Kide

Alignment for Kide Science®

with

Georgia Standards of Excellence (GSE) for Kindergarten 2016

Science



How Kide Science Aligns with Science Georgia Standards of Excellence (for Kindergarten)

In this document we will:

- 1. Show you how our lessons support the Science Georgia Standards of Excellence (GSE) *for Kindergarten**
- Give you a list of suggested activities to match the learning units and their core ideas, mentioned in the <u>GSE Kindergarten</u> <u>Curriculum Map</u>
- **3.** Explain how our Kide program supports Science and Engineering Practices **across the curriculum**, not just in Science lessons



*Something missing?

If you have other curriculum requirements, don't hesitate to contact us through info@kidescience.com

Kide

Science and Engineering Practices: in every Kide lesson!



Our activities are story-based inquiries - creating playful scenarios in your classroom.

In every single lesson, children advance crucial scientific-process skills, including all GSE **Science and Engineering Practices**:

- Asking questions and defining problems
- Planning and carrying out investigations
- Constructing explanations and designing solutions
- Obtaining, evaluating, and communicating information
- Engaging in argument from evidence
- Oeveloping and using models



Egg-straordinary Nest Building How do birds look after their babies?

Engineering Science Arts Mathematics

In addition to these scientific inquiry skills, each lesson supports many other skills, including technological, social-emotional, linguistic, mathematical and movement skills.

We really are cross-curricular.

See <u>our other curriculum alignment</u> <u>documents</u> for more details.

Science Georgia Standards of Excellence

Our program is well aligned with the Kindergarten - Science Georgia Standards of Exellence (GSE)

We either **support** the specific objectives (\bigotimes), or we are **working towards** them (\gtrless). This means that we are developing the <u>fundamental skills</u> required to achieve the objectives.

KIDE

Earth and Space Science

SKE1. <u>Obtain, evaluate, and communicate observations</u> about time patterns (day to night and night to day) and objects (sun, moon, stars) in the day and night sky.

	a.	<u>Ask questions to classify objects</u> according to those seen in the day sky, the night sky, and both.
Activities	جي:	New Lessons coming up soon Meanwhile, take a look at: <u>Space Adventure. Can I code instructions for a jetpack?</u>
*	b.	<u>Develop a model to communicate</u> the changes that occur in the sky during the day, as day turns into night, during the night, and as night turns into day using pictures and words. (Clarification statement: Students are not expected to understand tilt of the Earth, rotation, or revolution.)
Activities	: : : : : : :	New Lessons coming up soon Meanwhile, take a look at: <u>Spooky Shadows. How can I make spooky shadow creatures?</u>

SKE2. <u>Obtain, evaluate, and communicate information to describe the physical attributes</u> of earth materials (soil, rocks, water, and air).

Ø	a.	Ask questions to identify and describe earth materials—soil, rocks, water, and air.
Activities		Summer Sandcastles. How can I build a spectacular sand castle?
		It's Raining. How do water droplets keep their shape?
		A non-Existent Substance? Is an empty jar really empty?
Ø	b.	<u>Construct an argument supported by evidence</u> for how rocks can be grouped by physical attributes (size, weight, texture, color).
Activities		For classification practice (adapt by including local rocks) <u>Floating Problems. What can float and what can sink?</u>
		Mystical Magnets. How do magnets work?
	c.	Use tools to observe and record physical attributes of soil such as texture and color.
Activities		From seed to Plant. Where do trees come from?
		Digging Up Dinosaurs, How can I dig up dinosaur bones from the ground?

K i D E

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Physical Science

SKP1. <u>Obtain, evaluate, and communicate information to describe objects</u> in terms of the materials they are made of and their physical attributes.

