### **Kide Science**® Correlation

For the

# **Colorado Early Learning Developmental Guidelines** ages 3 to 5

With additional material from Colorado Essential Skills Colorado Academic Standards (Science)



### **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





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

Engineering Science Arts Mathematics

( 45 min lesson Easy preparation

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 Kide Science correlates with Colorado's Early Learning Guidelines**



In this document we will show you:

- 1. How we support the Colorado Essential Skills
- 2. A summary of how we support the COLORADO Early Learning Guidelines\*
  - In particular the science domain
  - Then all other domains
- 3. How we support Colorado's Science & Engineering Practices, DCI's and Cross Cutting Concepts
- 4. Show you how we support each of the Early Learning Science Guidelines, with activities suggested for each.
- 5. Suggested activities for all other remaining guidelines we support.



### Something missing?

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

### **Kide Science and Colorado Essential Skills**

Our aim: to create the next generation of critical thinkers

Kide Science believes that by developing inquiry skills, we are preparing children for the 21st Century.

We're proud and excited to see how well this supports COLORADO's Essential Skills ...... etc etc

Ø	Communicator		
	Ø	Interpersonal Communication	
	Ø	Media Literacy	
		Digital Literacy	
	<b>Ø</b>	Data Literacy	
Ø	Prob	olem Solver	
	Ø	Critical Thinking and Analysis	
	Ø	Creativity and Innovation	
	Ø	Collaboration and Teamwork	
	Ø	Adaptability and Flexibility	
Ø	Com	Community Member	
	Ø	Social Awareness	
	Ø	Civic Engagement	
	×	Global and Cultural Awareness	
Ø	Emp	owered Individual	
	Ø	Self-Awareness	
	<b>Ø</b>	Self-Management	
	Ø	Self-Advocacy and Initiative	
		Career Awareness	
	Ø	Perseverance and Resilience	

### **Kide Science and Colorado Early Learning Guidelines**



See how many of your **Science** guidelines we support!

The main focus of our program is to develop inquiry skills, by investigating science topics in play-based ways.

For specific lesson recommendations, see our more detailed pages later on this document.



DOMAIN	We have lesson recommendations for:
Science Knowledge and Skills	100% of the domain
1. Scientific Inquiry	8/8 indicators
2. Reasoning and Problem Solving	3/3 indicators
3. Life Science	10/10 indicators

### **Kide Science and Colorado Early Learning Guidelines**



**DOMAIN** 

PHYSICAL DEVELOPMENT AND HEALTH

1. Health, Safety and Nutrition

### See how many of your other guidelines we support

We also develop inquiry skills across the curriculum. Therefore, we support the guidelines for many of the domains.

We have lesson recommendations for:

63% of the domain

5/12 indicators

For our specific lesson recommendations, see the following pages.



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2. Gross Motor Skills	3/3 indicators
3. Fine Motor Skills	4/4 indicators
SOCIAL-EMOTIONAL DEVELOPMENT	100% of the domain
1. Relationships with Adults and Peers	5/5 indicators
2. Sense of Identity and Belonging	3/3 indicators
3. Emotional Functioning	3/3 indicators
4. Emotional and Behavioral Self-Regulation	3/3 indicators
5. Cognitive Self-Regulation (Executive Functioning)	5/5 indicators
ENGLISH LANGUAGE DEVELOPMENT	100% of the domain
1. Receptive English Language Skills	5/5 indicators
2. Expressive English Language Skills	5/5 indicators
3. Engagement in English Literacy Activities	4/5 indicators
LANGUAGE DEVELOPMENT	81% of the domain
1. Attending and Understanding	4/5 indicators
2. Communicating and Speaking	7/8 indicators
3. Vocabulary	2/3 indicators
LITERACY KNOWLEDGE AND SKILLS	29% of the domain
1. Print and Alphabet Knowledge	1/11 indicators
2. Phonological Awareness	0/4 indicators
3. Comprehension and Text Structure	4/5 indicators
4. Writing	2/4 indicators

### **Kide Science and Colorado Early Learning Guidelines**

	DOMAIN	We have lesson recommendations for:
5	LOGIC AND REASONING	100% of the domain
-V-V-V	1. Reasoning and Problem-Solving	5/5 indicators
	2. Symbolic Representation	3/3 indicators
1+1	MATHEMATICS	56% of the domain
	1. Number Concepts and Quantities	5/10 indicators
	2. Operations and Algebraic Thinking	0/6 indicators
	3. Measurement and Data	3/3 indicators
	4. Geometry and Spatial Sense	6/6 indicators
	APPROACHES TO LEARNING	100% of the domain
	1. Initiative and Curiosity	7/7 indicators
	2. Creativity	6/6 indicators
(2)	SOCIAL STUDIES KNOWLEDGE & SKILLS	27% of the domain
	1. History and Events	0/3 indicators
	2. Geography	1/2 indicators
	3. Economics	0/6 indicators
	4. Civics	3/4 indicators
5/4	CREATIVE ARTS EXPRESSION	31% of the domain
	Dance	2/18 indicators
	Drama and Theatre Arts	10/14 indicators
	Music	7/22 indicators
	Visual Arts	7/12 indicators

### Our program supports Colorado Science and Engineering Practices

- 1. Asking Questions and Defining Problems
- 2. Developing and Using Models
- 3. Planning and Carrying out Investigations
- 4. Analyzing and Interpreting Data
- 5. Using Mathematical and Computational Thinking
- **6.** Constructing Explanations and Designing Solutions
- 7. Engaging in Argument from Evidence
- 8. Obtaining, Evaluating and Communicating Information

# We have lessons supporting the Cross Cutting Concepts

- 🚺 1. Patterns
- Cause and Effect: Mechanism and explanation
- 3. Scale, Proportion and Quantity
- Systems and System Models
- 5. Energy and Matter: Flows, cycles, and conservation
- 6. Structure and Function
- 7. Stability and Change

# We also support the following Standards in Science, including the Disciplinary Core Ideas

### 1. Physical Science

Students know and understand common properties, forms, and changes in matter and energy.

