Kide Science® **Correlation**

For

Tennessee Academic Standards

Kindergarten



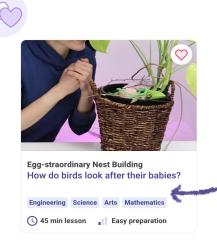
Kide Science: about us.



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

In every single lesson, children advance crucial scientific-process skills (also known as inquiry skills):

- **Observation**
- **Classification**
- Communication
- Measurement
- Predication
- Interpretation
- Conclusion



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 standards documents</u> for more details.

How Does Kide Science support Tennessee Academic Standards for Kindergarten?



In this document we will:

- Show you how our lessons support the Guiding Principles for the Tennessee K Developmental Standards (ELDs)
- 2. Summarize how we align with the Kindergarten Standards*
- Give you a **list of recommended Kide activities** which especially support specific standards

* We have based our alignment upon

Tennessee Early Learning Developmental Standards 2018
Tennessee Academic Standards for Science 2022
Tennessee Revised Math Standards K-8 2021
All other revised academic standard documents



Something missing?

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

Guiding Principles

Kide Science matches the **Guiding Principles** for the Tennessee K Developmental Standards



1. All children are capable of learning, achieving, and making developmental Progress.

The K Developmental Standards (ELDS) are intended for all children regardless of economic, linguistic, and cultural differences and/or physical, learning, or emotional challenges.



2. Children develop at different rates and each child is unique in his or her own development, growth, and acquisition of skills.

Individualized, appropriate, and reasonable supports and accommodations must be provided to close the achievement gap and promote school readiness for all children.



3. Early experiences have both cumulative and delayed effects on each individual child's development; optimal periods exist for certain types of development and learning.



Four-year-old children are active, eager learners.

A primary approach to learning is through purposeful, inquiry-based play. Optimal learning environments invite children's participation through hands-on, experiential exploration using all five senses. Four-year-olds are concrete learners who learn best through interactions with people and educational materials in multiple, varied contexts.



Development advances when children have opportunities to practice newly acquired skills and when they experience a challenge just beyond the level of their present mastery, known as the zone of proximal development.



6. Multi-dimensional development is essential for optimal brain growth.

Children's learning is integrated and occurs simultaneously across all developmental domains, which are interrelated and interactive with one another. Children's brain growth and cognitive development is accelerated when early education is focused and balanced among all eight areas of development included in the revised TN ELDS.



7. Children learn in the context of interactions and relationships with family members, caregivers, teachers, other children, and adults in their immediate environment and greater community.



8. The family is the most significant contributor to a child's lifelong learning and development. Engaging families in the early education of their children is essential to continuing a child's success in the elementary classroom and later learning.

KIDE

Kide Science and Tennessee K



See how many of your standards we support

We develop inquiry skills **across many subjects**. Therefore, we support the standards for many of the domains, as shown below. For our specific lesson recommendations, see our alignment documents.

DOMAINS	We have lesson recommendations for:
Science	100% of the domain
Physical science	4/4 standards
Life Science	4/4 standards
Earth Systems	6/6 standards
Engineering, Technology and Science	4/4 standards
English Language Arts*	50% of the domain
Reading	9/10 standards
Foundational Literacy	1/7 standards
Writing	0/10 standards
Speaking & Listening	6/6 standards
Math	60% of the domain
Counting and Cardinality	7/8 standards
Operations and Algebraic Thinking	0/5 standards
Number and Operations in Base Ten	0/5 standards
Measurement and Data	3/4 standards
Geometry	6/6 standards

^{*} Our lessons are story based. This means children's comprehension of stories will be developed each lesson. Some of the lessons can be tweaked to include more writing and reading with the children, but this is not the main aim of our sessions.

Kide Science and Tennessee Standards for Kindergarten

DOMAINS	We have lesson recommendations for:
Social Studies	15% of the domain
Culture	0/2 standards
Economics	1/7 standards
Geography	2/3 standards
Governments & Civics	0/6 standards
History	0/4 standards
Fine Arts	35% of the domain
Dance	10/22 standards
Theatre	11/12 standards
Media Arts	0/18 standards
Visual Arts	9/15 standards
Music	2/20 standards
Physical Development	45% of the domain
Motor Skills	3/20 standards
Movement Knowledge and Application	4/6 standards
Fitness and Physical Activity	2/2 standards
Personal & Social Responsibility	5/5 standards
Values Physical Activity	2/2 standards





Domain: Science

We align with each of the standards of the **Science Domain** of Tennessee Standards for Kindergarten:

- Physical Science (PS1, PS4)
- Life Science (LS1, LS3)
- Earth Science (ESS2, ESS3)
- Engineering, Technology and Science (ETS1, ETS2)

See our specific lesson recommendations for each individual standard on the following pages.

