

A Common Core State Standards and Next Generation  
Science Standards-Aligned  
Discussion & Activity Guide for Grades K-3

# Stretch to the Sun: From a Tiny Sprout to the Tallest Tree on Earth

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ISBN-13: 978-1580897716

Written by Carrie A. Pearson

Illustrated by Susan Swan

Published by Charlesbridge

## *About the book:*

*The tallest known tree on Earth is located in Redwood National Park in northern California. More than twelve hundred years old, it is approximately 380 feet tall--and still climbing!*

*The tree in this book sprouted, flourished, and survived ecological threats for over twelve hundred years before being discovered by tall-tree researchers. The coast redwood tree provides a unique ecosystem for the many plants and animals in its tree canopy and managed to survive extensive logging nearby. Discovered in 2006, the tree's location is kept secret to protect it.*

Guide created by  
Debbie Gonzales, MFA



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## Pre-Reading Discussion

### Discuss the cover of the book:

- Examine the images featured in the cover illustration. Notice the creatures depicted at the top of tree. Where do you think these animals live? Is it possible for a tree to become home to animals? Consider how a home in a tree might be the same or different than a home on the ground.
  - Notice that the top of the tree is not shown in the cover illustration. Determine why this is so.
  - Define the word *stretch*. Describe what it might feel like to stretch all the way up to the sun.
  - A *sprout* is tiny plant that grows from a seed. Predict how long it would take a sprout to become a tree as large as the one depicted in the illustration.
  - The title of the book is *Stretch to the Sun: From a Tiny Sprout to the Tallest Tree on Earth*. Predict what this story is going to be about.
- 

### Meet the author – Carrie A. Pearson:

- Carrie has a deep love for reading. Oftentimes, when Carrie was a very young child, she would climb high in a tree to find a limb to rest upon while reading a book. How might Carrie’s love for reading and nature be connected? Tell how this connection might have served as inspiration to write this book.
- Carrie believes that spending time in nature can help people to feel more healthy and happy. Do you agree with Carrie on this subject? Explain your answer.
- To learn more about author Carrie Pearson and her interesting home in Michigan’s Upper Peninsula access her website at [www.carriepearsonbooks.com](http://www.carriepearsonbooks.com).



### Meet the illustrator – Susan Swan:

- Susan says that she wants people who view her illustrations to feel joy. Examine the animals featured on the front cover. Identify how she expresses a sense of warmth and joy in this illustration.
- Susan not only paints her illustrations, she carefully cuts pieces of paper to create texture and depth in her work. Consider how Susan represented different types of texture in the cover illustration. Locate places on the front cover where Susan used paints and paper to create the feeling of roughness, smoothness, darkness, and light.
- Her fascination with cutting and shaping paper is not limited to creating illustrations for picture books. Susan rolls and folds bits of paper in a special way to create beautiful bead craft. Access her website at [www.susanswan.com](http://www.susanswan.com) to view illustrations and crafts that she has masterfully made.



Post-Reading Discussion

***Branches clatter.  
Twigs break.  
Limbs careen down, down, down.  
A giant redwood bends from the force of the wind.***

- Imagine how strong and powerful the wind must have been to cause a giant tree to fall to the ground. Discuss how the force of the wind and the crashing of the tree affected the animals of the forest.
- Explain how the natural destruction of a tree brought about new life – a sprout! Consider how long it took for the little sprout to grow.
- A sprout needs water and rich soil called *duff* to grow. Duff is created from decomposed leaves, twigs, minerals, and microorganisms. Determine how and why duff is the perfect place for a tiny tree sprout to grow.
- A number of plants, animals, and other organisms have made a home beneath the branches of the giant redwood trees called an *ecosystem*. Identify the plants and animals that survive in this protected ecosystem. Tell how these plants and animals depend upon each other – and the tree – for survival.

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***At the tree's crown, branches form platforms  
that collect leaves, bark, and smaller limbs.  
The debris turn to soil.  
Birds and animals visit the tree and drop seeds in that soil.***

- Imagine how high the 200-foot tree being referenced might be. Because an average giraffe is 11-feet tall, the tree would be 18 giraffes high. Or, because a two-story house measures approximately 20 feet in height, the tree would be as tall as 10 houses stacked on top of each other. Discover the measure of other large animals, small trees, and items. Determine how their height compares with the giant redwood tree.
- Consider how long it took for the tiny sprout to become a 200-foot tree. Make connections with the sprout's growth and the title of the book. Determine the sun's role in the tree's growth and development. Explain why the tallest tree continues to stretch to the sun.
- An ecosystem is described as being a *community* of living organisms. Communities are comprised of organisms that depend upon each other. Identify organisms that depend upon each other in the ecosystems created at the tree's crown.
- Determine how it is possible for soil to be created on the upper limbs of the tree. Explore the notion of an ecosystem, as rich and lively as those found at the base of the tree, but existing high above the ground.
- List the forms of life that depend upon the redwood tree, both at its base and in its canopy high above.



*The tangy, sharp scent of cut evergreen mixes with bitter fumes.  
The ground near the once-tiny tree shudders as other ancient redwoods crash.  
Tractors haul trees out of the forest, crushing everything in their paths.*

- Explain what is happening in the illustration featuring a truck loaded with logs.
- The book began with the story of a falling tree crashing to the ground because strong winds caused it to fall. Compare and contrast the earlier reference of a falling tree and this illustration. Discuss how the affects of the falling trees are similar, yet very different.
- Consider how the destruction of the redwood forest affects the ecosystems created by the giant trees, both on the ground and high in the canopies above.
- Discuss how remarkable – and wonderful – it is that the once-tiny tree referenced in this illustration has survived fires, violent storms, and the logging industry. Determine what is necessary for a tree to remain strong, even though other trees around it have fallen.