- PS1 Matter and Its Interactions
- PS2 Motion and Stability: Forces and Interactions
- PS3 Energy
- PS4 Waves and Their Applications

### 2. Life Sciences

students know and understand the characteristics and structure of living things, the processes of life, and how living things interact with each other and their environment.

- LS1 From Molecules to Organisms: Structures and Processes
- LS2 Ecosystems: Interactions, Energy and Dynamics
- LS3 Heredity: Inheritance and Variation of Traits
- LS4 Biological Evolution: Unity and Diversity

### 3. Earth and Space Sciences

Students know and understand the processes and interactions of Earth's systems and the structure and dynamics of Earth and other objects in space.

- ESS1 Earth's Place in the Universe
- ESS2 Earth's Systems
- ESS3 Earth and Human Activity

# Lesson recommendations for COLORADO EARLY LEARNING DEVELOPMENTAL GUIDELINES



### SCIENCE KNOWLEDGE AND SKILLS

Colorado's Science Knowledge & Skills domain describes children's abilities to: observe and gather information about the natural and physical world around them. Children use their natural curiosity to explore, ask questions and then process information by making connections, predictions, and generalizations.

We couldn't agree more! This is the main focus of Kide Science: to develop inquiry skills through science topics, in play-based ways.

Therefore we correlate with 100% of the Science COLORADO Early Learning Guidelines and you can find our lesson suggestions for each indicator below.

### 1. Scientific Inquiry:



	skills to observe and collect information and use it to ask tions, predict, explain, and draw conclusions.	Kide activity suggestions
<b>Ø</b>	Observe and describes observable phenomena (objects, materials, organisms, and events).	We develop these skills throughout all of our lessons.  See especially our Observation bundle
<b>Ø</b>	2. Engage in scientific talk.	All lessons
Ø	3. Compare and categorize observable phenomena.	Most lessons, see especially our <u>classification</u> bundle.
<b>Ø</b>	4. Use senses to explore the properties of objects and materials (e.g., solids, liquids).*	All lessons  The Peculiar Party of Mr Hush  What's Your Superpower?  Eggy Mystery  Happy Heartbeat
<b>Ø</b>	5. Make simple observations, predictions, explanations, and generalizations based on real-life experiences.*	All lessons
<b>⊘</b>	6. Notice change in matter.*	Bottled Heat  Hoseli's Instant Sorbet  A Freezing Surprise  Operation Ice Rescue  Cloudy Skies
Ø	7. Observe, describe and discuss properties of materials and transformation of substances.*	All lessons. E.g. <u>Toy Troubles</u> <u>Mrs Noblegas' Blob Soup</u>
Ø	8. Observe and discuss common properties, differences and comparisons among objects.*	Most lessons, see especially our <u>classification</u> bundle.



### **Lesson recommendations for** COLORADO EARLY LEARNING DEVELOPMENTAL GUIDELINES



### SCIENCE KNOWLEDGE AND SKILLS

### 2. Reasoning and Problem Solving: Kide activity suggestions Gathering information to make predictions, conduct investigations and experiments, draw conclusions, and analyze and communicate results 1. Ask a question, gather information, and make predictions. This is the very essence Kide Science! Every single activity provides children with the opportunity to practice these skills. 2. Plan and conduct investigations and experiments. 3. Analyze results, draw conclusions, and communicate results.







### **Lesson recommendations for** COLORADO EARLY LEARNING DEVELOPMENTAL GUIDELINES



### SCIENCE KNOWLEDGE AND SKILLS

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Make sense of natural phenomena and solve problems that  Kide activity s	suagestions
require understanding how individual organisms are configured and how these structures function to support life, growth, behavior and reproduction.	
1. Observe, describe and discuss living things and natural processes.*  See espective or Our plants and all of the control of	<u>y</u> bundle
2. Observe similarities and differences in the needs of living things.*  What makes a L Hiding in Pl Habitat H Breathing From Seed	ain Sight lunting Leaves
3. Observe and describe how natural habitats provide for the basic needs of plants and animals with respect to shelter, food, water, air and light.*  Hiding in Plants Habitat	lunting Leaves ive
4. Ask and pursue questions through simple investigations and observations of living things.*  All lessons in outplants and animals.	
5. Collect, describe, and record information about living things through discussion, drawings, graphs, technology and charts.*  Many opportunities to our lessons, From Seed What makes a L	especially: to <u>Plant</u>
6. Identify differences between living and nonliving things.*  What makes a L What a Mi	
7. Identify the common needs such as food, air and water of familiar living things.*  What makes a Laring for a Breathing	Pet Dog
8. Predict, explain and infer patterns based on observations and representations of living things, their needs and life cycles.*  Egg-straordinary From Seed Breathing	to Plant
9. Observe and document changes in living things over time using different modalities such as drawing, dramatization, describing or using technology.*  From Seed Breathing	
10.Recognize that plants and animals grow and change.*  From Seed	to Plant





### PHYSICAL DEVELOPMENT AND HEALTH

Our main focus is to develop children's inquiry skills, but we do this across a range of domains, including the Physical Development and Health Guidelines.

This way, children can develop domain healthy habits, such as performing self-care tasks independently, exercising, and motor skills, whilst also strengthening their science process skills.

Whilst we don't align with all of the guidelines, we do correlate with 63% of the Physical Development and Health Guidelines, and you can find lesson suggestions for those below.

