

Kindergarten Science Curriculum Connections

Physical Science

Standard(s) and Practices	Objectives	FOSS/EIE Kits	Journeys Connection	Writing
K-PS2-1 Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.	Students will: <ul style="list-style-type: none"> Understand that pushes and pulls can have different strengths and directions. Understand that pushing or pulling on an object can change the speed or direction of its motion and can start or stop it. Understand that when objects touch or collide they push on one another and can change motion. Understand that a bigger push or pull makes things speed up or slow down more quickly. 	BALANCE and MOTION Forces Investigation 2, part 1	Unit 2, Lesson 9 Why do people use wheels?	<ul style="list-style-type: none"> Draw a picture of somethings with wheels. Share with a friend to compare. (ex. I drew a bike with 2 wheels, it goes slow. I drew a car with 4 wheels, it goes fast)
K-PS2-2 Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or pull.	Students will: <ul style="list-style-type: none"> Understand that a situation that people want to change or create can be approached as a problem to be solved through engineering. Such problems may have many acceptable solutions. 	BALANCE and MOTION Forces Investigation 2, part 1		

Life Science

Standard(s) and Practices	Objectives	FOSS/EIE Kits	Journeys Connection	Writing
K-LS1-1 Use observations to describe patterns of what plants and animals (including humans) need to survive.	Students will: <ul style="list-style-type: none"> Understand that all animals need food in order to live and grow. Understand that animals obtain their food from plants or from other animals. Distinguish between living and non-living things. 	ANIMALS TWO x TWO Chicks Investigation 5, parts 1-4 INSECTS Butterflies Investigation 5, parts 1-3	Unit 1, Lesson 3 Why do people have to take care of pets?	<ul style="list-style-type: none"> Draw to show how you can take care of a pet. (ex. getting food for a dog)
			Unit 4, Lesson 17 How do living things change as they grow?	<ul style="list-style-type: none"> Draw and label the life cycle of a butterfly.

	<ul style="list-style-type: none"> • Understand that plants need water and light to live and grow. • Understand that animals obtain their food from plants or from other animals. 		Unit 5, Lesson 22 How do things change when someone is growing up?	<ul style="list-style-type: none"> • Draw and label a picture of a mother animal and its young. Write what they eat.
K-LS1-2 Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live.	Students will: <ul style="list-style-type: none"> • Understand that humans use natural resources for everything they do. • Understand that living things need water, air, and resources from the land. • Understand that the places animals live have the things they need to survive. 		Unit 5, Lesson 23 What steps can someone follow to plant and grow flowers.	<ul style="list-style-type: none"> • Write a simple how to story about planting a flower. Make sure to include the materials needed (water, sunlight, soil, etc.).
			Unit 5, Lesson 25 How do people get food from plants?	<ul style="list-style-type: none"> • Draw and label the steps to make something (bread, pie, apple sauce, etc.).
			Unit 2, Lesson 8 Why do different animals move in different ways?	<ul style="list-style-type: none"> • Draw and label an animal in its habitat. Extension: What do they use in their habitat to survive (ex. a polar needs ice)
			Unit 3, Lesson 12 What do animals do when the weather changes.	<ul style="list-style-type: none"> • Make a predictable chart: A _____ in the cold. (A bird flies south in the cold. A bear hibernates in the cold.)
Unit 3, Lesson 14 Where do different animals make their homes?	<ul style="list-style-type: none"> • Draw an animal from this week's story. Fill in the predictable sentences: This animal lives in the _____. • This animal eats _____. 			

Earth Science

Standard(s) and Practices	Objectives	FOSS/EIE Kits	Journeys Connection	Writing
K-ESS3-1 Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond, to severe weather.	Students will: <ul style="list-style-type: none"> Understand that weather scientists forecast severe weather so that the communities can prepare for, and respond to, these events. Understand that some kinds of severe weather are more likely than others in a given region. Understand that asking questions, making observations, and gathering information are helpful in thinking about problems. 		Unit 4, Lesson 19 What kinds of things could happen on a hike?	<ul style="list-style-type: none"> Draw and write about the things you might need on a hike.
K-ESS3-2 Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.	Students will: <ul style="list-style-type: none"> Understand that things people do to live comfortably can affect the world around them. Understand that people can make choices that reduce their impacts on the land, water, air, and other living things. Understand that designs can be convey through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people. 			<ul style="list-style-type: none"> Celebrate Earth Day in the classroom. Discuss recycling, reusing, reducing and repurposing. Ideas: Create area in classroom to collect recycling, make posters to encourage others in the school to recycle, write persuasive letters about saving resources (why you turn off the water while brushing, wear a sweater instead of turning up the heat, etc.)