*The loud noises stop as suddenly as they started.  
Protected from harvest, the tree grows older and taller.*

- The word *protected* means to care for, to save, and to guard from harm. Discuss the impact of establishing a law to save the redwood forest. Explain why protecting the forest and its ecosystems is a very important thing to do.
- This tree grows on land that is protected by law and cannot be cut down. The tree has grown to be taller than all of the trees in the forest. Consider how many ecosystems have been created in its canopy, so high in the sky. Predict how many plants and animals exist because of the tree’s massive size and strength. Discuss the significance of the sun in the growth and survival process.

## Tell a Story

Write and illustrate a short story about the tallest tree in the Redwood National Park.

Include information about the ecosystems that depend upon the tree to survive.

Tell the story of the tiny sprout that stretched to the sun boldly enough to become the tallest tree in the world.



Photo credit: [www.drivethenation.com](http://www.drivethenation.com)



Stretch to the Sun: From a Tiny Sprout to the Tallest Tree on Earth  
Word Search

Locate the words listed below in the puzzle. Fill in the circles with the missing vowels –A, E, I, O, and U.

Y	C	C	○	N	○	P	Y	C	D	V	S	Z	L	J	X	B	T	Q	D
J	T	L	L	Q	H	W	F	W	D	X	○	X	E	F	S	C	P	K	V
X	L	K	J	K	Y	L	S	W	I	E	L	Y	M	K	F	N	H	J	U
R	○	○	T	○	R	○	T	○	○	N	○	S	○	I	G	X	C	L	N
Y	S	S	E	U	T	S	M	I	Z	C	M	E	R	T	P	Y	R	O	Z
H	F	W	Q	E	F	J	T	I	O	Z	○	M	R	F	K	○	V	L	G
S	Z	K	R	○	L	F	V	A	B	L	N	I	○	L	B	F	X	C	C
X	B	H	N	L	○	I	X	L	Q	○	D	P	L	W	M	W	E	T	I
G	E	Q	O	Z	R	R	N	V	H	R	○	O	○	D	U	S	Y	S	W
C	J	R	T	R	M	J	R	T	Z	○	R	S	T	O	F	H	G	E	E
D	V	X	V	○	F	R	H	○	J	M	C	S	P	R	○	○	T	L	N
R	U	Z	P	D	D	W	S	Q	L	X	C	K	C	V	G	V	I	M	A
G	H	I	S	W	I	○	V	B	I	S	S	L	L	A	C	L	H	T	Y
V	F	F	J	○	M	F	F	E	L	F	J	U	M	○	N	H	S	U	X
G	I	M	V	○	D	D	X	F	L	K	U	L	U	Q	B	C	P	G	A
V	O	A	○	D	G	S	○	R	P	Z	A	H	○	Q	K	○	W	F	Z
L	D	F	R	S	F	U	M	B	R	Q	H	C	E	C	L	G	R	○	J
M	C	X	E	G	S	S	K	Y	R	S	Q	A	M	I	H	P	M	R	A
L	E	Y	X	O	H	I	N	D	L	○	Q	J	O	I	T	○	U	N	Y
K	A	P	B	L	B	V	P	A	V	F	S	R	T	L	M	P	N	S	E

BEES  
DEBRIS  
HUCKLEBERRY  
MURRELET  
SALAMANDER

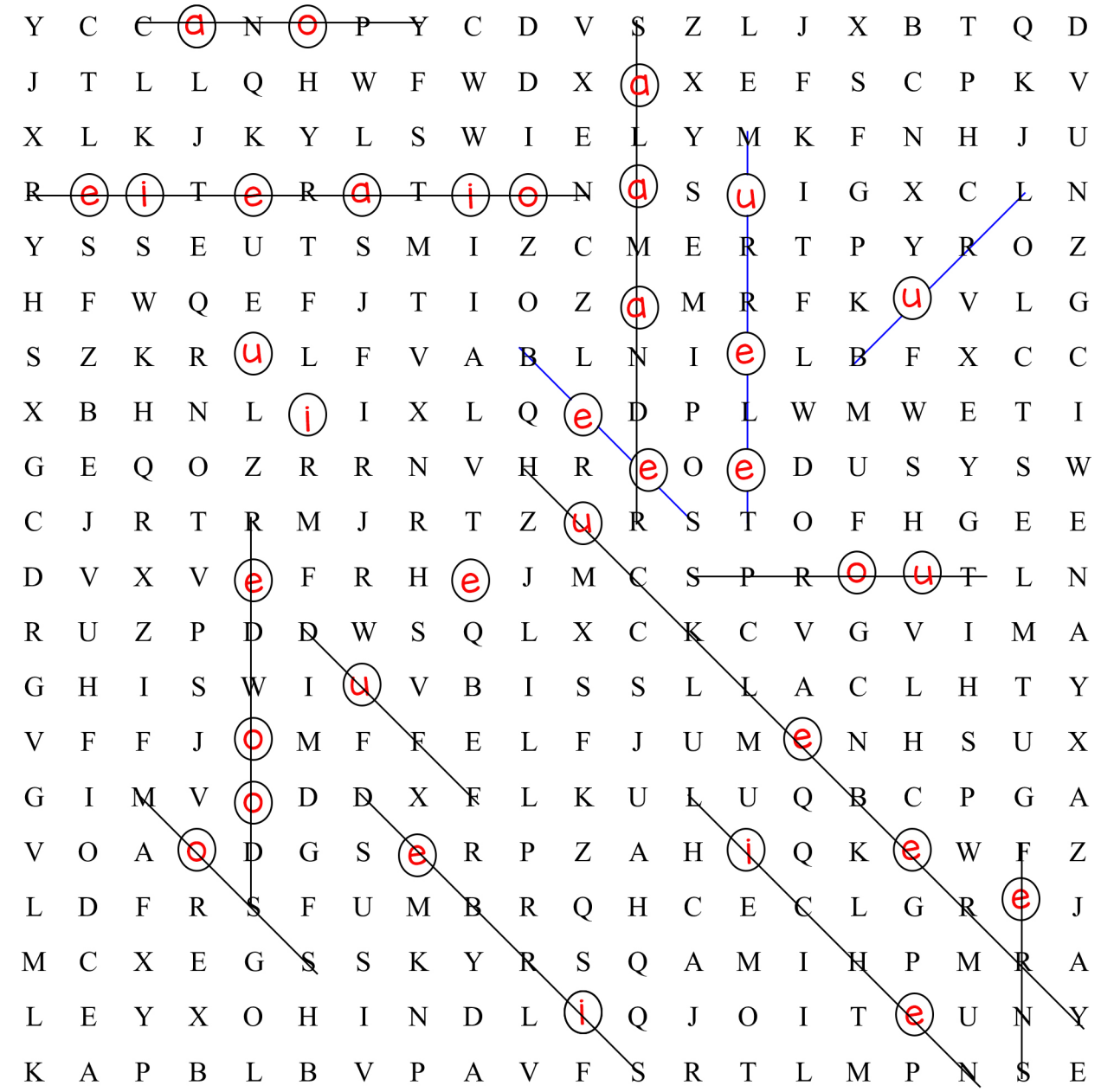
BURL  
DUFF  
LICHEN  
REDWOODS  
SPROUT