### 1. Health, Safety and Nutrition



1. Health, Safety and Nathtion				
well-	maintenance of healthy and age appropriate physical being, and understanding of healthy and safe habits and ticing healthy habits.	Kide activity suggestions		
<b>Ø</b>	4. Get sufficient rest and exercise to support healthy development.*	Take a look at our <u>Movement activities bundle</u>		
<b>Ø</b>	5. Complete personal care tasks, such as dressing, brushing teeth, toileting, and washing hands independently from adults.*	Germs in Hiding Getting Dressed for Autumn		
<b>Ø</b>	6. Communicate an understanding of the importance of health and safety routines and rules.*	Excellent opportunities across all lessons, especially Stop and Go		
<b>Ø</b>	7. Follow basic health and safety rules and respond appropriately to harmful or unsafe situations.*	<u>Fruity Surprise</u>		
×	8. Distinguish food on a continuum from most healthy to less healthy.	Fruity Surprise		
<b>₩</b>	9. Eat a variety of nutritious foods.	rruny Surplise		
Ø	10. Participate in structured and unstructured physical activities.*	Movement activities bundle		





### PHYSICAL DEVELOPMENT AND HEALTH

	2. Gross Motor Skills			
The control of large muscles for movem balance.		control of large muscles for movement, navigation, and nce.	Kide activity suggestions	
	<b>Ø</b>	Develop motor control and balance for a range of physical activities, such as walking, propelling a wheelchair or mobility device, skipping, running, climbing, and hopping.*	Carousel (activity a) Party Robot	
	Ø	Develop motor coordination and skill in using objects for a range of physical activities, such as pulling, throwing, catching, kicking, bouncing or hitting balls, and riding a tricycle.	Movement bundle, especially Crab Walk Puppy Playtime Caring for a Pet Dog	
	Ø	3. Understand movement concepts, such as control of the body, how the body moves (such as an awareness of space and directionality), and that the body can move independently or in coordination with other objects.*	Movement bundle, especially Stop and Go Lava Pond	

3. Fi	Fine Motor Skills			
The control of small muscles for such purposes as using utensils, self-care, building, and exploring.		Kide activity suggestions		
<b>⊘</b>	1. Develop hand strength and dexterity.	Many lessons, for example: <u>Make It Rain</u> <u>Finding Dinosaur Fossils</u> <u>Rainbow (activity B)</u> <u>Beehive</u>		
Ø	Develop eye-hand coordination to use everyday tools, such as pitchers for pouring or utensils for eating.	All lessons, e.g. <u>Vanishing Trick</u> <u>A Celebration Meal</u>		
Ø	3. Manipulate a range of objects, such as blocks or books.	All lessons, e.g. <u>Spooky Shadows</u> <u>Planning an Escape</u>		
Ø	4. Manipulate writing, drawing, and art tools.	Excellent opportunities across many lessons, for example: Colorful Drawing Book Hoseli's Googly Eye Mystery The Many Sides of Black Secret Messages/Hide and Seek Welcome to Supraland		





### SOCIAL-EMOTIONAL DEVELOPMENT

In our lessons we develop inquiry skills **collaboratively**, through imaginary, story based scenarios. Therefore, we are also providing wonderful opportunities for children to develop positive relationships, positive ideas about themselves, regulate their emotions, behavior, and impulses, and express emotions. These are all skills found in Colorado's Social-Emotional Development Guidelines.

We correlate with 100 % of the Social-Emotional Development Guidelines. Below you can find lesson suggestions for the indicators we support

### 1. Relationships with Adults and Peers

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,	The h	nealthy relationships and interactions with adults and peers.	Kide activity suggestions
	Ø	1. Engage in and maintains positive relationships and interactions with adults.*	All lessons
	Ø	2. Engage in prosocial and cooperative behavior with adults.*	All lessons
	Ø	3. Engage in and maintains positive interactions and relationships with other children.*	All lessons, see especially our
	Ø	4. Engage in cooperative play with other children.	Collaboration activity bundle
	Ø	5. Use basic problem-solving skills to resolve conflicts with other children.	All lessons

### 2. Sense of Identity and Belonging



The perception that one is capable of successfully making decisions, accomplishing tasks, and meeting goals.  Kide activity suggestions			
Ø	Recognize self as a unique individual having own abilities, characteristics, emotions, and interests.*	All lessons, see especially our <u>Feelings bundle</u>	
Ø	2. Express confidence in own skills and positive feelings about self.*	What's Your Superpower? Welcome to Supraland What makes a Living Thing (activity C)	
Ø	3. Have a sense of belonging to family, community, and other groups.	All lessons	





## © SOCIAL-EMOTIONAL DEVELOPMENT

### 3. Emotional Functioning



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	althy range of emotional expression and learning positive natives to aggressive or isolating behaviors.	Kide activity suggestions
Ø	Express a broad range of emotions and recognize these emotions in self and others.*	All lessons,
Ø	2. Express care and concern toward others.	see especially our <u>Emotions bundle</u>
Ø	3. Manage emotions with increasing independence.*	

### 4. Emotional and Behavioral Self-Regulation



The ability to recognize and regulate emotions and behavior.  Kide activity suggestions		
Ø	1. Follow classroom rules and routines with increasing independence.*	All lessons
Ø	2. Appropriately handle and take care of classroom materials.*	All lessons
Ø	3. Manage actions, words, and behavior with increasing independence.*	All lessons



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All lessons

# **Lesson recommendations for COLORADO EARLY LEARNING GUIDELINES**



### SOCIAL-EMOTIONAL DEVELOPMENT

5. Demonstrate flexibility in thinking and behavior.\*

# 5. Cognitive Self-Regulation (Executive Functioning) The ability to regulate attention and impulses. Kide activity suggestions Kide activity suggestions All lessons 2. Maintain focus and sustain attention with minimal adult support.\* All lessons 3. Persist in tasks.\* All lessons 4. Hold information in mind and manipulate it to perform tasks.\* All lessons, as children continue to remember the problem they are trying to solve all the way through the session







### ENGLISH LANGUAGE DEVELOPMENT

We correlate with 100% of the English Language and Development Guidelines. After all, the main focus of a Kide activity is on inquiry skills (including communication).