	Physical Science (PS1) Matter and its interactions			
			Kide activity suggestions	
⊘	K.PSI.1	Plan and conduct an investigation using patterns to classify different kinds of materials by their observable properties (i.e. absorbency, color, texture, hardness, and flexibility), by their uses, and by whether they occur naturally or are manufactured.	Hair Standing on End Mystical Magnets Friction on the Slopes Floating Problems Habitat Hunting Beehive What Makes a Living Thing?	
Ø	K.PSI.2	Conduct investigations to understand that matter can exist in different states (i.e. solid and liquid) and has properties that can be observed and tested.	Hoseli's Instant Sorbet Operation Ice Rescue A Freezing Surprise Cloudy Skies Hide and Seek (home experiment)	
⊘	K.PSI.3	Construct an evidence-based account of how an object made of a small set of pieces (e.g. blocks, snap cubes) can be disassembled and made into a new object.	A Frantic Fall Power of the Air Friction on the Slopes Planes Trains and Hot Air Balloons Spooky Shadows	





Domain: Science

Physical Science (PS4)

Waves and Their Applications in Technologies for Information Transfer

121.1			
Kide	activity	/ sugg	estions

KYZI	

K.PS4.01 Record data from an investigation using

senses to detect light, sound, and vibrations and communicate observations. Hello, Is Anybody Out There? Make Some Music! Spooky Shadows Pi Hiding A Colorful Arc A Kingdom Under the Ice

Life Science (LS1)

From molecules to organisms: structures and processes

			Kide activity suggestions
Ø	K.LSI.1	Use information from observations to identify the differences between plants and animals and how they live and grow.	What Makes a Living Thing? Hiding in Plain Sight
Ø	K.LSI.2	Recognize differences between living organisms and nonliving materials and sort them into groups by observable physical attributes	Breathing Leaves What a Machine!
Ø	K.LSI.3	Explain how animals, including humans, use their five senses to interact with the environment	The Peculiar Party of Mr Hush What's Your Superpower? Eggy Mystery

Life Science (LS3)

Heredity: Inheritance and Variation of Traits

Kide activity suggestions



K.LS3.01

Collect and analyze observational data to show that young living things are like, but not exactly like, their parents.

From Seed to Plant Hiding in Plain Sight What Makes a Living Thing? **Leaving Your Mark**





Domain: Science

Earth Science (ESS2): Earth systems			
			Kide activity suggestions
Ø	K.ESS2.1	Make observations to gather weather data (i.e. precipitation, wind, temperature, cloud cover) using tools (e.g. thermometer, rain gauge).	Pressure In The Puddle Whirling With The Vortex Summer Sandcastles Cloudy Skies Force of the Wind Foam Eruption
Ø	K.ESS2.2	Use simple graphs and pictorial weather symbols to describe weather patterns that occur over time (i.e. hourly, daily).	Lesson bundle: Kelvin's Weather Adventure especially Cloudy Skies
Ø	K.ESS2.3	Develop and use models to predict weather and identify patterns in spring, summer, autumn, and winter.	Getting Dressed for Autumn Summer Sandcastles Winter Garden Lesson bundle: Kelvin's Weather Adventure

Earth Science (ESS3): Earth and human activity			
			Kide activity suggestions
⊘	K.ESS3.1	Use a model to represent the way the environment meets the basic needs (shelter, food, water) of living things (including humans) and the places they live.	Habitat Hunting Beehive Egg-straordinary Nest Building Caring for a Pet Dog
Ø	K.ESS3.2	Explain the purpose of weather forecasting to prepare for, and respond to, severe weather in Tennessee.	The Great Inventors of the Secret Forest Whirling With The Vortex A Freezing Surprise Force of the Wind
⊘	K.ESS3.3	Communicate solutions that will reduce the impact from humans on land, water, air, and other living things in the local environment.	From Seed to Plant Flowery Business What makes a living thing? Habitat Hunting The Great Inventors of the Secret Forest Breathing Leaves



Domain: Science

Engineering, Technology and Science (ETS1) Engineering design			
			Kide activity suggestions
Ø	K.ETS1.1	Apply an engineering design approach to identify and solve practical problems.	See our <u>engineering</u> bundle
Ø	K.ETS1.2	Use drawings and labels to communicate ideas and designs accurately.	All lessons, especially: What makes a living thing? Kindergarten of Shape Creatures Getting Dressed for Autumn
⊘	K.ETS1.3	Ask and answer questions about the scientific world and gather information using the senses.	All lessons

