

**K-5 Informational Texts from the Common Core State Standards  
that can be used to integrate Environmental Principles and Concepts**

**Langstaff, John.**  
**“Over in the Meadow”**

Over in the meadow in a new little hive  
Lived an old mother queen bee and her honeybees five.  
“Hum,” said the mother,  
“We hum,” said the five;  
So they hummed and were glad in their new little hive.  
Over in the meadow in a dam built of sticks  
Lived an old mother beaver and her little beavers six.  
“Build,” said the mother,  
“We build,” said the six;  
So they built and were glad in the dam built of sticks.  
Over in the meadow in the green wet bogs  
Lived an old mother froggie and her seven polliwogs.  
“Swim,” said the mother.  
“We swim,” said the ‘wogs;  
So they swam and were glad in the green wet bogs.  
Over in the meadow as the day grew late  
Lived an old mother owl and her little owls eight.  
“Wink,” said the mother,  
“We wink,” said the eight;  
So they winked and were glad as the day grew late.

**Class discussion questions:** Where does each animal/insect live within this meadow? Why do you think the animals/insects have different activities to do? What do they need from the world around them to live?

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**Bulla, Clyde Robert.**  
***A Tree Is a Plant***

A tree is a plant. A tree is the biggest plant that grows. Most kinds of trees grow from seeds the way most small plants do. There are many kinds of trees. Here are a few of them. How many do you know? [illustration is labeled with Maple, Conifer, Persimmon, Palms, Lemon, Willow]

This tree grows in the country. It might grow in your yard, too. Do you know what kind it is? This is an apple tree. This apple tree came from a seed. The seed was small. It grew inside an apple. Have you ever seen an apple seed? Ask an adult to help you cut an apple in two. The seeds are in the center. They look like this. Most apple trees come from seeds that are planted. Sometimes an apple tree grows from a seed that falls to the ground. The wind blows leaves over the seed. The wind blows soil over the seed. All winter the seed lies under the leaves and the soil. All winter the seed lies under the ice and snow and is pushed into the ground. Spring comes. Rain falls. The sun comes out and warms the earth. The seed begins to grow. At first the young plant does not look like a tree. The tree is very small. It is only a stem with two leaves. It has no apples on it. A tree must grow up before it has apples on it. Each year the tree grows. It grows tall. In seven years it is so tall that you can stand under its branches. In the spring there are blossoms on the tree. Spring is apple-blossom time.

... We cannot see the roots. They are under the ground. Some of the roots are large. Some of them are as small as hairs. The roots grow like branches under the ground. A tree could not live without roots. Roots hold the trunk in the ground. Roots keep the tree from falling when the wind blows. Roots keep the rain from washing the tree out of the ground. Roots do something more. They take water from the ground. They carry the water into the trunk of the tree. The trunk carries the water to the branches. The branches carry the water to the leaves. Hundreds and hundreds of leaves grow on the

branches. The leaves make food from water and air. They make food when the sun shines. The food goes into the branches. It goes into the trunk and roots. It goes to every part of the tree. Fall comes and winter is near. The work of the leaves is over. The leaves turn yellow and brown. The leaves die and fall to the ground. Now the tree is bare. All winter it looks dead. But the tree is not dead. Under its coat of bark, the tree is alive.

**Class discussion questions:**

Before they read: What do you know about apples? Where have you seen them before?

After they read: What did you learn about apples? Why do you think people plant apple trees? What do apples need in order to grow? How can we help apple trees grow?

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**“Garden Helpers.”**

**National Geographic Young Explorers**

Not all bugs and worms are pests.  
Some help your garden grow.  
Earthworms make soil rich and healthy.  
This helps plants grow strong!  
A ladybug eats small bugs.  
The bugs can't eat the plants.  
This keeps your garden safe.  
A praying mantis eats any bug it can catch.  
Not many bugs can get past this quick hunter!  
This spider catches bugs in its sticky web.  
It keeps bugs away from your garden.

**Class discussion questions:** What do bugs and worms need to live? How do humans help provide these things? How can humans make it harder for these bugs and worms to live? How do these worms and bugs help humans? How can these worms and bugs make it harder for humans to live?