CANOPY  
FERNS  
MOSS  
REITERATION  
SQUIRRELS



Stretch to the Sun: From a Tiny Sprout to the Tallest Tree on Earth  
Word Search Answers

Locate the words listed below in the puzzle. Fill in the circles with the missing vowels –A, E, I, O, and U.



BEES  
DEBRIS  
HUCKLEBERRY  
MURRELET  
SALAMANDER

BURL  
DUFF  
LICHEN  
REDWOODS  
SPROUT

CANOPY  
FERNS  
MOSS  
REITERATION  
SQUIRRELS



## Eco-Bingo: A Folder Game

**Objective:** To develop an understanding of the interconnectedness of organisms within an ecosystem that exists in the canopies of the Redwood National Forest.

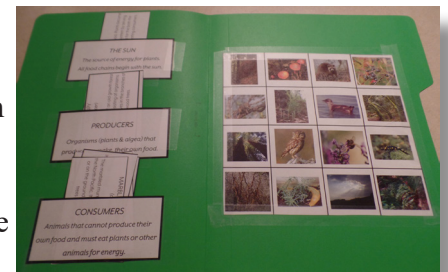
### Materials:

- *Stretch to the Sun: From a Tiny Sprout to the Tallest Tree on Earth*
- Eco-Bingo Game Cover (Guide, pg. 9)
- Eco-Bingo Definition Card Pockets (Guide, pg. 10)
- Eco-Bingo Game Board (Guide, pg. 11)
- Eco-Bingo Definition Cards (Guide, pgs. 12-15)
- Eco-Bingo Game Board Answers (Guide, pg. 16)
- A file folder
- Scissors
- Tape
- 16 game pieces (pennies, beans, small stones - anything that can be used to cover spaces on the game board)



### Procedure 1 - Construct Folder Game:

- Print copies of Eco-Bingo Game Cover, Definition Card Pockets, Game Board, Definition Cards, and Game Board Answers for each student. Upon completion, every child will have their own Eco-Bingo Folder Game to compete with.
- Use scissors to trim around the borders of each of the printed game components.
- Tape the Game Cover on the front of the file folder. Open the file folder to tape the Card Pockets on the left inside and the Game Board on the right. Close the file folder to tape the Game Board Answers on the back of the file folder.
- Examine the ecosystem labels and descriptions printed on the Card Pockets. Discuss the relationships between the sun, producers, and consumers within a habitat.
- Note that the Definition Cards are labeled with their role in the Redwood Forest canopy ecosystem. Associate the Definition Cards with the images featured in *Stretch to the Sun: From a Tiny Sprout to the Tallest Tree on Earth* and on the Game Board.
- Sort the Definition Cards by placing them in the correctly labeled Card Pocket.



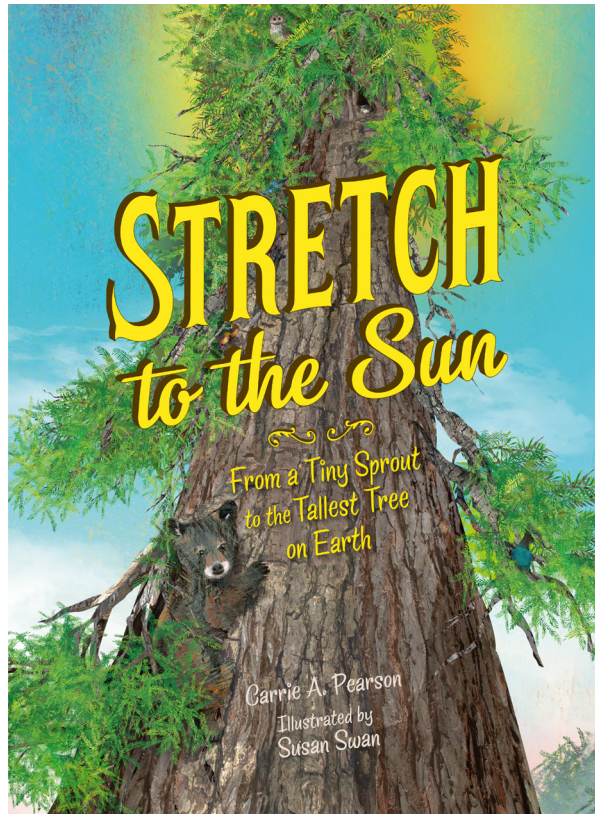
### Procedure 2 - Play the Game:

- Players combine Definition Cards included in each folder game by shuffling them together and placing them face down in the center of the table.
- One player chooses the Definition Card on the top of the stack, then uses a game piece to cover the image on the game board. The Definition Card is placed in a discard stack beside the original stack.
- The player repeats the action until all of the cards in the stack have been chosen and played.
- Players lose a turn if they choose a card that cannot be played on their board.
- The player who places four game pieces in a row on the game board wins the game.