Ø	a. <u>Ask questions to compare and sort objects</u> made of different materials. (Common materials include clay, cloth, plastic, wood, paper, and metal.)	
Activities	Eggy Mystery. How can we use our senses to solve mysteries? Force of the Wind. How can air move things around? Floating Problems. What can float and what can sink? Mystical Magnets. How do magnets work?	
Ø	a. <u>Use senses and science tools to classify common objects</u> , such as buttons or swatches of cloth, according to their physical attributes (color, size, shape, weight, and texture).	
Activities	Many of our lessons use classification, especially:	
	Measuring. How can small things feel heavy? And large things feel light?	
	Hair Standing on End. How can I move something with static electricity?	
	What a Machine! How can I tell if something is a machine or not?	
	Kindergarten of Shape Creatures. What different 2D shapes are there?	
	Busy Bees. How do bees collect pollen? (Activity A)	
Ø	a. <u>Plan and carry out an investigation to predict and observe</u> whether objects, based on their physical attributes, will sink or float.	
Activities	Floating Problems. What can float and what can sink? A Floaty Drink. Why does something sink or float? Cave Conundrum. How can I use air to make things float on water	

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K i D E

Physical Science

SKP2. <u>Obtain, evaluate, and communicate information to compare and describe</u> different types of motion.		
Ø	a. <u>Plan and carry out an investigation</u> to determine the relationship between an object's physical attributes and its resulting motion (straight, circular, back and forth, fast and slow, and motionless) when a force is applied. (Examples could include toss, drop, push, and pull.)	
Activities	Lift it up! How does and elevator work? A Frantic Fall. How can I change the speed of a rolling object? Safe Landing. How do things fall safely?	
Ø	a. <u>Construct an argument as to the best way to move an object based on its physical attributes</u>	
Activities	Planes Trains and Hot Air Balloons.What different vehicles can I build?	

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Life Science

SKL1. <u>Obtain, evaluate, and communicate information</u> about how organisms (alive and not alive) and non-living objects are grouped.

Ø	a.	<u>Construct an explanation based on observations</u> to recognize the differences between organisms and nonliving objects.
Activities		What makes a living thing? Does everything drink water?
Ø	а.	<u>Develop a model to represent</u> how a set of organisms and nonliving objects are sorted into groups based on their attributes.
Activities		What makes a living thing? Does everything drink water?

SKL2. <u>Obtain, evaluate, and communicate information to compare the similarities and differences in groups</u> of organisms.

	a. <u>Construct an argument supported by evidence</u> for how animals can be grouped according to their features.	
Activities	Habitat Hunting. Where do different animals live? Busy Bees. How do bees collect pollen? Hiding in Plain Sight. Can animals disappear?	
X	a. <u>Construct an argument supported by evidence</u> for how plants can be grouped according to their features.	
Activities	From Seed to plant. Where do trees come from? Flowery Business. How do plants drink?	
	a. Ask questions and make observations to identify the similarities and differences of offspring to their parents and to other members of the same species.	
Activities	Egg-straordinary Nest Building. How do birds look after their babies? Come out Pikkuli! How can I encourage a friend? From Seed to plant. Where do trees come from? Busy Bees. How do bees collect pollen?	

Here we suggest activities which particularly enhance the **core ideas** taken from <u>GSE Kindergarten</u> <u>Curriculum Map, 2017</u>.

Physical Attributes, SKP1a, b, c		
Core Ideas	Kide Activity Suggestions	
Vroperties of Matter	Mystical Magnets. How do magnets work? Eggy Mystery. How can we use our senses to solve mysteries? Operation Ice Rescue. How could I escape an ice trap? Hoseli's Instant Sorbet. How can I make ice cream without a freezer? A non-Existent Substance? Is an empty jar really empty?	
Solution Physical Attributes	Measuring. How can small things feel heavy? And large things feel light? Hair Standing on End. How can I move something with static electricity? Safe landing: How do things fall safely? Planes, Trains and Hot Air Balloons: What different vehicles can I build for a travel adventure?	
Solution Floating and Sinking	<u>Floating Problems. What can float and what can sink?</u> <u>A Floaty Drink. Why does something sink or float?</u> <u>Cave Conundrum. How can I use air to make things float on water?</u> <u>Hoseli's Journey: How can I move things without touching them?</u>	

Here we suggest activities which particularly enhance the GSE Kindergarten Curriculum Map, 2017.

