

# 4Q Science Review – Jeopardy

## Life Science

**Grade 3 - Animals**

<b>\$100</b> <b>\$100</b> <b>\$100</b> <b>\$100</b>	<p><b>3LS.B.2</b> Identify one adaptation eagles have that help them find food over a large area? <i>(e.g., wings, superb eyesight)</i></p>	<p><b>3ES.C.5</b> <b>True or False?</b> Plant fossils exist. <i>(true)</i></p>	<p><b>3LS.B.2</b> Identify one adaptation that helps birds in the tropical rainforest escape predators. <i>(e.g., brightly colored feathers/ (camouflage, wings)</i></p>
<b>\$100</b>	<p><b>3LS.A.1</b> Bald eagles eat frogs. If a bald eagle caught a frog on land, which stage of the life cycle would the frog be in? <i>(adult)</i></p>	<p><b>3LS.C.5</b> A paleontologist found a plant fossil on the side of a mountain. Fossils can provide evidence about the environment millions of years ago. What does this fossil tell us about this area millions of years ago? <i>(millions of years ago water covered the land)</i></p>	<p><b>3LS.B.3</b> A student observes an animal at the zoo. He takes notes on its traits and behaviors: thick fur, breathing air and feeding milk to its young. Identify the kind (family) of animal. <i>(mammal)</i></p>
<b>\$100</b>	<p><b>3LS.A.1</b> Identify the stage of a butterfly's life when it is wrapped in a chrysalis? <i>(pupa)</i></p>	<p><b>3LS.B.2</b> <b>True or False?</b> Animals move from place to place to meet their needs. <i>(true)</i></p>	<p><b>3LS.C.6</b> Identify the ecosystem where plants and animals need very little water to survive? <i>(desert)</i></p>
<b>\$100</b>	<p><b>3LS.A.1</b> <b>True or False?</b> Metamorphosis is a series of changes in appearance. <i>(true)</i></p>	<p><b>3LS.C.6</b> <b>True or False?</b> Fossils are the dying of a species. <i>(false)</i></p>	<p><b>3LS.C.5</b> Identify the type of rock where most fossils are found? <i>(sedimentary)</i></p>

# 4Q Science Review – Jeopardy

## Life Science

**Grade 3 - Animals**

<b>\$100</b> <b>\$100</b> <b>\$100</b> <b>\$100</b>	<p><b>3LS.B.2</b> Identify one adaptation eagles have that help them find food over a large area?</p>	<p><b>3ES.C.5</b> <b>True or False?</b> Plant fossils exist.</p>	<p><b>3LS.B.2</b> Identify one adaptation that helps birds in the tropical rainforest escape predators.</p>
<b>\$100</b>	<p><b>3LS.A.1</b> Bald eagles eat frogs. If a bald eagle caught a frog on land, which stage of the life cycle would the frog be in?</p>	<p><b>3LS.C.5</b> A paleontologist found a plant fossil on the side of a mountain. Fossils can provide evidence about the environment millions of years ago. What does this fossil tell us about this area millions of years ago?</p>	<p><b>3LS.B.3</b> A student observes an animal at the zoo. He takes notes on its traits and behaviors: thick fur, breathing air and feeding milk to its young. Identify the kind (family) of animal.</p>
<b>\$100</b>	<p><b>3LS.A.1</b> Identify the stage of a butterfly's life when it is wrapped in a chrysalis?</p>	<p><b>3LS.B.2</b> <b>True or False?</b> Animals move from place to place to meet their needs.</p>	<p><b>3LS.C.6</b> Identify the ecosystem where plants and animals need very little water to survive?</p>
<b>\$100</b>	<p><b>3LS.A.1</b> <b>True or False?</b> Metamorphosis is a series of changes in appearance.</p>	<p><b>3LS.C.6</b> <b>True or False?</b> Fossils are the dying of a species.</p>	<p><b>3LS.C.5</b> Identify the type of rock where most fossils are found?</p>

# 4Q Science Review – Jeopardy

## Life Science

**Grade 3 - Animals**

<b>\$200</b> <b>\$200</b> <b>\$200</b> <b>\$200</b>	<p><b>3LS.B.2</b> Give <b>TWO</b> examples of animal adaptation. <i>(e.g., changing colors (camouflage), mimicry (act like something else), gill (breath in water), behavior (hide under rocks during hot summer days))</i></p>	<p><b>3LS.B.1</b> Explain why the adaptation that allows animals to change color might help animals survive? <i>(Camouflage; makes it more difficult for predators to find them.)</i></p>	<p><b>3LS.B.2</b> An eagle has sharp, curved talons. What does this characteristic most likely tell you about eagles? <i>(Eagles use their talons to catch their prey)</i></p>
<b>\$200</b>	<p><b>3LS.B.1</b> Some species of birds eat fish that they scoop from the water. Describe the beaks of these bird species. <i>(pouch-shaped)</i></p>	<p><b>3LS.C.5</b> Scientists called paleontologists study fossils to learn about animals and plants that may not exist today. What can paleontologists learn by studying fossilized teeth? <i>(foods the animal ate)</i></p>	<p><b>3LS.B.2</b> Identify <b>TWO</b> adaptations frogs use to obtain the food it needs to survive? <i>(large eyes and a long tongue)</i></p>
<b>\$200</b>	<p><b>3LS.B.3</b> There is diversity among people and in other kinds of animals. Identify <b>TWO</b> characteristics that scientists use to classify animals. <i>(e.g., movement, body covering, body structure, breathing)</i></p>	<p><b>3LS.C.4</b> A student finds a fossil of a crab on a rock. It looks just like crabs she has recently seen at the beach. What can she infer about crabs? <i>(Crabs have not changed much over millions of years)</i></p>	<p><b>3LS.C.</b> Identify one way grass leaves differ from most plant leaves? <i>(e.g., the leaves of grass plants are long and narrow and many other plants have flat, broad leaves.)</i></p>
<b>\$200</b>	<p><b>3LS.C.6</b> Name <b>TWO</b> things that living things get from their environments. <i>(e.g., food, water, air, space)</i></p>	<p><b>3LS.B.2</b> An anteater is an animal that survives mainly by finding and eating ants. Its main method of hunting is by sticking its long snout in the ground to find ants. Identify which of the anteater's senses is most useful in seeking out food? <i>(it's sense of smell)</i></p>	<p><b>3LS.C.6</b> When beavers build a dam, what are the effects on the ecosystem? <i>(The beaver cuts down trees, and the dam changes the way the stream flows. The dam may create a pond, making new habitats and destroying others.)</i></p>