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**“Wind Power.”**

**National Geographic Young Explorers**

Wind is air on the move.  
See what wind can do.  
Wind can whip up some fun!  
Wind starts with the sun.  
The sun warms land and water.  
The air above warms up too.  
Warm air rises.  
Cooler air rushes in.  
That moving air is wind.  
Wind is energy.  
It can push a sailboat.  
Look at the windmills spin!  
They turn wind energy into electricity.  
What else can wind do?

**Class discussion questions:** How does wind influence people? How does wind help humans, or harm humans?

**Dorros, Arthur.**

***Follow the Water from Brook to Ocean***

After the next big rain storm, put your boots on and go outside. Look at the water dripping from your roof. Watch it gush out of the drainpipes. You can see water flowing down your street too.

Water is always flowing. It trickles in the brook near your house. Sometimes you see water rushing along in a stream or in a big river. Water always flows downhill. It flows from high places to low places, just the way you and your skateboard move down a hill.

Sometimes water collects in a low spot in the land – a puddle, a pond, or a lake. The water’s downhill journey may end there. Most of the time, though, the water will find a way to keep flowing downhill. Because water flows down-hill, it will keep flowing until it can’t go any lower. The lowest parts of the earth are the oceans. Water will keep flowing until it reaches an ocean.

Where does the water start? Where does the water in a brook or a stream or a river come from? The water comes from rain. And it comes from melting snow. The water from rain and melting snow runs over the ground. Some of it soaks into the ground, and some water is soaked up by trees and other plants. But a lot of the water keeps traveling over the ground, flowing downhill.

The water runs along, flowing over the ground. Trickles of water flow together to form a brook. A brook isn’t very deep or wide. You could easily step across a brook to get to the other side. The brook flows over small stones covered with algae. Algae are tiny plants. They can be green, red, or brown. Green algae make the water look green. Plop! A frog jumps into the brook. A salamander wiggles through leafy water plants. Slap! A trout’s tail hits the water. Lots of creatures live in the moving water.

**Class discussion questions:** How do humans use water? How do animals use water? Where does it come from? Where does it go?

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**Pfeffer, Wendy.**

***From Seed to Pumpkin***

When spring winds warm the earth, a farmer plants hundreds of pumpkin seeds.

Every pumpkin seed can become a baby pumpkin plant. Underground, covered with dark, moist soil, the baby plants begin to grow. As the plants get bigger, the seeds crack open. Stems sprout up. Roots dig down. Inside the roots are tubes. Water travels up these tubes the way juice goes up a straw.

In less than two weeks from planting time, green shoots poke up through the earth.

These shoots grow into tiny seedlings. Two leaves, called seed leaves, uncurl on each stem. They reach up toward the sun. Sunlight gives these leaves energy to make food. Like us, plants need food to grow. But green plants do not eat food as we do. Their leaves make it.

To make food, plants need light, water, and air. Leaves catch the sunlight. Roots soak up rainwater. And little openings in the leaves let air in. Using energy from the sun, the leaves mix the air with water from the soil to make sugar. This feeds the plant. Soon broad, prickly leaves with jagged edges unfold on the stems. The seed leaves dry up. Now the new leaves make food for the pumpkin plant.

Each pumpkin stem has many sets of tubes. One tube in each set takes water from the soil up to the leaves so they can make sugar. The other tube in each set sends food back down so the pumpkin can grow. The days grow warmer. The farmer tends the pumpkin patch to keep weeds out. Weeds take water from the soil. Pumpkin plants need that water to grow.

**Class discussion questions:** Why would a farmer plant hundreds of pumpkin seeds? What can humans do with pumpkins? What do pumpkins need in order to grow? How can humans make it easier or harder for pumpkins to grow?

**Thomson, Sarah L.**  
*Amazing Whales!*

A blue whale is as long as a basketball court. Its eyes are as big as softballs. Its tongue weighs as much as an elephant. It is the biggest animal that has ever lived on Earth – bigger than any dinosaur.

But not all whales are this big. A killer whale is about as long as a fire truck. Dolphins and porpoises are whales too, very small whales. The smallest dolphin is only five feet long. That’s probably shorter than your mom.