Engineering, Technology and Science (ETS2) Links among engineering, technology, science, and society Kide activity suggestions Wany lessons, inc. Leaf lesson Pi Hiding Measuring Digging up Dinosaurs Sweet Rainbow Mystical Magnets

KIDE

Tennessee K Lesson Recommendations



Domain: English Language Arts

The main focus of Kide activities is on inquiry skills (including communication). In addition, each of the Kide activities start with a story time to introduce a research problem. This shared story provides an excellent opportunity to practice comprehension skills, as well as set a base for independent reading

Whilst we don't claim to fully match with the English Language Arts and Reading standards, on the following pages you can find find a list of the ones we do support.

Reading	Standards		
Ø	Key Ideas and	Details	Kide activity suggestions
	R.KID.1	logical inferences, cite specific textual evidence to support conclusions	
	R.KID.2	central ideas or themes, developments and summarizing key details	
	R.KID.3	analyse how and why individuals, events and ideas develop	
Ø	Craft and Struc	cture	
	R.CS.4	interpret words and phrases, analyze how word choices shape meaning	
	R.CS.5	analyze structure inc. sentences, paragraphs, chapters	All of our lessons introduce a problem in the form of different
	R.CS.6	assess how point of view/purpose shapes the content (author/illustrator)	stories. Develop children's reading skills
Ø	Integration of	Knowledge and Ideas	by taking time to understand the story as a shared read.
	R.IKI.7	assess how point of view/purpose shapes the content (illustrations/text)	
	R.IKI.8	evaluating arguments, validity or reasoning	
	R.IKI.9	comparing and analysing themes/topics within different texts	
	Range of Reading and Level of Text Complexity		
	R.RRT.10	read and comprehend complex literary and informational texts	





Domain: English Language Arts

Foundational Literacy Standards Vocabulary Acquisition			
	Key Ideas and	Details	Kide activity suggestions
	FL.VA.7	Determine or clarify the meaning of unknown/multiple-meaning words/phrases by using context, meaningful word parts, and reference materials.	All of our lessons develop children's vocabulary in practical contexts. See <u>language skills</u> bundle

Speaking and Listening Standards Comprehension and Collaboration **Comprehension and Collaboration** Kide activity suggestions SL.CC.1 participate in a range of conversations, building on ideas clearly SL.CC.2 understanding information presented in a range of formats Children are encouraged to SL.CC.3 evaluate a speaker's point of view / communicate their ideas reasoning / evidence throughout our lessons, especially when reporting their findings to **Presentation of Knowledge and Ideas** the story characters. See our communication specific SL.PKI.4 describing information with appropriate lessons detail SL.PKI.5 make use of a range of media to present SL.PKI.6 adapt speech to a variety of contents and tasks





Domain: Mathematics

The main focus of Kide activities is on **inquiry skills** (including **measurement**, **comparison** and **classification.**) These skills set the foundations to number sense and basic operations

We also support areas of Geometry and Shapes and Math through physical movement.

Whilst we don't claim to fully match with the Mathematics standards, on the following pages you can find a list of the ones we do support.

Counting and Cardinality (CC)			
			Kide activity suggestions
Ø	K.CC.A.1 K.CC.A.2 K.CC.A.3	Know number names and the counting sequence	Counting and cardinality can be routinely practiced throughout all of our hands-on activities. Children will do lots of measuring by counting, and when they
⊘	K.CC.B.5 K.CC.B.6	Count to tell the number of objects	classify items, different totals can be compared. Especially in these lessons: Counting: A Secret Friend Kindergarten of Shape
⊘	K.CC.C.7 K.CC.C.8	Compare numbers	Creatures Sugary Problems Comparing: Floating Problems Force of the Wind Friction on the Slopes A Secret Friend Kindergarten of Shape Creatures

Measurement and Data (MD): Standard A Describe and compare measurable attributes				
			Kide activity suggestions	
Ø	K.MD.A.1	Describe the measurable attributes of an object, such as length (long/short), height (tall/short), or weight (heavy/light).	Many lessons	
Ø	K.MD.A.2	Directly compare two objects with a measurable attribute in common, to describe which object has more of/less of the attribute. For example, directly compare the heights of two children and describe one child as taller/shorter.	Especially in: <u>Growing Dino</u> <u>An Exact Science</u> <u>Measuring</u>	



Domain: Mathematics

Measurement and Data (MD): Standard C
Classify objects and count the number of objects in each category

Kide	activity	suggestions	



K.MD.C.4

Sort a collection of objects into a given category, with 10 or less in each category. Compare the categories by group size.