## 4Q Science Review – Jeopardy

# Life Science

**Grade 3 - Animals**

<b>\$200</b> <b>\$200</b> <b>\$200</b> <b>\$200</b>	<p><b>3LS.B.2</b> Give <b>TWO</b> examples of animal adaptation.</p>	<p><b>3LS.B.1</b> Explain why the adaptation that allows animals to change color might help animals survive?)</p>	<p><b>3LS.B.2</b> An eagle has sharp, curved talons. What does this characteristic most likely tell you about eagles?</p>
<b>\$200</b>	<p><b>3LS.B.1</b> Some species of birds eat fish that they scoop from the water. Describe the beaks of these bird species.</p>	<p><b>3LS.C.5</b> Scientists called paleontologists study fossils to learn about animals and plants that may not exist today. What can paleontologists learn by studying fossilized teeth?</p>	<p><b>3LS.B.2</b> Identify <b>TWO</b> adaptations frogs use to obtain the food it needs to survive?</p>
<b>\$200</b>	<p><b>3LS.B.3</b> There is diversity among people and in other kinds of animals. Identify <b>TWO</b> characteristics that scientists use to classify animals.</p>	<p><b>3LS.C.4</b> A student finds a fossil of a crab on a rock. It looks just like crabs she has recently seen at the beach. What can she infer about crabs?</p>	<p><b>3LS.C.</b> Identify one way grass leaves differ from most plant leaves?</p>
<b>\$200</b>	<p><b>3LS.C.6</b> Name <b>TWO</b> things that living things get from their environments.</p>	<p><b>3LS.B.2</b> An anteater is an animal that survives mainly by finding and eating ants. Its main method of hunting is by sticking its long snout in the ground to find ants. Identify which of the anteater's senses is most useful in seeking out food?</p>	<p><b>3LS.C.6</b> When beavers build a dam, what are the effects on the ecosystem?</p>

## 4Q Science Review – Jeopardy

# Life Science

**Grade 3 - Animals**

<b>\$300</b> <b>\$300</b> <b>\$300</b>	<p><b>3LS.C.6</b>  How might a change in the environment affect animals?  <i>(e.g., animals are able to move to new locations if their environment no longer meets their needs. If they are unable to adapt to the change in the environment they may not survive.)</i></p>	<p><b>3LS.B.2</b>  Birds survive in many different habitats. Penguins are birds that live in a very cold climate and swim rather than fly. Name <b>ONE</b> adaptation that allows penguins to survive and reproduce?  <i>(e.g., lots of body fat)</i></p>	<p><b>3LS.C.6</b>  Name <b>TWO</b> reasons why some organisms are more likely to become extinct than others?  <i>(e.g., animals that are limited in their diet and habitat have a harder time adapting to changing conditions; an animal such as a Koala prefers to eat only eucalyptus leaves, if they do not change their food they may not survive.)</i></p>
<b>\$300</b>	<p><b>3LS.C.6</b>  Name <b>THREE</b> ways in which people can change an ecosystem for the better?  <i>(e.g., cleaning up pollution, planting trees, bringing water to dry areas, protecting/creating areas for plants &amp; animals to live)</i></p>	<p><b>3LS.C.6</b>  Suppose all the plants in one ecosystem died. How will that ecosystem be affected?  <i>(e.g., insects and other animals that eat those plants might starve; changes to the food chain will continue to other species.)</i></p>	<p><b>3LS.C.6</b>  Explain why there is such a large variety of plants and animals in the oceans?  <i>(the ocean covers about 75% of Earth, it is Earth's largest ecosystem)</i></p>
<b>\$300</b>	<p><b>3LS.B.1</b>  Identify <b>THREE</b> things that every animal needs to survive.  <i>(food, water, air, and/or shelter)</i></p>	<p><b>3LS.C.4</b>  Why might an extinct animal resemble one that is alive today?  <i>(Some surviving related species have changed very little over time – e.g., some species of sharks, crocodiles, insects)</i></p>	<p><b>3LS.C.4</b>  What happens to organisms when an ecosystem changes?  <i>(e.g., populations grow or shrink, depending on resources; organisms may move)</i></p>

## 4Q Science Review – Jeopardy

# Life Science

Grade 3 - Animals

\$300	3LS.C.6  How might a change in the environment affect animals?	3LS.B.2  Birds survive in many different habitats. Penguins are birds that live in a very cold climate and swim rather than fly. Name <b>ONE</b> adaptation that allows penguins to survive and reproduce?	3LS.C.6  Name <b>TWO</b> reasons why some organisms are more likely to become extinct than others?
\$300	3LS.C.6  Name <b>THREE</b> ways in which people can change an ecosystem for the better?	3LS.C.6  Suppose all the plants in one ecosystem died. How will that ecosystem be affected?	3LS.C.6  Explain why there is such a large variety of plants and animals in the oceans?
\$300	3LS.B.1  Identify <b>THREE</b> things that every animal needs to survive.	3LS.C.4  Why might an extinct animal resemble one that is alive today?	3LS.C.4  What happens to organisms when an ecosystem changes?