Eco-Bingo Game Cover Page



An Eco-Bingo Folder Game made by

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## Eco-Bingo Definition Card Pockets

**PRODUCERS**

*Organisms (plants & algae) that produce, or make, their own food.*

**CONSUMERS**

*Animals that cannot produce their own food and must eat plants or other animals for energy.*

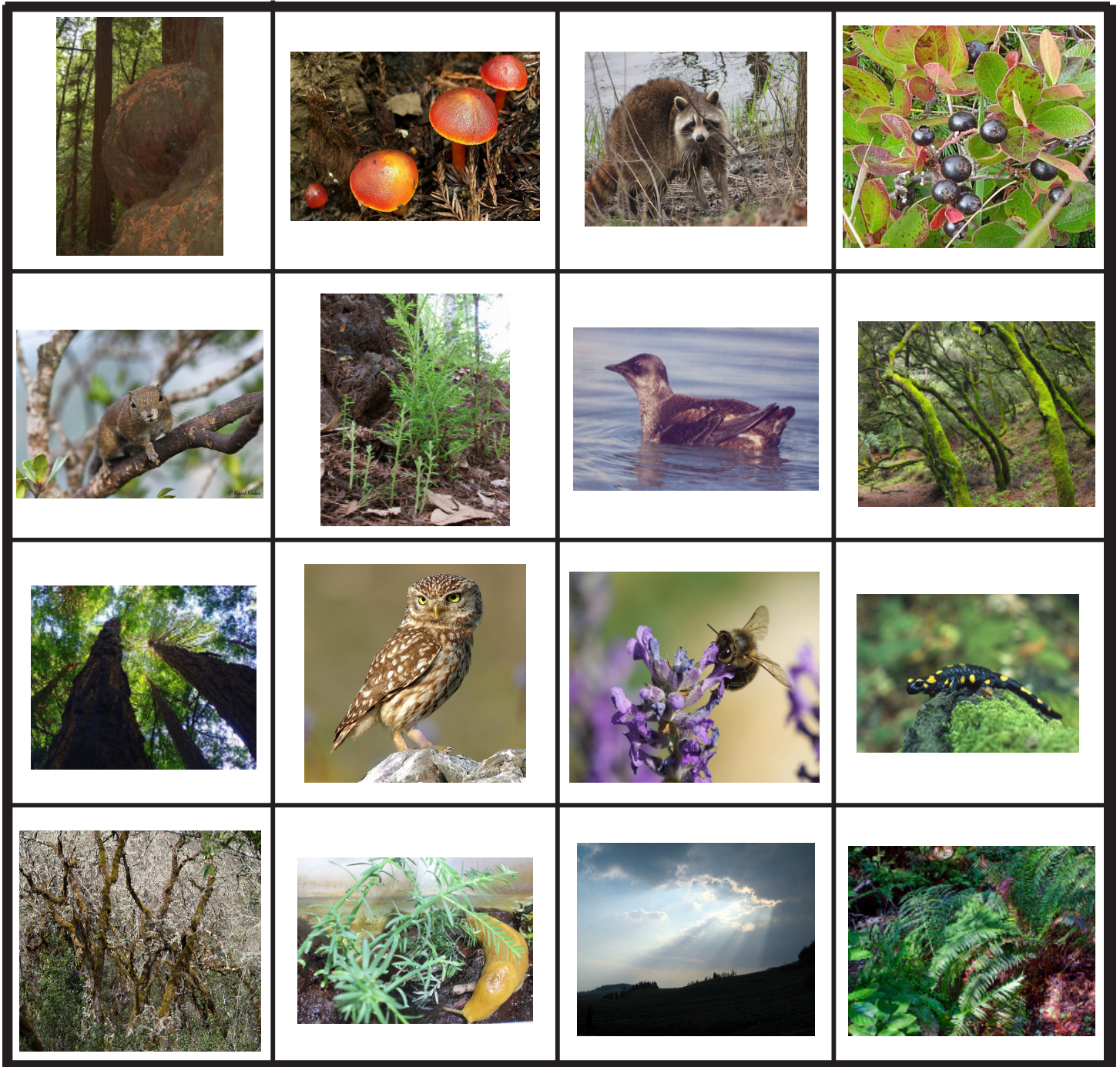
**THE SUN**

*The source of energy for plants.  
All food chains begin with the sun.*



# Eco-Bingo Game Board

*Use scissors to cut along bolded lines of outer borders.*



## Eco-Bingo Definition Cards

**RACCOON***(consumer)*

Bandit-masked raccoons are a familiar sight in the Redwood Forest because they will eat just about anything. They are adaptable and use their dexterous front paws and long fingers to find their food.

**HUCKLEBERRY***(producer)*

Huckleberry bushes grow in the redwood canopy, hundreds of feet high and are an important food source for many organisms.

**OWL***(consumer)*

The owl is a predator that hunts rodents and other small animals.

**BANANA SLUG***(consumer)*

Banana slugs are the second largest slugs in the world. They thrive in the moist redwood forest where they eat young, tender plants. Banana slugs will eat both the stems and leaves, destroying the plant.



## SALAMANDER

*(consumer)*

Salamanders climb high in the redwood canopy in search of small insects to feed upon.

## FERNS

*(producer)*

Ferns are non-flowering plants that have leaves, roots, and veins.

## MOSS

*(producer)*

Moss is a type of plant that doesn't have roots. Moss gets water by a process called 'osmosis', which means water and nutrients are absorbed through its cells.

## SQUIRREL

*(consumer)*

A squirrel is a lively tree-dwelling rodent with a bushy tail that typically eats nuts and seeds.



