K-2 Early Learning Standards: NGSS, Common Core, and C3 Framework

To help educators link instruction to academic requirements, each <u>Trees & Me</u> activity includes an Early Learning Standards graphic, which lists practices and concepts addressed in the activity for four subject areas: Science, English Language Arts, Math, and Social Studies. In addition, the following chart details K–2-level standards connections for all the activities.

In the United States, each state defines its own education mandates for schools, so exact curriculum connections vary by jurisdiction. However, many states use national standards as the foundation for their state-specific standards. The Early Learning Standards connections in this guide are based on the following national standards:



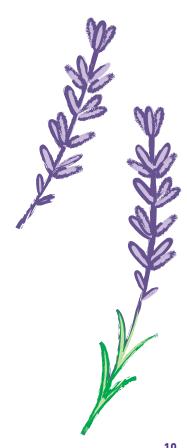






The following K– 2 early learning standards connections are replicated from Appendix E: Connection to Standards in *Trees & Me*.

- Science, Next Generation Science Standards (NGSS)
- · English Language Arts, Common Core State Standards-ELA
- Math, Common Core State Standards-Mathematics
- · Social Studies, C3 Framework for Social Studies



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	K-2 SPECIFICS	TREES & ME ACTIVITY											
SCIENCE		1	2	3	4	5	6	7	8	9	10	11	12
PRACTICES													
Asking Questions and Defining Problems	Ask questions based on observations to find more information about the natural and/or designed world(s).					*			•		•	*	•
Asking Questions and Defining Problems	Ask and/or identify questions that can be answered by an investigation.	*			•	*	•					*	
Developing and Using Models	Develop and/or use a model to represent amounts, relationships, relative scales (bigger, smaller), and/or patterns in the natural and designed world(s). [Models may include diagrams, drawings, physical replicas, dioramas, dramatizations, or storyboards.]		*		•	•	•			*		*	~
Planning and Carrying Out Investigations	With guidance, plan and conduct an investigation in collaboration with peers.		*	*	*	•		•		*	•	•	
Analyzing and Interpreting Data	Record information (observations, thoughts, and ideas).		•					•				*	
Analyzing and Interpreting Data	Use and share pictures, drawings, and/or writings of observations.		•						•	•		*	
Using Mathematics and Computational Thinking	Use counting and numbers to identify and describe patterns in the natural and designed world(s).	*				•			•			~	
CONCEPTS													
Wave Properties	Sound can make matter vibrate, and vibrating matter can make sound. (PS4.A)		*										
Structure and Function	All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, more from place to place and seek, find, and take in food, water, and air. Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow. (LS1.A)		•	•		•	•	*	*	*	•		
Organization for Matter and Energy Flow in Organisms	All animals need food in order to live and grow. They obtain their food from plants or from other animals. Plants need water and light to live and grow. (LS1.C)						*		•				•
Interdisciplinary Relationships in Ecosystems	Plants depend on water and light to grow. Plants depend on animals for pollination or to move their seeds around. (LS2.A)								•		*		•
Biodiversity and Humans	There are many different kinds of living things in any area, and they exist in different places on land and in water. (LS4.D)	•				•	•				*		
Natural Resources	Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do. (ESS3.A)			*	*							*	*
Weather and Climate	Weather is the combination of sunlight, wind, snow or rain, and temperature in a particular region at a particular time. People measure these conditions to describe and record the weather and to notice patterns over time. (ESS2.D)					*	*	*	*				
Patterns	Patterns in the natural world can be observed, used to describe phenomena, and used as evidence.	*	*	*				•	*				
Scale, Proportion, and Quantity	Students use relative scales (e.g., bigger and smaller; hotter and colder; faster and slower) to describe objects.							•					
System and System Models	Objects and organisms can be describe in terms of their parts and systems in the natural and designed world have parts that work together.			*				•					
Structure and Function	The shape and stability of structures of natural and designed objects are related to their function(s).	*										•	
Stability and Change	Some things stay the same while other things change. Things may change slowly or rapidly.							•	*	•			

 $[\]bigstar$ = Addressed in Featured Experience and other activity experiences

^{✓ =} Addressed in Featured Experience only

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ENGLISH		TREES & ME ACTIVITY											
LANGUAGE ARTS	K-2 SPECIFICS	1	2	3	4	5	6	7	8	9	10	11	12
PRACTICES													
Speaking and Listening: Comprehension and Collaboration	Participate in collaborative discussions with diverse partners about Grades K-2-appropirate topics and texts with peers and adults in small and larger groups.	*	*	*	*	*	*	*	*	*	*	*	*
Speaking and Listening: Comprehension and Collaboration	Ask and answer questions in order to seek help, get information, or clarify something that is not understood.	*	*	*	*	*	*	*	*	*	*	*	*
CONCEPTS													
Speaking and Listening: Presentation of Knowledge and Ideas	Describe familiar people places, things, and events and, with prompting and support, provide additional detail.	*	*	*	*	*	*	*	*	*	*	*	*
Reading: Key Ideas and Details	Ask and answer questions about key details in a text.					•		*					
Writing: Text Types and Purpose	Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.	*									•		
						TREE	S & N	1E AC	TIVITY	1			
MATH	K-2 SPECIFICS	1	2	3	4	5	6	7	8	9	10	11	12
PRACTICES													
Reason abstractly and quantitatively.	Reason abstractly and quantitatively.		*	*	•	•				•		*	
CONCEPTS													
Counting and Cardinality	Count to tell the number of things.											*	
Measurement and Data	Describe and compare measurable attributes.									•			
Measurement and Data	Represent and interpret data.											*	
Measurement and Data	Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple puttogether, take-apart, and compare problems using information presented in a bar graph.				•	•						•	
Measurement and Data	Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.					•	•	•	•	•		*	•
Geometry	Identify and describe shapes.	*											
Geometry	Reason with shapes and their attributes.												
						TRFF	S 8. N	1E AC	TIVITY	/			
SOCIAL STUDIES	K-2 SPECIFICS	1	2	3	4	5	6	7	8	9	10	11	12
PRACTICES													
Constructing Compelling Questions	Construct compelling questions.											*	

Describe the skills and knowledge required to produce certain goods and services.

Construct maps, graphs, and other representations of

Explain how weather, climate, and other environmental characteristics affect people's lives in a place or region.

Economics: Exchange and Markets

Geography: Geographic Representations

Geography: Human– Environment Interaction *

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