# 4Q Science Review – Jeopardy

## Life Science

**Grade 3 - Animals**

<b>\$400</b>	<p><b>3LS.C.6</b> A student observed a dolphin in the water. She tells her friend that the dolphin is a fish. Her friend explains that she is wrong. What might her friend say about dolphin, what kind of animal is a dolphin?   <i>(dolphin is a mammal because it breathes through lungs; must come to the surface of the water to breathe. Dolphins also birth live young.)</i></p>	<p><b>3LS.B.2</b> Animals meet their needs for survival in a many ways. Identify <b>TWO</b> structures that animals use to help them survive. Explain how each structure functions to help the animal survive.   <i>(e.g., gills and lungs – breathing; body coverings – skin/scales and hair/feathers – provides warmth, protection; movement – fins/tails and wings/legs – flying, walking, swimming)</i></p>	<p><b>3LS.C.6</b> Students observe the ecosystem around their school: Trees are cut down to clear an area for a new library. A nearby road is widened so more cars can travel on the road. An accident causes gallons of harmful chemicals to spill into a local river. What impact does this have on plants and animals?   <i>(e.g., in all cases, the number of plants and animals will decrease.)</i></p>
<b>\$400</b>	<p><b>3LS.B.3</b> A student finds an animal's nest. The student observes pieces of eggshell and feathers. Infer what this animal is, and tell how this animal travels from place to place.   <i>(The animal must be a bird because it hatched from an egg and has feathers. Since most birds can fly, it will probably fly from place to place.)</i></p>	<p><b>3LS.C.6</b> Identify <b>FOUR</b> ways ecosystems are affected by people?   <i>(e.g., people change an ecosystem by using resources such as trees and water. They pollute the water and air. They plant trees where forests were burned. They bring water to dry areas to grow crops.)</i></p>	<p><b>3LS.C.5</b> A scientist finds a dinosaur tooth that is flat, like a cow's tooth. What kind of food can he infer the dinosaur ate and how do you know?   <i>(The dinosaur probably ate the same kind of food cows eat – plants. This is known because teeth are a reliable indicator of food choice)</i></p>
<b>\$400</b>	<p><b>3LS.C.6</b> Explain how living things can change an ecosystem.   <i>(Living things can change an ecosystem by bringing more resources into the ecosystem. They also can change the size of populations in the ecosystem.)</i></p>	<p><b>3LS.C.6</b> Give <b>TWO</b> examples of how a blizzard might change the habitats of plants and animals living in a forest ecosystem?   <i>(e.g., frozen water sources can make water hard to get; snow might cover plants that animals need for food; the weather could cause animal/plants to die; trees fall)</i></p>	<p><b>3LS.A.1</b> Butterflies go through four stages in their life cycle. Identify the <b>FOUR</b> stages in the life cycle of a butterfly.   <i>(egg, caterpillar (larva), pupa and adult butterfly)</i></p>

## 4Q Science Review – Jeopardy

# Life Science

**Grade 3 - Animals**

<b>\$400</b>	<p><b>3LS.C.6</b></p> <p>A student observed a dolphin in the water. She tells her friend that the dolphin is a fish. Her friend explains that she is wrong. What might her friend say about dolphin, what kind of animal is a dolphin?</p>	<p><b>3LS.B.2</b></p> <p>Animals meet their needs for survival in a many ways. Identify <b>TWO</b> structures that animals use to help them survive. Explain how each structure functions to help the animal survive.</p>	<p><b>3LS.C.6</b></p> <p>Students observe the ecosystem around their school: Trees are cut down to clear an area for a new library. A nearby road is widened so more cars can travel on the road. An accident causes gallons of harmful chemicals to spill into a local river. What impact does this have on plants and animals?</p>
<b>\$400</b>	<p><b>3LS.B.3</b></p> <p>A student finds an animal's nest. The student observes pieces of eggshell and feathers. Infer what this animal is, and tell how this animal travels from place to place.</p>	<p><b>3LS.C.6</b></p> <p>Identify <b>FOUR</b> ways ecosystems are affected by people?</p>	<p><b>3LS.C.5</b></p> <p>A scientist finds a dinosaur tooth that is flat, like a cow's tooth. What kind of food can he infer the dinosaur ate and how do you know?</p>
<b>\$400</b>	<p><b>3LS.C.6</b></p> <p>Explain how living things can change an ecosystem.</p>	<p><b>3LS.C.6</b></p> <p>Give <b>TWO</b> examples of how a blizzard might change the habitats of plants and animals living in a forest ecosystem?</p>	<p><b>3LS.A.1</b></p> <p>Butterflies go through four stages in their life cycle. Identify the <b>FOUR</b> stages in the life cycle of a butterfly.</p>

# 4Q Science Review – Jeopardy

## Life Science

**Grade 4 - Plants**

<b>\$100</b> <b>\$100</b> <b>\$100</b> <b>\$100</b>	<p><b>4.LS.B.2</b> Name <b>ONE</b> function of plant's roots? <i>(e.g., absorbs water, absorbs nutrients, holds plant in place)</i></p>	<p><b>4.LS.A.5</b> <b>True or False?</b> Plants make their own food. <i>(true)</i></p>	<p><b>4.LS.A.5</b> Why are bees important to plant reproduction? <i>(they carry pollen between flowers)</i></p>
<b>\$100</b>	<p><b>4.LS.A.1</b> What occurs when seeds germinate? <i>(they will start to sprout)</i></p>	<p><b>4.LS.B.3</b> Why might it be difficult to pull a plant out of the ground? <i>(the plant is anchored in the soil by its roots)</i></p>	<p><b>4.LS.A.1</b> A student plants grass seeds in a small pot of soil. What must the grass seeds have before they will be able to sprout? <i>(e.g., water, soil, and sunlight)</i></p>
<b>\$100</b>	<p><b>4.LS.B.3</b> <b>True or False?</b> A piece of petrified wood is also known as a fossil <i>(true)</i></p>	<p><b>4.LS.A.5</b> <b>True or False?</b> Plants put carbon dioxide into the air. <i>(false)</i></p>	<p><b>4.LS.B.3</b> Give <b>ONE</b> reason for planting a tree away from a sidewalk. <i>(e.g., the sidewalk might crack as the tree grows)</i></p>
<b>\$100</b>	<p><b>4.LS.B.3</b> <b>True or False?</b> Photosynthesis is the process by which plants make food. <i>(true)</i></p>	<p><b>4.LS.C.4</b> <b>True or False?</b> When parts of the rainforest are cut down plants and animals are in danger of extinction. <i>(true)</i></p>	<p><b>4.LS.B.3</b> When a scientist wants to learn more about fossilized plants, what do they compare them to? <i>(a modern day plant/plants that are around today)</i></p>