Motion SKP2a, b		
Core Ideas		Kide Activity Suggestions
Ø	Objects pull or push each other when they collide or are connected.	Hoseli's Journey. How can I move things without touching them? Hair Standing on End. How can I move something with static electricity? Mystical Magnets. How do magnets work? Lift It Up! How Does an Elevator Work?
Ø	Pushes and pulls can have different strengths and directions.	<u>Lift it up! How does and elevator work?</u> <u>Power of the Air. How can I lift heavy</u> <u>things?</u>
Ø	Pushing or pulling on an object can change the speed or direction of its motion and can start or stop it.	A Frantic Fall. How can I change the speed of a rolling object? Friction on the Slopes. Why are some things slippery? Safe Landing. How do things fall safely? Planes Trains and Hot Air Balloons. What different vehicles can I build for a travel adventure?

Here we suggest activities which particularly enhance the <u>GSE Kindergarten Curriculum Map, 2017</u>.

Living/Non-living SKL1a, b		
Core Ideas	Kide Activity Suggestions	
All animals need food to live	e and grow. <u>Caring for a pet dog. How do I look after a pet?</u> <u>Beehive. How do bees make honey?</u> <u>Busy Bees. How do bees collect pollen?</u>	
Plants need water and light t grow	to live and <u>From seed to plant. Where do trees come</u> <u>from?</u> <u>Flowery Business. How do plants drink?</u>	
Animals can move around, b cannot	What makes a living thing? Does everything drink water?Busy bees. How do bees collect pollen?Lava pond. How can I work with my friends to solve a tricky problem?	
Living things can survive onl needs are met.	ly where their Hiding in Plain Sight. Can animals disappear? <u>A Freezing Surprise. How do things keep</u> warm in cold water?	
Living things exist in differer land and in water.	nt places on Habitat Hunting. Where do different animals live? A Freezing Surprise. How do things keep warm in cold water? A Kingdom Underneath the Ice. What is it like under the sea?	

Here we suggest activities which particularly enhance the GSE Kindergarten Curriculum Map, 2017.

Earth Materials SKE2a, b, c		
Core Ideas		Kide Activity Suggestions
Ø	Rocks, soils, and sand	Summer Sandcastles. How can I build a spectacular sand castle?
Ø	Plants and animals (including humans) depend on the land water, and air to live and grow.	What makes a living thing? Does everything drink water?Cloudy Skies. What are clouds made of? Why does it rain?The great inventors of the Secret Forest. How can I protect myself from the rain?Force of the wind. How can air move things around?From Seed to Plant. Where do trees come from?
Ø	Living things need water, air, and resources from the land, and they try to live in places that have the things they need. (Will connect to life science.)	Habitat Hunting. Where do different animals live? What makes a living thing? Does everything drink water? True Friends. How can I make someone feel welcome?

Here we suggest activities which particularly enhance the GSE Kindergarten Curriculum Map, 2017.

Time Patterns and Organisms SKE2a, b, c		
Core Ideas		Kide Activity Suggestions
*	Patterns of the motion of the Sun, moon, and stars in the sky, can be observed, described, and predicted.	New lessons coming up soon <u>Space Adventure. Can I code instructions</u> <u>for a jetpack?</u>
~	Some events on Earth occur in cycles, like day & night.	New lessons coming up soon Spooky Shadows. How can I make spooky shadow creatures? Getting Dressed for Autumn. How can I help a robot get dressed?
Ø	Animals and plants have different parts.	Flowery Business. How do plants drink? Leaving your mark. Can I recognize people just from their fingerprints and footprints? Beehive. How do bees make honey? Habitat Hunting. Where do different animals live?
Ø	Plants and animals have predictable characteristics at different stages of development. Plants and animals grow and change. Adult plants and animals can have young.	Egg-straordinary Nest Building. How do birds look after their babies?' Come out Pikkuli! How can I encourage a friend? From Seed to plant. Where do trees come from? Busy Bees. How do bees collect pollen?