## BEES

*(consumer)*

Bees are flying insects known for their role in pollination and for producing honey and beeswax.

## MARbled MURRELET

*(consumer)*

The marbled murrelet is a small seabird from the North Pacific. It nests in old-growth forests or on the ground at higher latitudes where trees cannot grow.

## BURL

*(producer)*

A burl is a tree growth in which the grain has grown in a rounded, knotty manner. It is an outgrowth on a tree trunk or branch that is filled with small knots from dormant buds.

## DUFF

*(producer)*

Duff, also known as the forest floor, consists of shed vegetative parts, such as leaves, branches, bark, and stems, existing in various stages of decomposition above the soil surface.



## LICHEN

(*producer*)

Lichen is a simple slow-growing plant that typically forms a low crusty, leaflike, or branching growth on rocks, walls, and trees.

## SPROUT

(*producer*)

A sprout is a new growth from a germinating seed.

## CANOPY

(*producer*)

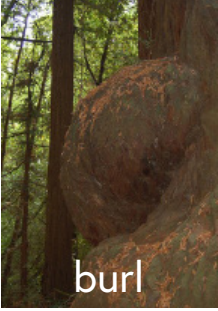















High up in the canopy of an old growth forest exists an ecosystem consisting of organisms that spend their entire lives in the branches of the giant redwood trees.

## SUN

The sun gives the plants food. Plants become the producers in an ecosystem by serving as the basic food source for both plant-eating and meat-eating consumers.



### Eco-Bingo Game Board Answers

 <p>burl</p>	 <p>duff</p>	 <p>raccoon</p>	 <p>huckleberry</p>
 <p>squirrel</p>	 <p>sprout</p>	 <p>marbled murrelet</p>	 <p>moss</p>
 <p>canopy</p>	 <p>owl</p>	 <p>bee</p>	 <p>salamander</p>
 <p>lichen</p>	 <p>banana slug</p>	 <p>sun</p>	 <p>fern</p>



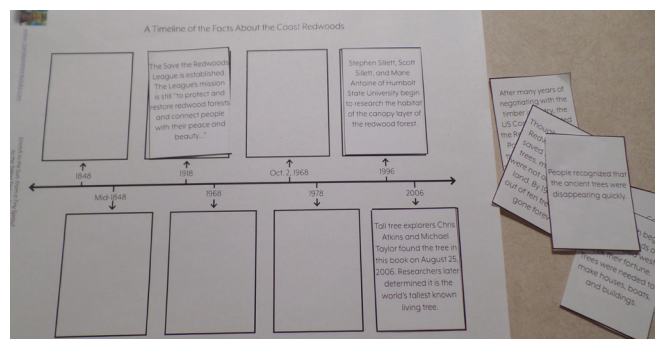


## The Facts About Coast Redwoods

**Objective:** Describe the relationship between a series of historical events using language that pertains to time, sequence, and cause/effect.

### Materials:

- *Stretch to the Sun: From a Tiny Sprout to the Tallest Tree on Earth*
- The Timeline of the Facts About the Coast Redwoods Template (Guide, pg. 19)
- Timeline Cards (Guide, pg. 20)
- The Timeline of the Facts About the Coast Redwoods – Answers (Guide, pg. 21)
- Scissors
- Tape