By basing our lessons in an imaginary world, English Language Learners can practice their English Language Development skills in a context which they themselves have created. This means that they feel much more comfortable to practice their new language.

Our hands on, practical inquiries, collaborative approach, simple but vocab-filled stories and vivid illustrations all support children as they practice their receptive and expressive skills.

See the lesson suggestions below for the indicators we do support.

### 1. Receptive English Language Skills:

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The a	ibility to comprehend or understand the English language.	Kide activity suggestions
Ø	1. Participate with movement and gestures while other children and the teachers dance and sing in English.	<u>True Friends</u> <u>Party Robot</u> <u>Make Some Music</u>
<b>⊘</b>	2. Acknowledge or respond nonverbally to common words or phrases, such as "hello," "good bye," "snack time," or "bathroom," when accompanied by adult gestures.	All lessons
<b>Ø</b>	3. Point to body parts when asked, "Where is your nose, hand, leg?"	Finding Dinosaur Fossils Hoseli's Googly Eye Mystery Party Robot Happy Heartbeat Peculiar Creatures of the Forest
<b>Ø</b>	4. Comprehend and respond to increasingly complex and varied English vocabulary, such as "Which stick is the longest?" "Why do you think the caterpillar is hungry?"	All lessons, especially in the final reporting back phase.
Ø	5. Follow multi-step directions in English with minimal cues or assistance.	All lessons

### 2. Expressive English Language Skills



3	The a	ability to speak or use English.	Kide activity suggestions
	Ø	1. Repeat word or phrase to self, such as "bus" while group sings the "Wheels on the Bus" or "brush teeth" after lunch.	All lessons provide this opportunity. Use flashcards to support this: E.g. <u>senses</u> , <u>emotions</u> , <u>seasons</u>
	Ø	2. Request items in English, such as "car," "milk," "book," "ball."	All lessons
	Ø	3. Use one or two English words, sometimes joined to represent a bigger idea, such as "throwball."	All lessons
	Ø	4. Use increasingly complex and varied English vocabulary.	All lessons, see especially our <u>Language</u> <u>skills</u> bundle
	Ø	5. Construct sentences, such as "The apple is round," or "I see a fire truck with lights on."	All lessons





### **ENGLISH LANGUAGE DEVELOPMENT**

### 3. Engagement in English Literacy Activities Understanding and responding to books, storytelling, and songs Kide activity suggestions presented in English. 1. Demonstrate eagerness to participate in songs, rhymes, and stories in English. All lessons include a story to participate in! 2. Point to pictures and says the word in English, such as "frog," "baby," "run." All lessons 4. Talk with peers or adults about a story read in English All lessons are rooted in this! 5. Tell a story in English with a beginning, middle, and end from a book or about All lessons a personal experience.





### LANGUAGE DEVELOPMENT

We correlate with 81% of the Language Guidelines.

Here at Kide Science we develop children's inquiry skills, including **communication**. We know that this enables children to develop their learning and social competence: something which is also an aim of the Colorado Early Learning Guidelines.

See our lesson suggestions below for the Language Development Guidelines we support.

### 1. Attending and Understanding



The ability to comprehend or understand language.		ability to comprehend or understand language.	Kide activity suggestions
	Ø	1. Attend to language during conversations, songs, stories, or other learning experiences.*	All lessons
	Ø	2. Comprehend increasingly complex and varied vocabulary.*	Opportunities through all lessons, see especially our <u>Language skills</u> bundle
	Ø	3. Comprehend different forms of language, such as questions or exclamations.*	All lessons
	<b>Ø</b>	4. Follow two- to three-step directions.*	Opportunities through all lessons, see especially <u>Where are you, Hoseli?</u> <u>Space Adventure</u>

### 2. Communicating and Speaking



The a	The ability to use language.  Kide activity suggestions				
Ø	Vary the amount of information provided to meet the demands of the situation.	Children can develop this skill when learning how to communicate with their peers, their teacher and of course, with our story character.			
Ø	2. Understand, follow, and use appropriate social and conversational rules.	All lessons			
Ø	3. Express self in increasingly long, detailed, and sophisticated ways.*	All lessons			
Ø	4. Participate in conversations of more than three exchanges with peers and adults.*	See our <u>Collaboration</u> skills bundles			
<b>Ø</b>	5. Use language to express ideas and needs.*	All lessons, see especially our <u>Language</u> <u>skills</u> bundle			
Ø	7. Practice asking questions and making statements.*	The teacher may facilitate this through every activity			
Ø	8. Speak in sentences of five or six words.*	All lessons provide an opportunity to practice this skill			





### LANGUAGE DEVELOPMENT

3. \	3. Vocabulary		
The	ability to use a variety of words.	Kide activity suggestions	
<b>Ø</b>	1. Understand and use a wide variety of words for a variety of purposes.*	Opportunities through all lessons, see especially our <u>Language skills</u> bundle	
Ø	3. Use increasingly complex and varied vocabulary.*	Opportunities through all lessons, see especially our <u>Language skills</u> bundle	





### LITERACY KNOWLEDGE AND SKILLS

We correlate with 29% of the Literacy Knowledge and Skills domain.