# 4Q Science Review – Jeopardy

## Life Science

**Grade 4 - Plants**

<b>\$100</b> <b>\$100</b> <b>\$100</b> <b>\$100</b>	<p><b>4.LS.B.2</b> Name <b>ONE</b> function of plant's roots?</p>	<p><b>4.LS.A.5</b> <b>True or False?</b> Plants make their own food.</p>	<p><b>4.LS.A.5</b> Why are bees important to plant reproduction?</p>
<b>\$100</b>	<p><b>4.LS.A.1</b> What occurs when seeds germinate?</p>	<p><b>4.LS.B.3</b> Why might it be difficult to pull a plant out of the ground?</p>	<p><b>4.LS.A.1</b> A student plants grass seeds in a small pot of soil. What must the grass seeds have before they will be able to sprout?</p>
<b>\$100</b>	<p><b>4.LS.B.3</b> <b>True or False?</b> A piece of petrified wood is also known as a fossil.</p>	<p><b>4.LS.A.5</b> <b>True or False?</b> Plants put carbon dioxide into the air.</p>	<p><b>4.LS.B.3</b> Give <b>ONE</b> reason for planting a tree away from a sidewalk.</p>
<b>\$100</b>	<p><b>4.LS.B.3</b> <b>True or False?</b> Photosynthesis is the process by which plants make food.</p>	<p><b>4.LS.C.4</b> <b>True or False?</b> When parts of the rainforest are cut down plants and animals are in danger of extinction.</p>	<p><b>4.LS.B.3</b> When a scientist wants to learn more about fossilized plants, what do they compare them to?</p>

# 4Q Science Review – Jeopardy

## Life Science

**Grade 4 - Plants**

<b>\$200</b>	<p><b>4LS.A.1</b> Identify and explain what time of year would be best for planting most seeds outside in Ohio? <i>(Spring; the soil is warmer, greater hours of sunlight, and will likely be more rainfall)</i></p>	<p><b>4LS.B.2</b> Identify <b>TWO</b> functions of a flower's leaf. <i>(absorb sunlight, take in gas (<math>CO_2</math>), photosynthesis, transpiration (evaporation of water through the leaves))</i></p>	<p><b>4LS.C.4</b> Most of today's ferns grow in a damp environment. If a scientist discovered a fern fossil, what might she infer about the past environment? <i>(e.g., damp environment)</i></p>
<b>\$200</b>	<p><b>4LS.C.4</b> A paleontologist discovers a fossilized plant. She thinks the plant once grew fruit. What is <b>ONE</b> possible way she can investigate to see if it might have produced fruit? <i>(e.g., compare it to similar plants that are alive today)</i></p>	<p><b>4LS.A.5</b> Which change is most likely to happen in an ecosystem in which a population of predators has increased in numbers? <i>(Predators eat prey. An increased of predators will cause a decrease in the number of prey, or less food will be available)</i></p>	<p><b>4.LS.C.4</b> How would a scientist know if he found a prehistoric plant that had fruit?  (The fossil might possibly include fruit; if not it could be closely related to a living plant that has fruit. Or the fossil might be one of a group of plants that are known not to have fruit)</p>
<b>\$200</b>	<p><b>4.LS.B.2</b> How might thorns help a plant to survive? <i>(protect the plant from harm)</i></p>	<p><b>4LS.C.4</b> A tree that only lives in New Zealand once lived all over the world. How would a scientist know the tree had lived all over the world? <i>(fossils of the plant are found worldwide)</i></p>	<p><b>4LS.C.4</b> Why has only a small fraction of prehistoric plants been preserved as fossils?  (most dead plants rot away without leaving a fossil behind)</p>
<b>\$200</b>	<p><b>4.LS.B.3</b> Why must nonvascular plants grow close to the ground? <i>(so they can quickly and easily absorb water from their surroundings)</i></p>	<p><b>4.LS.C.4</b> If scientists cannot find a living plant that is like a fossil, what is probably true about the plant that made the fossil?  (it is probably extinct)</p>	<p><b>4LS.B.2</b> What would happen to a population of predators if the number of prey in the area increased?  (More prey means more food for the predators. The predator population would increase.)</p>

## 4Q Science Review – Jeopardy

# Life Science

**Grade 4 - Plants**

<b>\$200</b>	<p><b>4LS.A.1</b> Identify and explain what time of year would be best for planting most seeds outside in Ohio?</p>	<p><b>4LS.B.2</b> Identify <b>TWO</b> functions of a flower's leaf.</p>	<p><b>4LS.C.4</b> Most of today's ferns grow in a damp environment. If a scientist discovered a fern fossil, what might she infer about the past environment?</p>
<b>\$200</b>	<p><b>4LS.C.4</b> A paleontologist discovers a fossilized plant. She thinks the plant once grew fruit. What is <b>ONE</b> possible way she can investigate to see if it might have produced fruit?</p>	<p><b>4LS.A.5</b> Which change is most likely to happen in an ecosystem in which a population of predators has increased in numbers?</p>	<p><b>4LS.C.4</b> How would a scientist know if he found a prehistoric plant that had fruit?</p>
<b>\$200</b>	<p><b>4.LS.B.2</b> How might thorns help a plant to survive?</p>	<p><b>4LS.C.4</b> A tree that only lives in New Zealand once lived all over the world. How would a scientist know the tree had lived all over the world?</p>	<p><b>4LS.C.4</b> Why has only a small fraction of prehistoric plants been preserved as fossils?</p>
<b>\$200</b>	<p><b>4.LS.B.3</b> Why must nonvascular plants grow close to the ground?</p>	<p><b>4.LS.C.4</b> If scientists cannot find a living plant that is like a fossil, what is probably true about the plant that made the fossil?</p>	<p><b>4LS.B.2</b> What would happen to a population of predators if the number of prey in the area increased?</p>