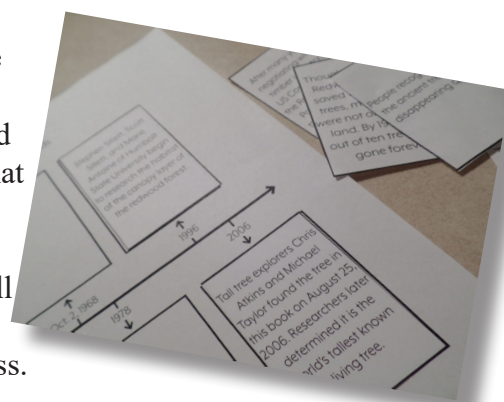


### Procedure:

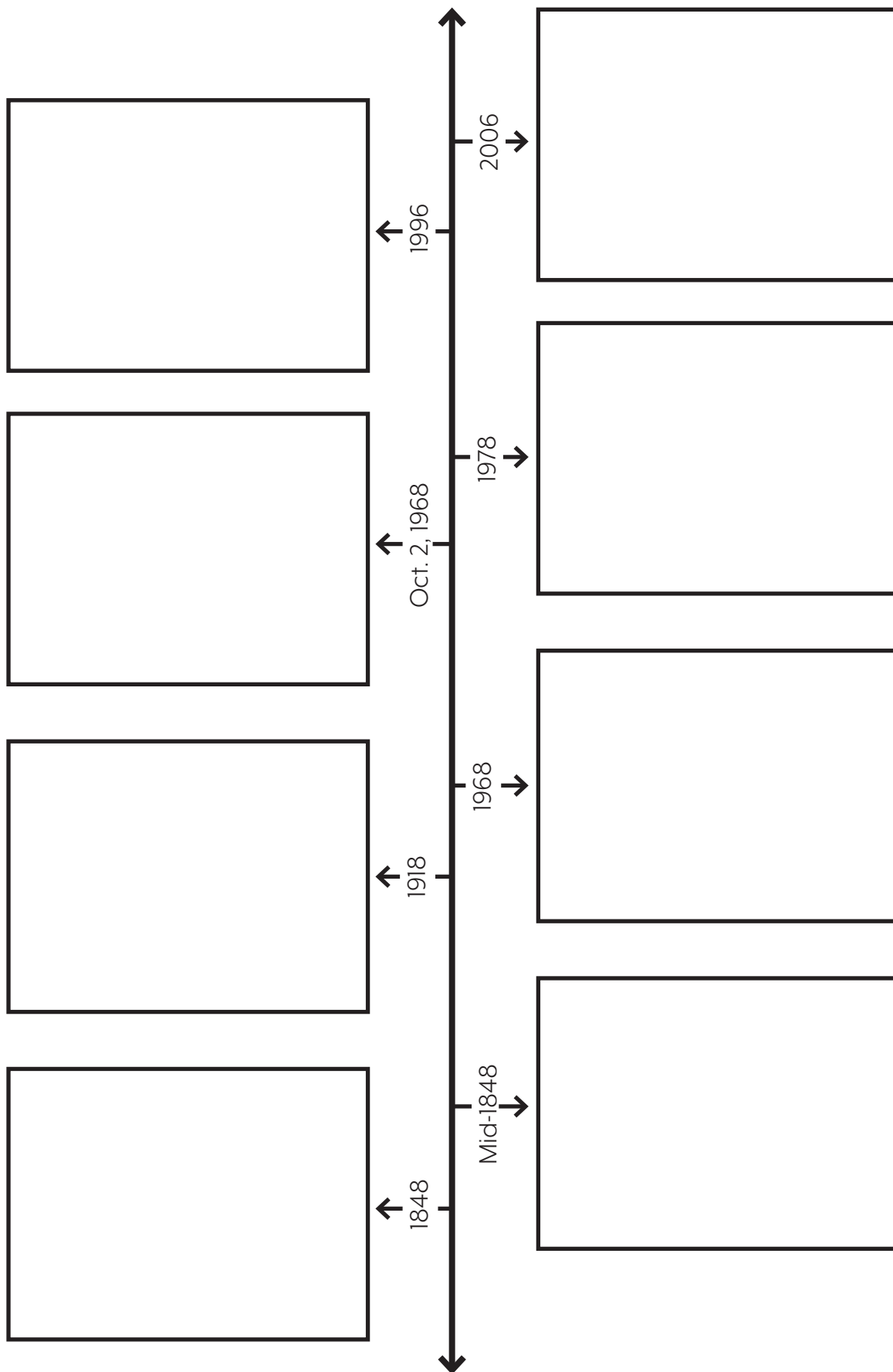
- Reread the text carefully, focusing on the sequence of events that occurred throughout the story. Closely consider the historical content described in the Facts About the Redwoods section found at the end of the book.
- Print the Timeline of the Facts About the Coast Redwoods Template and the Timeline Cards found in this guide.
- Use scissors to trim around the Timeline Cards.
- Using *Stretch to the Sun: From a Tiny Sprout to the Tallest Tree on Earth* as a reference, read and sequence the Timeline Cards on the Timeline of the Facts About the Coast Redwoods Template by placing the cards in the dated space provided on the timeline.
- Use the Timeline of the Facts About the Coast Redwoods – Answers to validate the sequencing of the Timeline Cards.
- Encourage students to illustrate their interpretations of the event described on each Timeline Card on the back of each card.

### Follow Up:

- Encourage students to analyze their completed Timeline of the Facts About the Coast Redwoods. Ask them to identify which they feel are the most important to the preservation of redwood forests. Have them choose the card that represents the event that they feel most passionate about.
- Instruct students to write a short persuasive essay expressing why they feel that their selected event is most critical to overall history of the preservation of the Redwood Forest.
- Encourage students to prepare to share their work with the class.



### A Timeline of the Facts About the Coast Redwoods



## Timeline Cards

The Gold Rush began, and thousands of people traveled west to seek their fortune. Trees were needed to make houses, boats, and buildings.

The Save the Redwoods League is established. The League's mission is "to protect and restore redwood forests and connect people with their peace and beauty..."

After many years of negotiating with the timber industry, US Congress created the Redwood National Park, placing tens of thousands of acres in the care of the National Park Service.

People recognized that the ancient trees were disappearing quickly.

Though the Save the Redwoods League saved thousands of trees, millions more were not on protected land. By 1968, nine out of ten trees were gone forever.

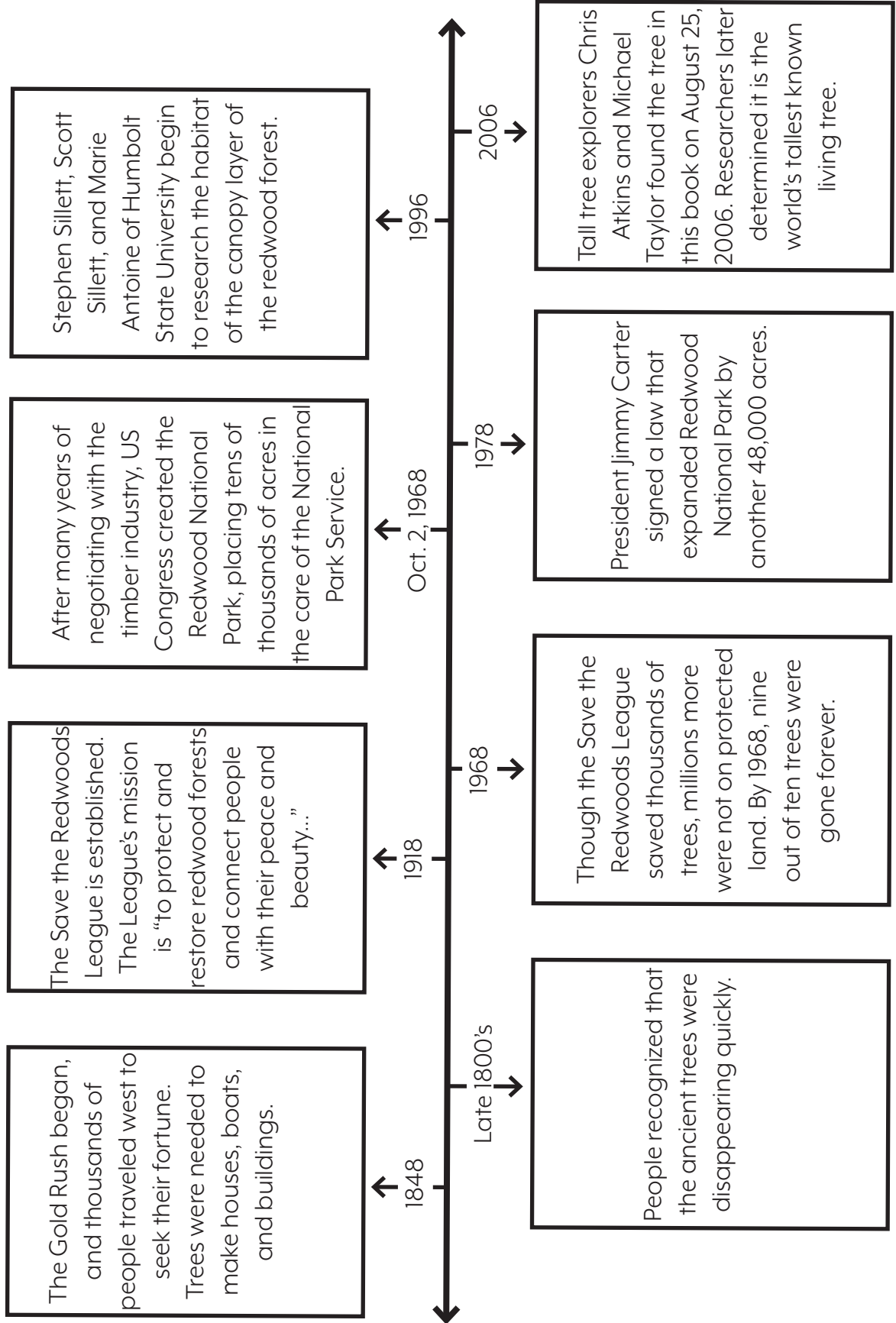
President Jimmy Carter signed a law that expanded Redwood National Park by another 48,000 acres.