The main focus of a Kide activity is to develop children's inquiry skills (including **communication**). On top of this, each of the Kide activities start with a shared story, providing an excellent opportunity to practice listening skills and reading skills. Children can then be supported to respond to their experiences in a variety of ways, including writing.

Whilst we don't claim to fully match with the Literacy guidelines, on the following pages you can find find suggested lessons for the ones we do support.



### 1. Print and Alphabet Knowledge



The i	nterest in books and their characteristics.	Kide activity suggestions
	Demonstrate an understanding of how print is used (functions of print) and the rules that govern how print works (conventions of print).*	Use the story letter to develop this each lesson
<b>Ø</b>	3. Show interest in both shared reading experiences and looking at books independently.*	Supported through all lessons
<b>A</b>	8. Recognize print in everyday life, such as numbers, letters, one's name, words, and familiar logos and signs.*	For each lesson, develop these skills during the shared reading of the story letter.
<b>A</b>	9. Understand that print conveys meaning.*	
<b>&gt;</b>	10. Understand conventions, such as print moves from left to right and top to bottom of a page.*	
<b>A</b>	11. Recognize the association between spoken or signed and written words.*	



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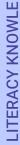


### LITERACY KNOWLEDGE AND SKILLS

### 3. Comprehension and Text Structure



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The ability to understand and get meaning from stories and information from books and other texts.		Kide activity suggestions
Ø	Ask and answer questions and make comments about print materials.*	All lessons
<b>Ø</b>	2. Retell stories or information from books through conversation, artistic works, creative movement, or drama.*	All lessons
Ø	3. Make predictions based on illustrations.*	All lessons
Ø	4. Begin to identify key features of reality versus fantasy in stories, pictures, and events.*	As our lessons are set in an imaginary world called Supraland, many discussions about this will happen: we promise you!





### LITERACY KNOWLEDGE AND SKILLS

4. Writing		
The familiarity with writing implements, conventions, and emerging skills to communicate through written representations, symbols, and letters.  Kide activity suggestions		
<b>⊘</b>	1. Experiment with writing tools and materials.*	For example: <u>Colorful Drawing Book</u> <u>Hoseli's Magnet Map</u> <u>Welcome to Supraland</u> <u>Peculiar Creatures of the Forest</u> <u>Winter Garden</u> <u>Cave Paintings</u>
A	2. Recognize that writing is a way of communicating for a variety of purposes, such as giving information, sharing stories, or giving an opinion.*	Our lessons provide a range of wonderful opportunities to write
Ø	3. Use scribbles, shapes, pictures, and letters to represent objects, stories, experiences, or ideas.*	See our <u>Arts bundle</u> , especially: Many lessons e.g. Peculiar Creatures of the Forest  Secret Messages Hide and Seek What makes a Living Thing? A Secret Friend (activity B)







### LOGIC AND REASONING

We correlate with 100% of the Logic and Reasoning domain.

Every single Kide Science lesson poses a problem to children. They are encouraged to analyze the problem, draw on their knowledge, test out ideas, and use their critical thinking to solve it. We then provide opportunities for children to represent their ideas symbolically, especially through pretend play.

See our lesson suggestions below for each Logic and Reasoning indicator.

### 1. Reasoning and Problem-Solving



	ability to recognize, understand, and analyze a problem and on knowledge or experience to seek solutions to a problem.	Kide activity suggestions
<b>Ø</b>	1. Seek multiple solutions to a question, task, or problem.	All lessons
<b>Ø</b>	2. Recognize cause and effect relationships.	All lessons
Ø	3. Classify, compare, and contrast objects, events, and experiences.	All lessons, especially our <u>classification</u> bundle.
Ø	4. Use past knowledge to build new knowledge.	All lessons
Ø	5. Identify problems and search for solutions by asking questions during collaborative explorations of the topic; begin to state facts about the topic.*	All lessons

### 2. Symbolic Representation



The	use of symbols or objects to represent something else.	Kide activity suggestions
Ø	Represent people, places, or things through drawings, movement, and three-dimensional objects.	All lessons, see especially our Emotional skills activity bundle
Ø	2. Engage in pretend play and act out roles.	All lessons, e.g. <u>Egg-straordinary Nest Building</u> <u>Habitat Hunting</u> <u>Puppy Playtime</u> <u>Caring for A Pet Dog</u>
<b>Ø</b>	3. Begin to identify key features of reality versus fantasy in stories, pictures, and events.*	As our lessons are set in an imaginary world called Supraland, many discussions about this will happen: we promise you!



### **MATHEMATICS**

We correlate with 56% of the Mathematics Guidelines.

The main focus of a Kide activity is on inquiry skills (including **measurement, comparison and classification**.) These skills set the foundations to number concepts, quantities, and operations. We also support Geometry and Spatial Sense through our varied, creative activities.

Whilst we don't claim to fully match with the Mathematics guidelines, on the following pages you can find lesson suggestions for the ones we do.

