in the PE, but significant adaptation to the activity as-written is required to fully meet the PE. These activities *support* the PE and **can be used as a supplemental activity** with additional instruction and different activities to fully address the PE.

Activity Name	Page #	Age Levels	NGSS correlation (Student Performance Expectation)	Comments	Correlation Ranking
First Impressions	10-11	3-4,	None		
		4-5,			
		5-6,			
		6-7			
Ants on Parade	12-13	4-5,	K-LS1-1. Use observations to describe		***
		5-6,	patterns of what plants and animals		
		6-7	(including humans) need to survive.		
			K-ESS2-2. Construct an argument		**
			supported by evidence for how plants and		
			animals (including humans) can change the		
			environment to meet their needs.		
			K-ESS3-1. Use a model to represent the		**
			relationship between the needs of different		
			plants or animals (including humans) and		
			the places they live.		
			1-LS1-1. Use materials to design a solution		**
			to a human problem by mimicking how		
			plants and/or animals use their external		
			parts to help them survive, grow, and meet		
			their needs.		

			1-LS3-1. Make observations to construct an evidence-based account that young plants and animals are alike, but not exactly like, their parents.	This activity focuses on ants. This activity does not meet the "plants" part of the PE. To better meet this PE for animals, show examples of ant larvae to students to compare to their observations of the adult ants.	**
Spider Web Wonders	14-15	3-4, 4-5, 5-6	K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.		**
			K-ESS3-1. Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live.		**
			K-ESS3-3. Communicate solutions that will reduce the impact of humans on the land, water, and/or other living things in the local environment.	Include the "Helping Hands" portion to the activity.	**
			1-PS4-1. Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.	The Picking Up Vibrations activity listed in the "Centers & Extensions" section could be added to a lesson related to vibrations and this PE.	*
			1-LS1-1. Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.	Completing Step 4 of the "Ready, Set, Go!" procedures helps address this PE.	**
			2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.		***

			K-2-ETS1-2. Develop a simple sketch, drawing, or physical model to illustrate	Try the <i>Working Webs</i> activity in the "Centers & Extensions"	*
			how the shape of an object helps it function as needed to solve a given problem.	section.	
			K-2-ETS1-3. Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.	Try the Picking Up Vibrations and/or Working Webs activity in the "Centers & Extensions" section. Modify the procedures to have students perform two tests to help meet this PE.	*
Looking at Leaves	16-17	3-4, 4-5, 5-6, 6-7	K-PS3-1. Make observations to determine the effect of sunlight on Earth's surface.	Adding the "Take Me Outside!" and encouraging students to notice the difference between sunny and shady areas can help meet this PE.	*
			K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.	Strengthen this PE by completing the "Helping Hands" portion, too.	**
			K-ESS2-1. Use and share observations of local weather conditions to describe patterns over time.	Completing the "Take Me Outside" portion helps meet this PE.	**
			K-ESS3-1. Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.		*

			1-LS3-1. Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.	This activity focuses on plants. To help meet this PE, encourage students to observe both fully grown plants, young plants like saplings, and seeds.	**
			1-ESS1-2. Make observations at different times of year to relate the amount of daylight to the time of year.	Completing the "Take Me Outside!" and adding observations of the amount of daylight during each visit will help meet this PE.	*
			2-PS1-1. Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.	Completing the "Ready, Set, Go!" procedures as well as the "Might Math," "Healthy Me!," "Home Connections," and/or Observation Challenge in the "Centers & Extensions" will meet this PE.	***
			2-LS2-1. Plan and conduct an investigation to determine if plants need sunlight and water to grow.	Adding an investigation aspect to the gardening portion of this activity in the "Helping Hands" section can help meet this PE.	*
			2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.		***
In a Grasshopper's World	18-19	3-4, 4-5, 5-6, 6-7	K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.	This activity focuses on grasshoppers.	***

			<ul> <li>K-ESS3-1. Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.</li> <li>1-LS1-1. Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.</li> </ul>		***
			1-LS3-1. Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.	Have students observe grasshoppers at multiple life stages such as comparing larvae to adults.	**
			2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.		***
Wiggling Worms	20-21	3-4, 4-5, 5-6,	K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.		***
		6-7	K-ESS2-2. Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.	Completing the "Helping Hands" composting activity and the <i>Worm Farm</i> portion of the "Centers & Extensions" section can provide students with an understanding of how earthworms affect soil and help meet this PE.	*

			<ul> <li>K-ESS3-1. Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.</li> <li>2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.</li> </ul>		***
What's Wild?	22-23	3-4, 4-5, 5-6,	K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.		***
		6-7	K-ESS3-1. Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.		***
			2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.		***
Wildlife is Everywhere!	24-25	3-4, 4-5, 5-6,	K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.		**
		6-7	1-LS3-1. Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.	Include the "Helping Hands" activity to help meet this PE.	**
			2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.		***
Lunch for a Bear	26-27	3-4, 4-5, 5-6, 6-7	K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.	This activity focuses on the diet of Black Bears and provides opportunities for human comparisons.	***