Tall tree explorers Chris Atkins and Michael Taylor found the tree in this book on August 25, 2006. Researchers later determined it is the world's tallest known living tree.

Stephen Sillett, Scott Sillett, and Marie Antoine of Humboldt State University begin to research the habitat of the canopy layer of the redwood forest.



# A Timeline of the Facts About the Coast Redwoods – Answers



## Common Core State Standards Alignment

Common Core State Standards Alignment		Discussion	Word Search	Eco-Bingo	Timeline
<b>English Language Arts Standards » Reading: Literature</b>					
CCSS.ELA-Literacy.RL.K.1	With prompting and support, ask and answer questions about key details in a text.	•		•	•
CCSS.ELA-Literacy.RL.K.2	With prompting and support, retell familiar stories, including key details.	•			
CCSS.ELA-Literacy.RL.K.3	With prompting and support, identify characters, settings, and major events in a story.	•		•	•
CCSS.ELA-Literacy.RL.K.4	Ask and answer questions about unknown words in a text.	•	•		
CCSS.ELA-Literacy.RL.K.6	With prompting and support, name the author and illustrator of a story and define the role of each in telling the story.	•			
CCSS.ELA-Literacy.RL.K.7	With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts).	•			•
CCSS.ELA-Literacy.RL.K.10	Actively engage in group reading activities with purpose and understanding.	•	•	•	•
CCSS.ELA-Literacy.RL.1.1	Ask and answer questions about key details in a text.	•	•	•	•
CCSS.ELA-Literacy.RL.1.2	Retell stories, including key details, and demonstrate understanding of their central message or lesson.	•			•
CCSS.ELA-Literacy.RL.1.3	Describe characters, settings, and major events in a story, using key details.	•		•	•
CCSS.ELA-Literacy.RL.1.4	Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.		•	•	
CCSS.ELA-Literacy.RL.1.7	Use illustrations and details in a story to describe its characters, setting, or events.	•		•	
CCSS.ELA-Literacy.RL.1.9	Compare and contrast the adventures and experiences of characters in stories.	•			
CCSS.ELA-Literacy.RL.1.10	With prompting and support, read prose and poetry of appropriate complexity for grade 1.	•	•	•	
CCSS.ELA-Literacy.RL.2.1	Ask and answer such questions as <i>who</i> , <i>what</i> , <i>where</i> , <i>when</i> , <i>why</i> , and <i>how</i> to demonstrate understanding of key details in a text.	•		•	•
CCSS.ELA-Literacy.RL.2.7	Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.	•		•	
CCSS.ELA-Literacy.RL.3.1	Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.	•		•	•
<b>English Language Arts Standards » Reading: Informational Text</b>					
CCSS.ELA-Literacy.RI.K.1	With prompting and support, ask and answer questions about key details in a text.	•	•	•	•
CCSS.ELA-Literacy.RI.K.2	With prompting and support, identify the main topic and retell key details of a text.	•		•	•
CCSS.ELA-Literacy.RI.K.3	With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.	•		•	•
CCSS.ELA-Literacy.RI.K.4	With prompting and support, ask and answer questions about unknown words in a text.	•	•	•	•
CCSS.ELA-Literacy.RI.K.5	Identify the front cover, back cover, and title page of a book.	•			
CCSS.ELA-Literacy.RI.K.6	Name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.	•			
CCSS.ELA-Literacy.RI.K.7	With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).	•		•	•
CCSS.ELA-Literacy.RI.K.10	Actively engage in group reading activities with purpose and understanding.	•	•	•	•