### 1. Number Concepts and Quantities



1. Nu	ımber Concepts and Quantities	
prope	nderstanding that numbers represent quantities and have ordinal erties (number words represent a rank order, cular size, or position in a list).	Kide activity suggestions
<b>⊘</b>	1. Count verbally or sign to at least 20.*	It's Raining Lava Pond Hoseli's Journey (activity B) Cave Conundrum (activity A)
	2. Instantly recognize, without counting, small quantities of up to five objects and say or sign the number.*	Sugary Problems A Secret Friend
Ø	3. Say or sign the number names in order when counting, pairing one number word that corresponds with one object, up to at least 10.*	Sugary Problems Crab Walk A Secret Friend
<b>Ø</b>	4. Use the number name of the last object counted to answer "How many?" questions for up to approximately 10 objects.*	Lava Pond Sugary Problems A Secret Friend Hoseli's Journey (activity B) Secret Messages (activity a)
<b>₹</b>	5. Accurately count as many as five objects in a scattered configuration or out of a collection of more than five objects.*	Sugary Problems A Secret Friend Crab Walk
<b>A</b>	6. Understand that each successive number name refers to a quantity that is one larger.*	<u>It's Raining</u> <u>Cave Conundrum (activity A)</u>
Ø	7. Identify whether the number of objects in one group is more than, less than, or the same as objects in another group for up to at least five objects.*	Measuring (activity B) Hiding in Plain Sight Crab Walk Kindergarten of Shape Creatures
	9. Associate a number of objects with a written numeral 0-5.*	<u>Lava Pond</u> <u>A Secret Friend</u> Can be supported through our <u>Number Flashcards</u>
<b>Ø</b>	10. Recognize and, with support, write some numerals up to 10.*	Lava Pond A Secret Friend Cave Conundrum (activity A) Secret Messages (activity a) Sweet Rainbow

Can be supported through our Number Flashcards



### **MATHEMATICS**

2. Operations and Algebraic Thinking			
	The u	se of numbers to describe relationships and solve problems.	Kide activity suggestions
	<b>₹</b>	Represent addition and subtraction in different ways, such as with fingers, objects, and drawings.*	Sugary Problems A Secret Friend

### 3. Measurement and Data The understanding of attributes and relative properties of objects as related to Kide activity suggestions size, capacity, and area. 1. Use comparative language, such as shortest, heavier, biggest, or later.\* **Growing Dino** Measuring (activity B) Hiding in Plain Sight Kindergarten of Shape Creatures 2. Compare or order up to five objects based on their measurable attributes, **Balancing Problems** such as height or weight.\* Make Some Music Halloween: Wake Up the Ghost! 3. Measure using the same unit, such as putting together snap cubes to see how Many lessons include children tall a book is.\* measuring using finger widths. E.g. Who Stole The Salt? Optical Illusions (Activity B) Kindergarten of Shape Creatures





### **MATHEMATICS**

### 4. Geometry and Spatial Sense



	nderstanding of shapes, their properties, and how objects are related to nother.	Kide activity suggestions
Ø	1. Name and describe shapes in terms of length of sides, number of sides, and number of angles/ corners.*	Kindergarten of Shape Creatures Peculiar Creatures of the Secret Forest Beehive Hoseli's Holidays: A Fallen Star
Ø	2. Correctly name basic shapes (circle, square, rectangle, triangle) regardless of size and orientation.*	Kindergarten of Shape Creatures Bubbles! Spooky Shadows The Great Inventors of the Secret Forest Egg-straordinary Nest Building Beehive
Ø	3. Analyze, compare, and sort two-and three dimensional shapes and objects in different sizes. Describe their similarities, differences, and other attributes, such as size and shape.*	Peculiar Creatures of the Secret Forest Kindergarten of Shape Creatures Growing Dino Egg-straordinary Nest Building
Ø	4. Compose simple shapes to form larger shapes.	Planning an Escape Bubbles! The Great Inventors of the Secret Forest
Ø	5. Understand and use language related to directionality, order, and the position of objects, including up/down and in front/behind.*	A Celebration Meal A Floaty Drink
Ø	6. Correctly follow directions involving their own position in space, such as "Stand up" and "Move forward."*	Where are you, Hoseli? Space Adventure



### APPROACHES TO LEARNING

We correlate with 100% of the Approaches to Learning Standards.

Approaches to learning are at the very heart of what we do at Kide Science. Our aim is to create the next generation of critical thinkers, so every single one of our lessons gives children the opportunity to use their initiative and creativity to solve a problem.

### 1. Initiative and Curiosity



erest in varied topics and activities, a desire to learn and endence in learning.	Kide activity suggestions
1. Engage in independent activities.	All lessons
2. Make choices and communicate these to adults and other children.	All lessons
3. Independently identify and seek things to complete activities or tasks, such as gathering art supplies to make a mask or gathering cards to play a matching activity.	All lessons, for example <u>Welcome to Supraland</u> <u>Habitat Hunting</u> <u>Planes, Trains and Hot Air Balloons</u> <u>True Friends</u>
4. Plan play scenarios, such as dramatic play or construction, by establishing roles for play, using appropriate materials, and generating appropriate scenarios to be enacted.	All lessons, especially <u>Egg-straordinary Nest Building</u> <u>Habitat Hunting</u> <u>Puppy Playtime</u> <u>Caring for A Pet Dog</u>
5. Ask questions and seek new information.	All lessons
Be willing to participate in new activities or experiences even if they are perceived as challenging.	All lessons
7. Demonstrate eagerness to learn about and discuss a range of topics, ideas, and activities.	All lessons
	1. Engage in independent activities.  2. Make choices and communicate these to adults and other children.  3. Independently identify and seek things to complete activities or tasks, such as gathering art supplies to make a mask or gathering cards to play a matching activity.  4. Plan play scenarios, such as dramatic play or construction, by establishing roles for play, using appropriate materials, and generating appropriate scenarios to be enacted.  5. Ask questions and seek new information.  6. Be willing to participate in new activities or experiences even if they are perceived as challenging.  7. Demonstrate eagerness to learn about and discuss a range of topics, ideas,