# 4Q Science Review – Jeopardy

## Life Science

**Grade 4 - Plants**

<b>\$300</b>	<p><b>4LS.A.1</b>  A student wants to track how much two different sprouts grow in a month. Name <b>THREE</b> possible tools he will need to help complete this experiment.  <i>(e.g., ruler, calculator, calendar, journal )</i></p>	<p><b>4LS.B.3</b>  Name <b>THREE</b> characteristics of an apple.  <i>(e.g., color; size; number; smell; texture )</i></p>	<p><b>4LS.C.4</b>  Some fossils of shells and fish have been found at the tops of rocky mountain peaks. How do you suppose this happened?  <i>(the mountains where the fossils were found were covered by water long ago)</i></p>
<b>\$300</b>	<p><b>4.LS.B.2</b>  A student is making a diagram of a plant for science. In addition to leaves, which additional plant parts would be important to include in the diagram and why?  <i>(e.g., Roots: absorbs water, absorbs nutrients, holds it in place; Stem: allow transportation of nutrients to leaves.)</i></p>	<p><b>4.LS.B.3</b>  Scientists use various characteristics to classify plants into different groups. Identify <b>TWO</b> characteristics that scientists use to classify plants.  <i>(e.g., <b>type of stem</b> – with or without tubes (vascular or non-vascular); <b>method of reproduction</b> – with or without seeds, with or without flowers; <b>type of leaf</b> – changes color and loses leaves in fall, evergreen in all seasons)</i></p>	<p><b>4LS.B.3</b>  What are the functions of roots, stems and leaves?  <i>(e.g., <b>roots</b> cling to the soil, hold the plant in the ground and get water from the ground; <b>stems</b> hold up the leaves; <b>leaves</b> are flat so they can get lots of sun)</i></p>
<b>\$300</b>	<p><b>4LS.A.1</b>  Hydroponic technology is used to grow plants in nutrient rich water instead of in soil. Scientists found that less water is needed to grow hydroponic plants. Using hydroponic technology for food would be most helpful to people living in which area?  <i>(desert like areas)</i></p>	<p><b>4LS.A.5</b>  Plants and animals in an ecosystem interact in a variety of ways. Identify <b>TWO</b> types of interactions that take place in an ecosystem.  <i>(e.g., bees pollinating flowers, animals eating plants and leaving seeds through their waste)</i></p>	<p><b>4LS.A.5</b>  Sometimes we do things that can help or destroy the habitats of animals and plants. Identify <b>THREE</b> things we can do to help protect their habitats rather than destroy them.  <i>(e.g., pick up trash along lakes and rivers to provide for a better, cleaner place for animals to live and drink; plant new trees to increase habitats for some animals; pass laws to protect more natural lands)</i></p>

## 4Q Science Review – Jeopardy

# Life Science

Grade 4 - Plants

\$300	4LS.A.1  A student wants to track how much two different sprouts grow in a month. Name <b>THREE</b> possible tools he will need to help complete this experiment.	4LS.B.3  Name <b>THREE</b> characteristics of an apple.	4LS.C.4  Some fossils of shells and fish have been found at the tops of rocky mountain peaks. How do you suppose this happened?
\$300	4.LS.B.2  A student is making a diagram of a plant for science. In addition to leaves, which additional plant parts would be important to include in the diagram and why?	4.LS.B.3  Scientists use various characteristics to classify plants into different groups. Identify <b>TWO</b> characteristics that scientists use to classify plants.	4LS.B.3  What are the functions of roots, stems and leaves?
\$300	4LS.A.1  Hydroponic technology is used to grow plants in nutrient rich water instead of in soil. Scientists found that less water is needed to grow hydroponic plants. Using hydroponic technology for food would be most helpful to people living in which area?	4LS.A.5  Plants and animals in an ecosystem interact in a variety of ways. Identify <b>TWO</b> types of interactions that take place in an ecosystem.	4LS.A.5  Sometimes we do things that can help or destroy the habitats of animals and plants. Identify <b>THREE</b> things we can do to help protect their habitats rather than destroy them.

# 4Q Science Review – Jeopardy

## Life Science

**Grade 4 - Plants**

<b>\$400</b>	<p><b>4LS.A.1</b></p> <p>A teacher has both ferns and tomato plants growing in her greenhouse. The tomato plant uses seeds to reproduce. How does the fern reproduce? <i>(the fern uses spores to reproduce)</i></p>	<p><b>4LS.B.2</b></p> <p>Explain why you are most likely to find more small leaf plants growing in very dry climates. <i>(Small leaves reduce the amount of surface area that is exposed to the sun and dry heat of the desert. This helps the plant store water, which can be lost through pores on leaves.)</i></p>	<p><b>4LS.B.2</b></p> <p>Water lilies are aquatic plants. They live in water. Water lilies need nutrients that come from the soil in order to survive. Explain how these plants obtain nutrients? <i>(Water lilies have long roots that reach the soil of lakes and ponds. These long roots absorb the nutrients these plants need from the soil.)</i></p>
<b>\$400</b>	<p><b>4LS.B.2</b></p> <p>Most plants have three main parts. Identify <b>TWO</b> main parts of a plant that help it to grow, survive or reproduce and explain how each part helps the plant survive. <i>(root – anchor the plant, absorb water and nutrients; stem – supports the leaves and carries food, water, nutrients; leaves – provide food to plant by conducting photosynthesis; flowers – develop seeds for reproduction)</i></p>	<p><b>4LS.C.4</b></p> <p>Imagine a populated lake area filled with aquatic animals. Something strange happens and the lake starts to dry up. Millions of years pass. Scientists return to the lake area and start to dig where the lake once was. Predict what they would find. <i>(e.g., scientists would probably find fossils of the bones, teeth, and hard shells of animals that once lived in or near the lake)</i></p>	<p><b>4LS.A.5</b></p> <p>In a garden, you see bees buzzing around red roses. The small white chickweeds are almost untouched. Why do you think this is happening? <i>(e.g., the bright color of the petals from the roses and its smell attract bees; the small white chickweed is not very bright in color and its smell may not be pleasant to bees.)</i></p>
<b>\$400</b>	<p><b>4LS.B.2</b></p> <p>Why doesn't a seed need sunlight to germinate? <i>(sunlight is necessary for photosynthesis, the embryo gets the food it needs from food stored in the seed)</i></p>	<p><b>4LS.B.2</b></p> <p>Describe the roots of plants that grow in the desert, explain the advantage of this type of root. <i>(e.g., Desert plant roots are branched out and are very close to the surface; the advantage is that the root can absorb water easily.)</i></p>	<p><b>4LS.A.5</b></p> <p>Plants in a desert often grow far from one another. Explain why this occurs? <i>(Water is scarce in a desert ecosystem. Desert plants often grow far from each other so each plant can have enough water, less competition)</i></p>