Many lessons, especially those in our classification bundle

KiDE

Geometry: Standard A

Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres)

			Kide activity suggestions
	K.G.A.1	Describe objects in the environment using names of shapes and solids (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres). Describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, between, and next to.	A Celebration Meal Where Are You Hoseli?
	K.G.A.2	Correctly name shapes and solids (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres) regardless of their orientations or overall size.	Kindergarten of Shape Creatures A Secret Friend Hoseli's Holidays Position: A Celebration Meal
Ø	K.G.A.3	Identify shapes (squares, circles, triangles, rectangles, and hexagons) as two-dimensional and solids (cubes, cones, cylinders, and spheres) as three-dimensional.	Planning an Escape Egg-straordinary Nest Building Bubbles!

Geometry: Standard B

Analyze, compare, create, and compose shapes.

			Kide activity suggestions
Ø	K.G.B.4	Describe similarities and differences between two- and three-dimensional shapes/solids, in different sizes and orientations.	Peculiar Creatures of the Forest Planning an Escape
Ø	K.G.B.5	Model shapes in the world by building and drawing shapes.	Spooky Shadows Beehive
Ø	K.G.B.6	Compose a figure using simple shapes/solids and identify smaller shapes/solids within the figure.	A Secret Friend Spooky Shadow



Tennessee Early Learning Lesson Recommendations



Domain: Social Studies

The main focus of Kide activities is on inquiry skills (including critical thinking). Our program also has activities to support topics of map work and technology.

Whilst we don't claim to fully match with the Social Studies standards, on the following pages you can find a list of the ones we do support.

Economics			
			Kide activity suggestions
	K.04	Identify and explain how basic human needs of food, clothing, shelter, and transportation are met.	Fruity Surprise Getting Dressed for Autumn Habitat Hunting Stop and Go

Geography

Students will demonstrate an understanding of the concept of location, what maps and globes represent, and their geographical location.

Kide activity suggestions		
K.08	Use personal directions such as up, down, near, far, left, right, in front of, and behind.	Where Are You Hoseli? Northbound
K.09	Explain what a map and globe represent.	Welcome to Supraland Hoseli's Magnet Map Journey into Imagination Northbound Planes Trains and Hot Air Balloons

KIDE

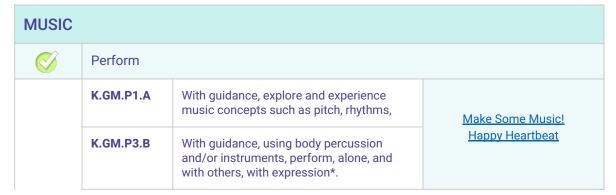


Domain: Fine Arts

The main focus of Kide activities is on **inquiry skills** in the context of STEAM lessons, including Art and Movement.

And so, whilst we don't claim to fully match with all of the Fine Arts standards, on the following pages you can find a list of the ones we do support.

DANCE			
Ø	Perform		
	K.D.P1.A	Make still and moving body shapes that show lines change levels, and vary in size	
	K.D.P1.B	Demonstrate tempo contrasts with movements that match to tempo of sound stimuli.	
	K.D.P1.C	Identify and apply different characteristics to movements (e.g., slow, smooth, or wavy).	
	K.D.P2.A	Demonstrate same-side and cross-body locomotor and nonlocomotor movements, body patterning movements, and body shapes.	See our <u>movement</u> lessons, especially <u>Party Robot</u> , <u>Lava</u> <u>Pond</u> , <u>True Friends</u>
	K.D.P2.B	Move safely in general space and start and stop on cue	
	K.D.P2.C	Move body parts in relation to other body parts, and repeat and recall movements upon request.	
	K.D.P3.A	Dance for and with others in a designated space.	
Ø	Create		
	MS.6.0	Maintains momentary stillness on various bases of support (body parts).	<u>Party Robot</u> <u>Stop and Go!</u> <u>Crab Walk</u>



KiDE





Domain: Fine Arts

VISUAL ARTS			
Ø	Create		
	K.VA.Cr1.A	Explore and experiment imaginatively with ideas and materials.	
	K.VA.Cr1.B	Collaborate in creative art-making in response to an artistic problem.	Planes, Trains and Hot Air
	K.VA.Cr2.A	Through experimentation, build skills in various media and artmaking approaches	<u>Balloons</u> <u>Winter Garden</u> <u>Habitat Hunting</u>
	K.VA.Cr2.B	Use art materials, tools, and equipment safely.	Spooky Shadows Journey into Imagination Welcome to Supraland
	K.VA.Cr2.C	Create art that represents natural and constructed environments.	Cave Paintings
	K.VA.Cr3.A	Explain the process of making art while creating.	
Ø	Present		
	K.VA.P1.A	Select art objects for personal portfolio and display	You could select and display creations from every session e.g. pictures, mark making.
	K.VA.P2.A	Explain the purpose of a portfolio	More ideas of how to do this here
	Present		
	K.VA.R1.A	Describe what an image represents.	<u>Pi Hiding</u> Spooky Shadows