### APPROACHES TO LEARNING

### 2. Creativity



2. Greativity			
Creat	Creatively engaging in learning and interactions with others.  Kide activity suggestions		
<b>Ø</b>	Ask questions related to tasks or activities that indicate thinking about new ways to accomplish the task or activity.	All lessons	
Ø	2. Approach tasks, activities, and play in ways that show creative problem solving.	All lessons, e.g. <u>The Great Inventors of the Secret Forest</u> <u>Lift It Up!</u>	
Ø	3. Use multiple means of communication to creatively express thoughts, feelings, or ideas.	All lessons e.g. <u>Getting Dressed for Autumn</u> <u>True Friends</u>	
Ø	4. Engage in social and pretend play.	All lessons	
Ø	5. Use imagination with materials to create stories or works of art.	Most lessons, see especially our <u>Arts bundle</u>	
Ø	6. Use objects or materials to represent something else during play, such as using a paper plate or Frisbee as a steering wheel.	Many lessons, especially <u>Journey into Imagination</u> <u>Welcome to Supraland</u> <u>Habitat Hunting</u> <u>Planes, Trains and Hot Air Balloons</u> <u>Treasure Hunt</u>	

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# Lesson recommendations for COLORADO EARLY LEARNING GUIDELINES



### SOCIAL STUDIES KNOWLEDGE & SKILLS

Our main focus is to develop children's inquiry skills through STEAM subjects, but we do believe that children can still strenghten their science process skills in other contexts, even Geography and History!

Whilst we don't claim to fully align with the Social Studies Knowledge and Skills, we do correlate with 27% of them. You can find our lesson suggestions for those indicators below.

1. His	story and Events	
	nderstanding that events happened in the past and how these events to one's self, family, and community.	Kide activity suggestions
<b>A</b>	1. Differentiate between past, present, and future.	Finding Dinosaur Fossils Cave Paintings

# 2. Geography Apply geographic representations and perspectives to analyze human movement, spatial patterns, systems, and the connections and relationships among them. 1. Identify aspects of the environment, such as roads, buildings, trees, gardens, bodies of water, and land formations. Planes Trains and Hot Air Balloons Lava Pond Foam Eruption Welcome to Supraland Breathing Leaves Stop and Go Summer Sandcastles

All lessons

# **Lesson recommendations for COLORADO EARLY LEARNING GUIDELINES**



### SOCIAL STUDIES KNOWLEDGE & SKILLS

4. Demonstrate self-regulated behaviors and fairness in resolving conflicts.

4. Civics		
	ze the origins, structures, and functions of governments to evaluate the ct on citizens and the global society.	Kide activity suggestions
<b>₹</b>	Understand the reasons for rules in the home and classroom and for laws in the community.	Many opportunities to discuss safety rules, including Stop and Go
Ø	2. Show interest in interacting with and developing relationships with others.	All lessons
Ø	3. Recognize that everyone has rights and responsibilities within a group.	All lessons
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### **CREATIVE ARTS EXPRESSION**

We develop inquiry skills through STEAM activities, including Art. Therefore our activities provide the opportunity to practice many of the Creative Arts Expression Guidelines, 31% of them, in fact.

In particular, every single Kide activity encourages children (and adults) to act in role as an investigator. This strengthens children's drama and theater skills.

For the indicators we do fully cover, see the lesson suggestions below.

### **DANCE**

### 1. Movement



The u	ise of the body to move to music and express oneself.	Kide activity suggestions
Ø	Safely practice simple locomotor and non-locomotor movements.	Take a look at our Movement activities,
	2. Explore movement in time and space using shape, size, level, direction, stillness and transference of weight (stepping).	Where Are You, Hoseli? (Activity A)  Lava Pond  Stop and Go
Ø	3. Explore movement to encourage (kinesthetic) body awareness.	Take a look at our <u>Movement activities</u>
	4. Explore simple phrases of movement to experience rhythm, clapping and moving to music in relationship to others.	Happy Heartbeat Party Robot True Friends

### 2. Create, Compose, and Choreograph



Using the dance elements of space, time, and energy to explore, improvise, and develop movement phrases, sequences and dances.		Kide activity suggestions
<b>A</b>	Create movements in response to sensory ideas (e.g., textures, colors, smells) and images from nature.	Egg-straordinary Nest Building Habitat Hunting
A	2. Move to express different feelings in personal and general space.	Come Out, Pikkuli!
<b>a</b>	3. Explore movement while moving with objects (e.g., scarves, feathers, balls).	<u>Crab Walk</u> <u>Party Robot</u> <u>Happy Heartbeat</u>
<b>A</b>	4. Transfer same movements to different body parts and use repetition.	Party Robot



### CREATIVE ARTS EXPRESSION

### **DANCE**

4. Re	4. Reflect, Connect, and Respond			
	cting upon dance, connecting it with other disciplines, responding to liscuss and analyze dance as art.	Kide activity suggestions		
<b>A</b>	Experience the joy of seeing and responding to dance.	<u>Party Robot</u> <u>True Friends</u>		
A	2. Demonstrate movement to express emotion.	Come Out, Pikkuli!		
<b>₹</b>	3. Express what is seen and felt in a movement with different tempos, rhythms and genres	<u>Happy Heartbeat</u>		
	4. View a performance with attention.	<u>True Friends</u> <u>Party Robot</u>		
A	6. Show their favorite dance move to the performers or each other.	Party Robot		



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# **Lesson recommendations for COLORADO EARLY LEARNING GUIDELINES**



### CREATIVE ARTS EXPRESSION

### DRAMA AND THEATER ARTS

puppetry, etc.).