## 4Q Science Review – Jeopardy

### Life Science

#### Grade 4 - Plants

\$400	4LS.A.1  A teacher has both ferns and tomato plants growing in her greenhouse. The tomato plant uses seeds to reproduce. How does the fern reproduce?	4LS.B.2  Explain why you are most likely to find more small leaf plants growing in very dry climates.	4LS.B.2  Water lilies are aquatic plants. They live in water. Water lilies need nutrients that come from the soil in order to survive. Explain how these plants obtain nutrients?
\$400	4LS.B.2  Most plants have three main parts. Identify <b>TWO</b> main parts of a plant that help it to grow, survive or reproduce and explain how each part helps the plant survive.	4LS.C.4  Imagine a populated lake area filled with aquatic animals. Something strange happens and the lake starts to dry up. Millions of years pass. Scientists return to the lake area and start to dig where the lake once was. Predict what they would find.	4LS.A.5  In a garden, you see bees buzzing around red roses. The small white chickweeds are almost untouched. Why do you think this is happening?
\$400	4LS.B.2  Why doesn't a seed need sunlight to germinate?	4LS.B.2  Describe the roots of plants that grow in the desert, explain the advantage of this type of root.	4LS.A.5  Plants in a desert often grow far from one another. Explain why this occurs?

# 4Q Science Review – Jeopardy

## Life Science

### Grade 5 – Plants and Animals Interactions

<b>\$100</b> <b>\$100</b> <b>\$100</b> <b>\$100</b>	<p>5.LS.B.1 What is the process that explains how trees and plants use carbon dioxide to make oxygen? <i>(photosynthesis)</i></p>	<p>5.LS.B.2 <b>True or False?</b> Most animals' food can be traced back to plants. <i>(true)</i></p>	<p>5.LS.B.3 How do decomposers help to keep an ecosystem balanced? <i>(they return nutrients to the soil)</i></p>
<b>\$100</b>	<p>5.LS.B.1 Explain how plants obtain their energy? <i>(by using energy from the sun)</i></p>	<p>5.LS.B.2 <b>True or False?</b> Animals that eat producers are known as consumers. <i>(true)</i></p>	<p>5.LS.B.3 Sheep consumers that eat grass and other plants to stay alive, but they do not eat animals. How would you identify this consumer? <i>(herbivores)</i></p>
<b>\$100</b>	<p>5.LS.C.4 <b>True or False?</b> Fewer organisms can live in fast-moving water than still water. <i>(true)</i></p>	<p>5.LS.C.5 <b>True or False?</b> A hummingbird's long beak is an adaptation. <i>(true)</i></p>	<p>5.LS.C.6 <b>Harmful or Beneficial?</b> Earthworms dig burrows in the soil, which help loosen the soil. What effect does this activity have on new plants? <i>(beneficial, less compaction)</i></p>
<b>\$100</b>	<p>5.LS.C.4 Which type of ecosystem changes the most from one season to the next? <i>(deciduous forest)</i></p>	<p>5.LS.C.5 What adaptation helps a skunk defend itself against predators? <i>(its odor)</i></p>	<p>5.LS.C.6 Humans cut down forests to make room to grow crops. This is an example of humans changing the environment to meet what type of need? <i>(grow food)</i></p>

# 4Q Science Review – Jeopardy

## Life Science

### Grade 5 – Plants and Animals Interactions

<b>\$100</b> <b>\$100</b> <b>\$100</b> <b>\$100</b>	<p><b>5.LS.B.1</b> What is the process that explains how trees and plants use carbon dioxide to make oxygen?</p>	<p><b>5.LS.B.2</b> <b>True or False?</b> Most animals' food can be traced back to plants.</p>	<p><b>5.LS.B.3</b> How do decomposers help to keep an ecosystem balanced?</p>
<b>\$100</b> <b>\$100</b> <b>\$100</b> <b>\$100</b>	<p><b>5.LS.B.1</b> Explain how plants obtain their energy?</p>	<p><b>5.LS.B.2</b> <b>True or False?</b> Animals that eat producers are known as consumers.</p>	<p><b>5.LS.B.3</b> Sheep consumers that eat grass and other plants to stay alive, but they do not eat animals. How would you identify this consumer?</p>
<b>\$100</b> <b>\$100</b> <b>\$100</b> <b>\$100</b>	<p><b>5.LS.C.4</b> <b>True or False?</b> Fewer organisms can live in fast-moving water than still water.</p>	<p><b>5.LS.C.5</b> <b>True or False?</b> A hummingbird's long beak is an adaptation.</p>	<p><b>5.LS.C.6</b> <b>Harmful or Beneficial?</b> Earthworms dig burrows in the soil, which help loosen the soil. What effect does this activity have on new plants?</p>
<b>\$100</b> <b>\$100</b> <b>\$100</b> <b>\$100</b>	<p><b>5.LS.C.4</b> Which type of ecosystem changes the most from one season to the next?</p>	<p><b>5.LS.C.5</b> What adaptation helps a skunk defend itself against predators?</p>	<p><b>5.LS.C.6</b> Humans cut down forests to make room to grow crops. This is an example of humans changing the environment to meet what type of need?</p>