		Discussion	Word Search	Eco-Bingo	Timeline
CCSS.ELA-Literacy.RI.1.1	Ask and answer questions about key details in a text.	•		•	•
CCSS.ELA-Literacy.RI.1.2	Identify the main topic and retell key details of a text.	•		•	•
CCSS.ELA-Literacy.RI.1.3	Describe the connection between two individuals, events, ideas, or pieces of information in a text.	•		•	•
CCSS.ELA-Literacy.RI.1.4	Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.	•	•	•	•
CCSS.ELA-Literacy.RI.1.6	Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.	•		•	
CCSS.ELA-Literacy.RI.1.7	Use the illustrations and details in a text to describe its key ideas.	•		•	•
CCSS.ELA-Literacy.RI.1.10	With prompting and support, read informational texts appropriately complex for grade 1.	•	•	•	•
CCSS.ELA-Literacy.RI.2.1	Ask and answer such questions as <i>who</i> , <i>what</i> , <i>where</i> , <i>when</i> , <i>why</i> , and <i>how</i> to demonstrate understanding of key details in a text.	•		•	•
CCSS.ELA-Literacy.RI.2.3	Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.	•			•
CCSS.ELA-Literacy.RI.2.4	Determine the meaning of words and phrases in a text relevant to a <i>grade 2 topic or subject area</i> .	•	•	•	
CCSS.ELA-Literacy.RI.2.7	Explain how specific images contribute to and clarify a text.	•		•	
CCSS.ELA-Literacy.RI.3.1	Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.	•	•	•	•
CCSS.ELA-Literacy.RI.3.3	Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.	•		•	•
CCSS.ELA-Literacy.RI.3.4	Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a <i>grade 3 topic or subject area</i> .	•	•	•	
CCSS.ELA-Literacy.RI.3.7	Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).	•		•	•
<b>English Language Arts Standards » Reading: Foundational Skills</b>					
CCSS.ELA-Literacy.RF.K.1	Demonstrate understanding of the organization and basic features of print.	•	•	•	•
CCSS.ELA-Literacy.RF.K.2	Demonstrate understanding of spoken words, syllables, and sounds (phonemes).	•	•	•	•
CCSS.ELA-Literacy.RF.K.3	Know and apply grade-level phonics and word analysis skills in decoding words.	•	•	•	•
CCSS.ELA-Literacy.RF.K.4	Read emergent-reader texts with purpose and understanding.	•	•	•	•
CCSS.ELA-Literacy.RF.1.1	Demonstrate understanding of the organization and basic features of print.	•	•	•	•
CCSS.ELA-Literacy.RF.1.2	Demonstrate understanding of spoken words, syllables, and sounds (phonemes).	•	•	•	•
CCSS.ELA-Literacy.RF.1.3	Know and apply grade-level phonics and word analysis skills in decoding words.	•	•	•	•
CCSS.ELA-Literacy.RF.2.3	Know and apply grade-level phonics and word analysis skills in decoding words.	•	•	•	•
CCSS.ELA-Literacy.RF.3.3	Know and apply grade-level phonics and word analysis skills in decoding words.	•	•	•	•
CCSS.ELA-Literacy.RF.3.4	Read with sufficient accuracy and fluency to support comprehension.	•	•	•	•



		Discussion	Word Search	Eco-Bingo	Timeline
<b>English Language Arts Standards » Writing</b>					
CCSS.ELA-Literacy.W.K.1	Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book.				•
CCSS.ELA-Literacy.W.K.2	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.	•			
CCSS.ELA-Literacy.W.1.1	Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.				•
CCSS.ELA-Literacy.W.1.2	Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.	•			
CCSS.ELA-Literacy.W.2.1	Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., <i>because</i> , <i>and</i> , <i>also</i> ) to connect opinion and reasons, and provide a concluding statement or section.				•
CCSS.ELA-Literacy.W.2.2	Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.	•			
CCSS.ELA-Literacy.W.3.1	Write opinion pieces on topics or texts, supporting a point of view with reasons.				•
CCSS.ELA-Literacy.W.3.2	Write informative/explanatory texts to examine a topic and convey ideas and information clearly.	•			
<b>English Language Arts Standards » Speaking &amp; Listening</b>					
CCSS.ELA-Literacy.SL.K.1	Participate in collaborative conversations with diverse partners about <i>kindergarten topics and texts</i> with peers and adults in small and larger groups.	•		•	•
CCSS.ELA-Literacy.SL.K.2	Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.	•	•	•	•
CCSS.ELA-Literacy.SL.K.3	Ask and answer questions in order to seek help, get information, or clarify something that is not understood.	•	•	•	•
CCSS.ELA-Literacy.SL.K.4	Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.	•			•
CCSS.ELA-Literacy.SL.K.5	Add drawings or other visual displays to descriptions as desired to provide additional detail.	•			•
CCSS.ELA-Literacy.SL.K.6	Speak audibly and express thoughts, feelings, and ideas clearly.	•	•	•	•
CCSS.ELA-Literacy.SL.1.1	Participate in collaborative conversations with diverse partners about <i>grade 1 topics and texts</i> with peers and adults in small and larger groups.	•	•	•	•
CCSS.ELA-Literacy.SL.1.2	Ask and answer questions about key details in a text read aloud or information presented orally or through other media.	•		•	•
CCSS.ELA-Literacy.SL.1.4	Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.	•		•	•
CCSS.ELA-Literacy.SL.1.5	Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.	•			•



## Next Generation Science Standards Alignment

		Discussion	Word Search	Eco-Bingo	Timeline
<b>K-LS1-1 From Molecules to Organisms: Structures and Processes</b>					
	Use observations to describe patterns of what plants and animals (including humans) need to survive.			•	
	<u>Analyzing and Interpreting Data</u> : Use observations (firsthand or from media) to describe patterns in the natural world in order to answer scientific questions.			•	
	<u>Scientific Knowledge is Based on Empirical Evidence</u> : Scientists look for patterns and order when making observations about the world.			•	
<b>LS1.C: Organization for Matter and Energy Flow in Organisms</b>					
	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.			•	
<b>K-ESS3-1 Earth and Human Activity</b>					
	Use a model to represent the relationship between the needs of different plants and animals and the places they live.			•	
	<u>Developing and Using Models</u> : Use a model to represent relationships in the natural world.			•	
<b>ESS3.A: Natural Resources</b>					
	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.			•	





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