	1. Create			
<b>⊘</b>		ing and forming theatrical works, interpreting theatrical works for rmance and design, and developing characters and analyzing roles.	Kide activity suggestions	
	Ø	Create characters and environments using imagination and background knowledge through dramatic play or guided drama experience (e.g., story drama, creative drama, movement stories, pantomimes, puppetry, etc.).	All lessons	
	<b>Ø</b>	2. Generate multiple representations of a single object in a variety of dramatic experiences (e.g., story drama, creative drama, movement stories, pantomime, puppetry, etc.).	All lessons e.g. <u>Journey into Imagination</u> <u>Welcome to Supraland</u> <u>Habitat Hunting</u> <u>Planes, Trains and Hot Air Balloons</u> <u>Treasure Hunt</u>	
	Ø	3. Communicate ideas through actions and words using imagination and background knowledge in dramatic play or a guided drama experience (e.g., story drama, creative drama, movement stories, pantomimes, puppetry, etc.).	All lessons	
	Ø	4. Investigate story in dramatic play or a guided drama experience (e.g., story drama, creative drama, movement stories, pantomimes, puppetry, etc.).	All lessons	
		5. Apply personal experiences to a story in dramatic play or a guided drama	All Leaves and the second of t	

2. Pe	2. Perform			
Expressing the human experience in story, movement, speech, and staging for an intended audience.		Kide activity suggestions		
Ø	1. Make appropriate character reactions that connect the environment or cultures of the story using imagination or background knowledge in a dramatic play or a guided drama experience (e.g., story drama, creative drama, movement stories, pantomime, puppetry, etc.).	All lessons encourage children to act in role		
Ø	2. Create characters using body and voice in dramatic play or a guided drama experience (e.g., story drama, creative drama, movement stories, pantomime, puppetry, etc.).	and respond to different story events.		

All lessons provide an opportunity for this

experience (e.g., story drama, creative drama, movement stories, pantomime,



### CREATIVE ARTS EXPRESSION

### DRAMA AND THEATER ARTS

### 3. Respond



	J. NE	spond	
cultu		onding to the artistic and scientific knowledge of conventions, es, styles, genres, theories, and technologies needed to know better es and best practices.	Kide activity suggestions
	Ø	1. Recall an emotional response in dramatic play or a guided drama experience.	See our <u>Pikkuli</u> bundle especially
	Ø	2. Reflect on choices in a dramatic play and guided drama experiences.	Reporting section of all lessons
	Ø	3. Name and describe characters in a dramatic play or a guided drama.	All lessons
	<b>⊘</b>	4. Recognize artistic choices.	Artistic choices are celebrated in many lessons, including  Magical Winter Garden  Cave Paintings  Welcome to Supraland  A Secret Friend (activity B)
		5. Identify and connect stories and cultural experiences that are similar to one another in dramatic play or a guided drama experience.	Links between the stories can be explored, and children can bring their own cultural experiences to their play each lesson

### **MUSIC**

### 1. Music Expression



The use of voice and instruments to create sounds.		Kide activity suggestions
	4. Respond to rhythmic patterns and elements of music using expressive movement.	Opportunities to develop this through <u>Happy Heartbeat</u> <u>Party Robot</u> <u>True Friends</u>
A	5. Apply teacher feedback for progress of musical practice and experience.	Make Some Music!

### 2. Creation of Music



The u	se of voice and instruments to create sounds.	Kide activity suggestions
<b>Ø</b>	Improvise sound effects to accompany play activities.	Happy Heartbeat
<b>⊘</b>	2. Use improvised movement to demonstrate musical awareness.	Happy Heartbeat Party Robot Lava Pond



### CREATIVE ARTS EXPRESSION

### **MUSIC**

3. Theory of Music			
	write, and analyze the elements of music through a variety of means monstrate musical literacy.	Kide activity suggestions	
Ø	1. Use individual means to respond to rhythm.	<u>Happy Heartbeat</u>	
A	2. Use individual means to respond to pitch.	Make Some Music!	
<b>Ø</b>	6. Use personal communication to describe sources of sound.	Hello, Is Anybody Out There?  Make Some Music!  Happy Heartbeat  Eggy Mystery	
Ø	7. Use individual means to respond to dynamics and tempo.	<u>Happy Heartbeat</u> <u>Party Robot</u>	
Ø	8. Recognize a wide variety of sounds and sound sources.	Hello, Is Anybody Out There?  Make Some Music!  Happy Heartbeat  Eggy Mystery	

### **VISUAL ARTS**

1. Ob	1. Observe and Learn to Comprehend:			
Identify art in daily surroundings.		Kide activity suggestions		
<b>A</b>	Select images in materials such as but not limited to books, cartoons, computer games, and environmental print	Our lessons are set in an imaginary world so we do not use established works of art.		
Ø	2. Use age-appropriate communication to describe works of art.	However, children have many opportunities to create and discuss their <u>own</u> artwork.		
	3. Recognize basic language of art and design in relation to daily surroundings.	See our <u>Art bundle</u> .		



### CREATIVE ARTS EXPRESSION

### **VISUAL ARTS**

	2. Envision and Critique to Reflect		
<b>%</b>	Evalu	ate the effectiveness of what is made during the creative process.	Kide activity suggestions
	Ø	Explain that works of art communicate ideas and tell stories.	<u>Journey into Imagination</u> <u>Treasure Hunt</u>
	Ø	2. Communicate a story about a work of art.	Journey into Imagination  Cave Paintings  Planes Trains and Hot Air Balloons
	Ø	3. Discuss one's own artistic creations and those of others.	Most lessons

	3. Invent and Discover to Create			
)	Use different skills to generate works of art for functional, expressive, conceptual, and social/cultural purposes.		Kide activity suggestions	
	Ø	1. Explore the process of creating works of art at one's own pace.		
	Ø	2. Use art materials freely, safely, and with respect to specific environments.	See our <u>Art bundle</u> .	
	<b>⊘</b>	3. Engage in the process of creating visual narratives from familiar stories and subject matter.		

	4. Re	4. Relate and Connect to Transfer		
J	Make new connections to their own environments, cultures, and stories through the process of making art.  Kide activity suggestions			
	A	3. Identify arts materials used by artists.	See our <u>Art bundle</u> .	

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