The Deep Blue	28-29	3-4,	K-LS1-1. Use observations to describe	This activity develops	**
Sea		4-5,	patterns of what plants and animals	students' awareness of	
		5-6,	(including humans) need to survive.	oceans and ocean life.	
		6-7	K-ESS3-1. Use a model to represent the		***
			relationship between the needs of different		
			plants or animals (including humans) and		
			the places they live.		
			2-LS4-1. Make observations of plants and		***
			animals to compare the diversity of life in		
			different habitats.		
Who Lives in a	30-31	3-4,	K-ESS3-1. Use a model to represent the		***
Tree?		4-5,	relationship between the needs of different		
		5-6,	plants or animals (including humans) and		
		6-7	the places they live.		
			1-LS3-1. Make observations to construct an		**
			evidence-based account that young plants		
			and animals are like, but not exactly like		
			their parents.		
			2-LS4-1. Make observations of plants and		***
			animals to compare the diversity of life in		
			different habitats.		
Fishing Fun!	32-33	3-4,	K-LS1-1. Use observations to describe	Step 1 of the "Ready, Set,	**
		4-5,	patterns of what plants and animals	Go!" procedures allows	
		5-6,	(including humans) need to survive.	students to describe the	
		6-7		needs of fish.	
		0-7			

			2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.	Add discussion or observations of fish habitats to the activity. If students complete the <i>Places to See</i> <i>Fish</i> portion of the "Home Connections," then this PE may be met.	*
Hiding in Plain Sight	34-35	3-4, 4-5, 5-6, 6-7	K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive. 1-LS1-1. Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.		**
Tracks!	36-37	3-4, 4-5, 5-6, 6-7	1-LS3-1. Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.	Allow students to observe examples of tracks made by young and adult animals. Having students complete the <i>Big Feet, Little Feet</i> portion of the "Home Connections" may help meet this PE.	**
			2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.	Include the "Take Me Outside!" activity.	**
Grow As We Go	38-39	3-4, 4-5, 5-6,	1-LS1-2. Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.		**

		6-7	1-LS3-1. Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.		***
Backbone Bonanza	40-41	3-4, 4-5, 5-6, 6-7	2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.	Include the "Take Me Outside!" activity to help meet this PE.	**
Bird Beak Buffet	42-43	3-4, 4-5, 5-6, 6-7	K-2-ETS1-2. Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.		***
			K-2-ETS1-3. Analyze data from test of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.		**
Terrific Turkeys	44-45	4-5, 5-6, 6-7	K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.	In this activity students learn about Wild Turkeys through a simulation.	***
			1-LS1-2. Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.	Include the "Take Me Outside!" activity and discuss the behavior of poults (young turkey) and mother turkeys. Other modifications are necessary to fully meet this PE – find books, photographs, etc.	*

Owl Pellets	46-47	3-4,	K-LS1-1. Use observations to describe	This activity allows students	***
		4-5,	patterns of what plants and animals	to learn about what owls eat.	
		5-6,	(including humans) need to survive.		
		6-7			
Oh Deer!	48-49	4-5,	K-LS1-1. Use observations to describe		***
		5-6 <i>,</i>	patterns of what plants and animals		
		6-7	(including humans) need to survive.		
			K-ESS3-1. Use a model to represent the		***
			relationship between the needs of different		
			plants and animals (including humans) and		
			the places they live.		
Seed Need	50-51	3-4,	2-LS2-2. Develop a simple model that		***
		4-5 <i>,</i>	mimics the function of an animal in		
		5-6,	dispersing seeds or pollinating plants.		
		6-7	2-LS4-1. Make observations of plants and	Strengthen this PE by having	**
			animals to compare the diversity of life in	students collect seeds in	
			different habitats.	different habitats for	
				comparison.	
Show Me the	52-53	3-4,	K-LS1-1. Use observations to describe	This activity helps students	***
Energy!		4-5,	patterns of what plants and animals	discover that all animals,	
		5-6,	(including humans) need to survive.	including people, depend on	
		6-7		plants as a food source – and	
			2-LS2-1. Plan and conduct an investigation	that energy originally comes	***
			to determine if plants need sunlight and	from the sun.	
			water to grow.		
Aqua Charades	54-55	5-6,	K-LS1-1. Use observations to describe	This activity focuses on the	***
		6-7	patterns of what plants and animals	importance of water for	
			(including humans) need to survive.	people, animals, and plants.	

Wildlife Water	56-57	3-4,	K-LS1-1. Use observations to describe	This activity focuses on water	***
Safari		4-5, 5-6,	patterns of what plants and animals (including humans) need to survive.	sources for local wildlife.	
		6-7	K-ESS3-1. Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.		***
			2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.		***
Field Study Fun 58-59	58-59	3-4, 4-5, 5-6,	K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.		***
		6-7	K-ESS2-2. Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.		**
			K-ESS3-1. Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.		***
			1-ESS1-2. Make observations at different times of year to relate the amount of daylight to the time of year.	Completing the "Take Me Outside!" and adding observations of the amount of daylight during each walk will help meet this PE.	*
			2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.		***

Wildlife as	60-61	None	
Symbols			
Less is More	62-63	K-ESS3-3. Communicate solutions that will reduce the impact of humans on land, water, air, and/or other living things in the local environment.	***