There are about 80 kinds of whales. All of them are mammals. Dogs and monkeys and people are mammals, too. They are warm-blooded. This means that their blood stays at the same temperature even if the air or water around them gets hot or cold. Mammal babies drink milk from their mothers. Whale babies are called calves. And mammals breathe air. A whale must swim to the ocean’s surface to breathe or it will drown. After a whale calf is born, its mother may lift it up for its first breath of air.

A whale uses its blowholes to breathe. It can have one blowhole or two. The blowholes are on the top of its head. When a whale breathes out, the warm breath makes a cloud called a blow. Then the whale breathes in. Its blowholes squeeze shut. The whale dives under the water. It holds its breath until it comes back up. When sperm whales hunt, they dive deeper than any other whale. They can hold their breath for longer than an hour and dive down more than a mile.

Deep in the ocean, where the water is dark and cold, sperm whales hunt for giant squid and other animals. Some whales, like sperm whales, have teeth to catch their food. They are called toothed whales. Other whales have no teeth. They are called baleen whales. (Say it like this: bay-LEEN.) Blue whales and humpback whales are baleen whales. They have strips of baleen in their mouths. Baleen is made of the same stuff as your fingernails. It is strong but it can bend. A baleen whale fills its mouth with water. In the water there might be fish or krill. Krill are tiny animals like shrimp. The whale closes its mouth. The water flows back out between the strips of baleen. The fish or krill are trapped inside its mouth for the whale to eat. Some whales, like killer whales, hunt in groups to catch their food. These groups are called pods. A whale mother and her children, and even her grandchildren sometimes live in one pod.

**Class discussion questions:** How are blue whales similar to humans? How are they different? What do they need in order to live? How can humans make it easier or harder for blue whales to live?

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**Hakim, Joy.**  
*A History of US*

From Book 1: The First Americans, Prehistory to 1600; Chapter 7: “The Show-Offs”

In case you forgot, you’re still in that time-and-space capsule, but you’re not a baby anymore. You’re 10 years old and able to work the controls yourself. So get going; we want to head northwest, to the very edge of the land, to the region that will be the states of Washington and Oregon. The time? We were in the 13<sup>th</sup> century; let’s try the 14<sup>th</sup> century for this visit.

Life is easy for the Indians here in the Northwest near the great ocean. They are affluent (AF-flew-ent –it means “wealthy”) Americans. For them the world is bountiful: the rivers hold salmon and sturgeon; the ocean is full of seals, whales, fish, and shellfish; the woods are swarming with game animals. And there are berries and nuts and wild roots to be gathered. They are not farmers. They don’t need to farm.

Those Americans go to sea in giant canoes; some are 60 feet long. (How long is your bedroom? Your schoolroom?) Using stone tools and fire, Indians of the Northwest cut down gigantic fir trees and hollow out the logs to make their boats. The trees tower 200 feet and are 10 feet across at the base. There are so many of them, so close together, with a tangle of undergrowth, that it is sometimes hard for hunters to get through the forest. Tall as these trees are, there are not as big as the redwoods that grow in a vast forest to the south (in the land that will become California).

**Class discussion questions:** Why does the author consider the Indians in the Northwest wealthy? What do they do in order to have enough food to eat? In what ways do they rely on the plants and animals in their environment? Do you think this environment would have looked different if the Indians hadn’t lived there? In what ways, specifically?

**Additional recommendations from the CCSS for Teachers to Look-up/Locate:**

Field, Rachel, “Something Told the Wild Geese.” Branches Green. New York: Macmillan, 1934.

D’Aluscio, Faith, *What the World Eats*, Photographed by Peter Menzel. New York: Random House, 2008.

Media Text “American Indians of the Pacific Northwest Collection,” a digital archive of images and documents hosted by the University of Washington: <http://content.lib.washington.edu/aipnw/>

Rauzon, Mark, and Cynthia Overbeck Bix. *Water, Water Everywhere*. San Francisco: Sierra Club, 1994.

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Hakim, Joy. *A History of US*. Oxford: Oxford University Press, 2005.

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