# 4Q Science Review – Jeopardy

## Life Science

### Grade 5 – Plants and Animals Interactions

<b>\$200</b>	<p><b>5.LS.B.1</b> A student observes that a tree in front of her school has green leaves. In October she notices that its leaves have changed from green to orange. What conclusion can she make? <i>(the tree has stopped producing chlorophyll)</i></p>	<p><b>5.LS.B.2</b> Explain the function of plant leaves. <i>(e.g., plant leaves capture the sun's energy; a green plant uses energy during photosynthesis)</i></p>	<p><b>5.LS.C.6</b> In parts of the northwestern U.S., logging is destroying many forests. These forests are home to the spotted owl. Many people worry that logging will result in the extinction of the spotted owl. What is the main cause of extinction? <i>(loss of habitat)</i></p>
<b>\$200</b>	<p><b>5.LS.B.1</b> Which substance allows a leaf to use sunlight to produce food? <i>(chlorophyll)</i></p>	<p><b>5.LS.B.2</b> In what order do an owl, an acorn and a squirrel form a food chain in the forest? <i>(acorn, squirrel, owl)</i></p>	<p><b>5.LS.B.3</b> When an animal dies its remains are broken down by what in an ecosystem? <i>(decomposers)</i></p>
<b>\$200</b>	<p><b>5.LS.C.4</b> Identify plant adaptations that would allow plants to survive and reproduce in a desert climate? <i>(e.g., a plant species that can store water would be likely to survive and reproduce in a desert climate)</i></p>	<p><b>5.LS.C.5</b> What is <b>ONE</b> way seasonal changes affect organisms? <i>(e.g., supply of resources is always changing, ability to relocate (migration), change in behavior (hibernation))</i></p>	<p><b>5.LS.C.6</b> What gas in the atmosphere might increase if people cut down the trees in a large rainforest? <i>(carbon dioxide)</i></p>
<b>\$200</b>	<p><b>5.LS.C.4</b> Plants that survive in the desert are exposed to harsh conditions. Deserts are very dry and hot. In order for desert plants to adapt to their environment what must they have? <i>(the ability to collect and store water)</i></p>	<p><b>5.LS.C.5</b> Name <b>TWO</b> things that organisms compete for in an ecosystem? <i>(they compete for food, water, shelter, and space)</i></p>	<p><b>5.LS.B.3</b> Meadow voles are small mouse-like animals that eat insects. What type of consumer is a vole? <i>(carnivore)</i></p>

# 4Q Science Review – Jeopardy

## Life Science

### Grade 5 – Plants and Animals Interactions

<b>\$200</b>	5.LS.B.1  A student observes that a tree in front of her school has green leaves. In October she notices that its leaves have changed from green to orange. What conclusion can she make?	5.LS.B.2  Explain the function of plant leaves.	5.LS.C.6  In parts of the northwestern U.S., logging is destroying many forests. These forests are home to the spotted owl. Many people worry that logging will result in the extinction of the spotted owl. What is the main cause of extinction?
<b>\$200</b>	5.LS.B.1  Which substance allows a leaf to use sunlight to produce food?	5.LS.B.2  In what order do an owl, an acorn and a squirrel form a food chain in the forest?	5.LS.B.3  When an animal dies its remains are broken down by what in an ecosystem?
<b>\$200</b>	5.LS.C.4  Identify plant adaptations that would allow plants to survive and reproduce in a desert climate?	5.LS.C.5  What is <b>ONE</b> way seasonal changes affect organisms?	5.LS.C.6  What gas in the atmosphere might increase if people cut down the trees in a large rainforest?
<b>\$200</b>	5.LS.C.4  Plants that survive in the desert are exposed to harsh conditions. Deserts are very dry and hot. In order for desert plants to adapt to their environment what must they have?	5.LS.C.5  Name <b>TWO</b> things that organisms compete for in an ecosystem?	5.LS.B.3  Meadow voles are small mouse-like animals that eat insects. What type of consumer is a vole?

# 4Q Science Review – Jeopardy

## Life Science

### Grade 5 – Plants and Animals Interactions

<b>\$300</b>	<p><b>5.LS.B.1</b></p> <p>What would happen to the fish in a river if pollution killed the plant life in the river?</p> <p><i>(e.g., plants are at the bottom of food chains; if the plants die, the animals will not have food to eat, and their populations will decline or die out)</i></p>	<p><b>5.LS.B.2</b></p> <p>Describe a food chain with a producer as the first source of food.</p> <p><i>(hawk→snake→mouse→plant)</i></p>	<p><b>5.LS.B.3</b></p> <p>After food energy is taken in by a second-level consumer, what happens next?</p> <p><i>(it can be transferred to a third-level consumer or be broken down by decomposers)</i></p>
<b>\$300</b>	<p><b>5.LS.B.1</b></p> <p>Not all producers are plants. Some protists are also producers. How can you tell by looking at a protist whether it is a producer?</p> <p><i>(if a protist is green, it contains chlorophyll and can make its own food; if it is not green, it can not make its own food and is not a producer)</i></p>	<p><b>5.LS.B.2</b></p> <p>Energy moves through an ecosystem. Explain what this statement means.</p> <p><i>(e.g., plants use sunlight to produce food; animals eat the plants and as other animals eat those animals, food energy moves from producers to consumers to decomposers)</i></p>	<p><b>5.LS.B.3</b></p> <p>A fish eats a tadpole, and then an eagle eats the fish. What is missing in this food chain?</p> <p><i>(e.g., plants are at the bottom of food chains; if the plants die, the animals will not have food to eat, and their populations will decline or die out)</i></p>
<b>\$300</b>	<p><b>5.LS.C.4</b></p> <p>A small barnacle can attach itself to rocks in both shallow and deep water in order to survive. A larger type of barnacle prefers deep water and will crowd the small barnacle out of the deeper water spots. Which adaptation helps the smaller barnacle survive in this situation?</p> <p><i>(e.g., it can survive in a wider range of habitats)</i></p>	<p><b>5.LS.C.5</b></p> <p>A certain forest is home to a large number of hawks. What does this tell you about the number of mice and other small animals that live there?</p> <p><i>(the forest must have many small animals to serve as prey for hawks; hawks would not stay there unless they could meet their needs)</i></p>	<p><b>5.LS.C.6</b></p> <p>Forests are being cut down for timber. Many people believe new trees should be planted in these areas after the old trees are removed. Explain <b>THREE</b> reasons to support this idea.</p> <p><i>(e.g., new trees prevent erosion; provide oxygen; provide a habitat for organisms)</i></p>