Domain: Fine Arts

THEATRE			
Ø	Perform		
	K.T.P1.A	With prompting and support, identify characters, setting, and/or plot in dramatic play or a guided drama experience	
	K.T.P2.B	With prompting and support, explore and experiment with various technical elements in dramatic play	
	K.T.P3.A	Use body, face, gestures, and /or voice to communicate character traits and emotions	
Ø	Create		
	K.T.Cr1.A	With prompting and support, observe, invent, and inhabit an imaginary elsewhere in dramatic play	
	K.T.Cr1.B	With prompting and support, safely use materials to create props, puppets, and costume pieces	This standard is the very essence of our pedagogy!
	K.T.Cr2.A	With prompting and support, appropriately interact with peers and contribute to dramatic play	Jump into imaginary drama every single lesson!
	K.T.Cr2.B	With prompting and support, express original ideas in dramatic play/theatrical work	
	K.T.Cr3.A	With prompting and support, identify the who, what, and where of a story	
Ø	Respond		
	K.T.R1.A	With prompting and support, express an emotional response to characters in dramatic play	
	K.T.R2.B	With prompting and support, name and describe characters, settings, and/or plot	
	K.T.R3.A	With prompting and support, actively engage with others in dramatic play	





Domain: Physical Development

In addition to the more traditional STEAM areas, our cross-curricular programme also has activities to support **SEL** and **movement skills.**

Whilst we don't claim to fully match with the physical development standards, here you can find a list of the ones we do support.

MOTOR SKILLS				
	Locomotor Sk	Locomotor Skills		
			Kide activity suggestions	
Ø	MS.1.0	Performs locomotor skills while maintaining balance.	See our movement lessons Especially	
Ø	MS.3.0	Jumps and lands with two feet while maintaining balance.	Party Robot Puppy Playtime	
	Non Locomotor or Educational Games			
Ø	MS.6.0	Maintains momentary stillness on various bases of support (body parts).	Party Robot Stop and Go! Crab Walk	

MOVEMENT KNOWLEDGE & APPLICATION (MKA)					
	Movement Co	Movement Concepts			
			Kide activity suggestions		
Ø	MKA.1.0a MKA.1.0b	Identifies self-space. Moves in self-space.	0		
Ø	MKA.2.0a MKA.2.0b	Identifies five directions of travel Travels in five directions	See our <u>movement</u> lessons Especially Stop and Go!		
Ø	MKA.3.0a MKA.3.0b	Identifies fast and slow speeds. Travels using fast and slow speeds.	<u> </u>		
	Analysis and Strategies				
Ø	MKA.6.0	Recalls performance cues of locomotor and manipulative skills.	<u>Party Robot</u>		





Domain: Physical Development

FITNESS & PHYSICAL ACTIVITY (FPA)						
	Fitness Knowledge					
			Kide activity suggestions			
Ø	FPA.1.0	Recognizes that movement increases heart rate and breathing.	Happy Heartbeat			
Ø	FPA.2.0	Identifies active-play opportunities outside physical education class.	All lessons.			

PERSONAL & SOCIAL RESPONSIBILITY (PSR)						
	Personal Responsibility					
			Kide activity suggestions			
Ø	IPSR.1.0	Follows directions with few prompts	All lessons			
Ø	PSR.2.0	Actively listens to teacher feedback.				
	Cooperation					
Ø	PSR.3.0	Shares equipment with others.	All lessons			
	Procedures and Rules					
Ø	PSR.4.0	Recalls procedures and rules in the learning environment.	All lessons			
	Safety					
Ø	PSR.5.0	Participates safely and uses equipment properly with few reminders.	All lessons			







Domain: Physical Development

VALUES PHYSICAL ACTIVITY (VPA)						
	Appreciation					
			Kide activity suggestions			
Ø	VPA.1.0	Recognizes and participates in physical activity for enjoyment.	See our <u>movement</u> lessons			
	Challenge					
Ø	VPA.2.0	Acknowledges some physical activities are challenging/ difficult.	Develop this discussion and awareness through our movement lessons			