Earth and Space Science

Standard(s) and Practices	Objectives	FOSS/EIE Kits	Journeys Connection	Writing
K-ESS2-1 Use and share observations of local weather conditions to describe patterns over time.	Students will: <ul style="list-style-type: none"> Understand that people measure weather conditions to describe and record the weather and to notice patterns over time. Understand that weather is the combination of sunlight, wind, 	AIR AND WEATHER Weather Chart Investigation 2, part 1, Investigation 4, part 1 Measuring Temperature Investigation 2, part 2	Unit 2, Lesson 6 How do our senses help up learn about the world?	<ul style="list-style-type: none"> Draw your favorite season. Create art showing a tree in different seasons.
			Unit 3, Lesson 11	<ul style="list-style-type: none"> Draw a picture of the weather in winter. Draw a

	snow or rain, and temperature in a particular region at a particular time.	Measuring Rain Investigation 2, part 4	How does the weather change in different months and seasons?	picture of the weather in summer.
K-ESS2-2 Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.	Students will: <ul style="list-style-type: none"> Understand that people can make choices that reduce their impacts on the land, water, air and other living things. Understand that plants and animals can change their environment. Understand that things people do to live comfortably can affect the world around them. 		Unit 3, Lesson 15 What can we see in the sky?	<ul style="list-style-type: none"> As a class, make a Venn Diagram: night in the city and night in the country.

Engineering and Technology

Standard(s) and Practices	Objectives	FOSS/EIE Kits	Journeys Connection	Writing
K-2-ETS1-1 Ask questions, make observation, and gather information about a simple problem that can be solved through the development of a new or improved object or tool.	Students will: <ul style="list-style-type: none"> Understand that a situation that people want to change or create can be approached as a problem to be solved through engineering. Understand that asking questions, making observations, and gathering information are helpful in thinking about problems. Understand that before beginning to design a solution, that it is important to clearly understand the problem. 		Unit 4, Lesson 16 What kinds of things do scientists study?	<ul style="list-style-type: none"> As a class, make a list of questions and observations Emily had while writing to Mr. Blueberry.
			Unit 4, Lesson 20 What do scientists do when they discover something new?	<ul style="list-style-type: none"> Look online for real photos of dig sites or take part in a 'virtual dig.' Draw or write a postcard to a friend to tell what you saw at the dig site.
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.	Students will: <ul style="list-style-type: none"> Understand that designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solution to other people. 		Unit 2, Lesson 10 What can we create with shapes?	<ul style="list-style-type: none"> Give every student a set of pattern blocks to create an animal. Label to describe the animal. Compare with a friend.
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.	Students will: <ul style="list-style-type: none"> Understand that because there is always more than one possible solution to a problem, it is useful to compare and test designs. 			<ul style="list-style-type: none"> Give groups of students the same set of materials (tape and paper, marshmallows and toothpicks) and a task to build something (bridge,

				tower). Have groups write about and compare designs.
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Journeys Lesson	Science Connection
Unit 1, Lesson 3	K-LS1-1
Unit 2, Lesson 6	K-ESS2-1
Unit 2, Lesson 8	K-LS1-2
Unit 2, Lesson 9	K-PS2-1
Unit 2, Lesson 10	K-2-ETS1-2
Unit 3, Lesson 11	K-ESS2-1
Unit 3, Lesson 12	K-LS1-2
Unit 3, Lesson 14	K-LS1-2
Unit 3, Lesson 15	K-ESS2-2
Unit 4, Lesson 16	K-2-ETS1-1
Unit 4, Lesson 17	K-LS1-1
Unit 4, Lesson 19	K-ESS3-1
Unit 4, Lesson 20	K-2-ETS1-1
Unit 5, Lesson 22	K-LS1-1
Unit 5, Lesson 23	K-LS1-1
Unit 5, Lesson 25	K-LS1-2