## 4Q Science Review – Jeopardy

# Life Science

### Grade 5 – Plants and Animals Interactions

\$300	5.LS.B.1  What would happen to the fish in a river if pollution killed the plant life in the river?	5.LS.B.2  Describe a food chain with a producer as the first source of food.	5.LS.B.3  After food energy is taken in by a second-level consumer, what happens next?
\$300	5.LS.B.1  Not all producers are plants. Some protists are also producers. How can you tell by looking at a protist whether it is a producer?)	5.LS.B.2  Energy moves through an ecosystem. Explain what this statement means.	5.LS.B.3  A fish eats a tadpole, and then an eagle eats the fish. What is missing in this food chain?
\$300	5.LS.C.4  A small barnacle can attach itself to rocks in both shallow and deep water in order to survive. A larger type of barnacle prefers deep water and will crowd the small barnacle out of the deeper water spots. Which adaptation helps the smaller barnacle survive in this situation?	5.LS.C.5  A certain forest is home to a large number of hawks. What does this tell you about the number of mice and other small animals that live there?	5.LS.C.6  Forests are being cut down for timber. Many people believe new trees should be planted in these areas after the old trees are removed. Explain <b>THREE</b> reasons to support this idea.

# 4Q Science Review – Jeopardy

## Life Science

### Grade 5 – Plants and Animals Interactions

<b>\$400</b>	<p><b>5.LS.B.1</b> Identify the <b>FOUR</b> things that a plant needs for photosynthesis? <i>(light, water, chlorophyll, and carbon dioxide)</i></p>	<p><b>5.LS.B.2</b> How would Earth's atmosphere change if plants stopped carrying out photosynthesis? <i>(without photosynthesis, air would have more carbon dioxide and less oxygen)</i></p>	<p><b>5.LS.B.3</b> In a food chain there are arrows that point in a specific direction. What do those arrows represent on a food chain? <i>(the arrows show the direction of the flow of energy)</i></p>
<b>\$400</b>	<p><b>5.LS.C.4</b> Why are swamps and marshes the homes of many organisms? <i>(the water is shallow, enabling many plants to grow there; the plants provide food and shelter for many small animals, which provide food for predators)</i></p>	<p><b>5.LS.C.5</b> During the winter months, the temperature begins to drop in North America. During this time, bears hibernate. Explain why bears hibernate. <i>(during cold months, there are fewer resources (fewer food resources) available to bears; in order for them to survive through this time, bears must hibernate)</i></p>	<p><b>5.LS.C.6</b> A housing development has cut down half of the trees in a forest. What must the organisms that live in the forest do in order to survive? <i>(organisms must compete with one another for the limited resources that are left in the habitat)</i></p>
<b>\$400</b>	<p><b>5.LS.C.4</b> Why do few producers live near the bottom of the near shore zone? <i>(phytoplankton need sunlight to grow, so they don't live in deeper water; the animals that eat them stay near their food source; the surface of the ocean has more oxygen than the depths, partly because the phytoplankton produce oxygen while they make their own food and partly because oxygen enters the water through contact with air)</i></p>	<p><b>5.LS.C.5</b> A herd of elephants graze on the African savannah. They dig into a dry riverbed, creating a water hole. Zebras and warthogs drink there. The elephants strip leaves off trees in a grove used by vervet monkeys. People cut down the dead trees for use as firewood. Which species was harmed by the changes to the ecosystem made by the elephant herd and how were they harmed? <i>(vervet monkey – less trees)</i></p>	<p><b>5.LS.C.6</b> Suppose the number of organisms in one population in a community suddenly increases. Predict what might happen, and explain why. <i>(e.g., if the population is made up of producers, the herbivores and omnivores would increase, and then the carnivores would increase; if it consists of prey, the predators would increase; if its members are predators, their prey would decrease)</i></p>

## 4Q Science Review – Jeopardy

# Life Science

### Grade 5 – Plants and Animals Interactions

\$400	5.LS.B.1  Identify the <b>FOUR</b> things that a plant needs for photosynthesis?	5.LS.B.2  How would Earth's atmosphere change if plants stopped carrying out photosynthesis?	5.LS.B.3  In a food chain there are arrows that point in a specific direction. What do those arrows represent on a food chain?
\$400	5.LS.C.4  Why are swamps and marshes the homes of many organisms?	5.LS.C.5  During the winter months, the temperature begins to drop in North America. During this time, bears hibernate. Explain why bears hibernate.	5.LS.C.6  A housing development has cut down half of the trees in a forest. What must the organisms that live in the forest do in order to survive?
\$400	5.LS.C.4  Why do few producers live near the bottom of the near shore zone?	5.LS.C.5  A herd of elephants graze on the African savannah. They dig into a dry riverbed, creating a water hole. Zebras and warthogs drink there. The elephants strip leaves off trees in a grove used by vervet monkeys. People cut down the dead trees for use as firewood. Which species was harmed by the changes to the ecosystem made by the elephant herd and how were they harmed?	5.LS.C.6  Suppose the number of organisms in one population in a community suddenly increases. Predict what might happen, and explain why.