R.I.4.2 MP3

Name: _____ Date: _____

"Don't Step on that Ecosystem!"

By Courtney Duke

Lexile Level: 530 | F&P: Level K | DRA: 20 (479 Words)

The next time you go out, take a careful look around. Maybe it's raining, and you can see a big puddle. Plants might be growing in it. Birds might take baths in it. And if you're lucky, the puddle might even be a home to tadpoles.

Any place where plants and animals live together is an ecosystem. An ecosystem can be huge, like a desert or the ocean. But it can also be as small as a puddle.

A living thing can be an ecosystem, too. Picture an oak tree in the forest. Bugs and birds make cozy homes in its bark and branches. Squirrels nest in its trunk.

Every few years, this oak tree grows acorns. When the acorns are ripe, they fall to the forest floor. These rich nuts are good food. Mice and deer eat the acorns to fatten up for the winter.

Mice save acorns. Then they have food in the cold winter months. In the spring, hawks swoop down, looking for a mouse meal.

All living things are connected to each other in an ecosystem. In a way, the oak tree helps the hawk find its food. The mice don't eat all the acorns. Some will get covered in dirt. They get water from rain. They can grow up to be ecosystems too.

Now think of the ocean. Imagine diving into the blue water. Near the surface, you see a rocky ridge of coral. This is a coral reef. The reef is home to many plants and animals. Sea plants sway in the current. Fish come to feed or to hide from predators. Coral reefs are home to one- quarter of all the fish in the sea. Reefs also draw birds, whales, turtles, and seals. This makes the reef ecosystem one of the most important in the world. Ecosystems form in all kinds of ways. Even people make ecosystems, though we don't always mean to. Think of a big ship crossing the ocean. On its deck are huge metal boxes. During a storm, one of the boxes washes overboard and sinks to the bottom of the sea.

The box becomes part of the ecosystem there. Crabs climb into it. A barnacle may attach to the side. Then an anemone attaches there too. A curious octopus comes to hunt shellfish. It eats the shellfish. Then it swims away, leaving empty shells behind. A hermit crab crawls over to find a new shell to live in. Over time, lots of anemones grow on the box. Anemones look like plants.

They have tentacles, or waving arms. Schools of tiny fish swim through the waving arms. Bigger fish chase the tiny fish. Seals come to hunt for fish dinners. Eventually, even more animals come. The box is now its own ecosystem.

Ecosystems are everywhere. New ones form all the time. You might see an ecosystem when you least expect it.

Name: _____ Date: _____

Standard RI.4.2

I can determine how the main idea of a text, the details that support the main idea, and explain how the details support the main idea.

1

DOK 1

Read this paragraph from the passage. Then underline the sentence that states what the paragraph is mostly about.

> *The box becomes part of the ecosystem there. Crabs climb into it. A barnacle may attach to the side. Then an anemone attaches there too. A curious octopus comes to hunt shellfish. It eats the shellfish. Then it swims away, leaving empty shells behind. A hermit crab crawls over to find a new shell to live in. Over time, lots of anemones grow on the box. Anemones look like plants.*

2

DOK 1

Which of these details show how a new ecosystem can form?

a. An ecosystem can be huge, like a desert or the ocean. But it can also be as small as a puddle.
b. All living things are connected to each other in an ecosystem. In a way, the oak tree helps the hawk find its food.
c. Reefs also draw birds, whales, turtles, and seals. This makes the reef ecosystem one of the most important in the world.
d. The box becomes part of the ecosystem there. Crabs climb into it. A barnacle may attach to the side.

3

DOK 2

The author wants to add an additional example to this passage that supports the main idea. Which of these examples **best** support the main idea?

a. Barnacles live on a whale's skin. Barnacles are able to eat plankton when the whales eat. The barnacles do not harm or help the whale.
b. Vultures eat dead animals. They are able to eat meat that is rotten and would be dangerous to other animals.
c. Oxpeckers are birds that live on elephants. The oxpecker eats lice, ticks, and other parasites that live on the elephant. They also scream when they see predators, which helps the elephant stay alive.
d. New ecosystems form on the oil rigs and platforms in the ocean. Coral grow on the steel platforms, which feed fish. Turtles and sharks live off of the fish.

4

DOK 2

Read the three paragraphs from the passage. Then answer the prompt.

Ecosystems form in all kinds of ways. Even people make ecosystems, though we don't always mean to. Think of a big ship crossing the ocean. On its deck are huge metal boxes. During a storm, one of the boxes washes overboard and sinks to the bottom of the sea.

The box becomes part of the ecosystem there. Crabs climb into it. A barnacle may attach to the side. Then an anemone attaches there too. A curious octopus comes to hunt shellfish. It eats the shellfish. Then it swims away, leaving empty shells behind. A hermit crab crawls over to find a new shell to live in. Over time, lots of anemones grow on the box. Anemones look like plants.

They have tentacles, or waving arms. Schools of tiny fish swim through the waving arms. Bigger fish chase the tiny fish. Seals come to hunt for fish dinners. Eventually, even more animals come. The box is now its own ecosystem.

Summarize this section of the passage in a few sentences.

5

DOK 3

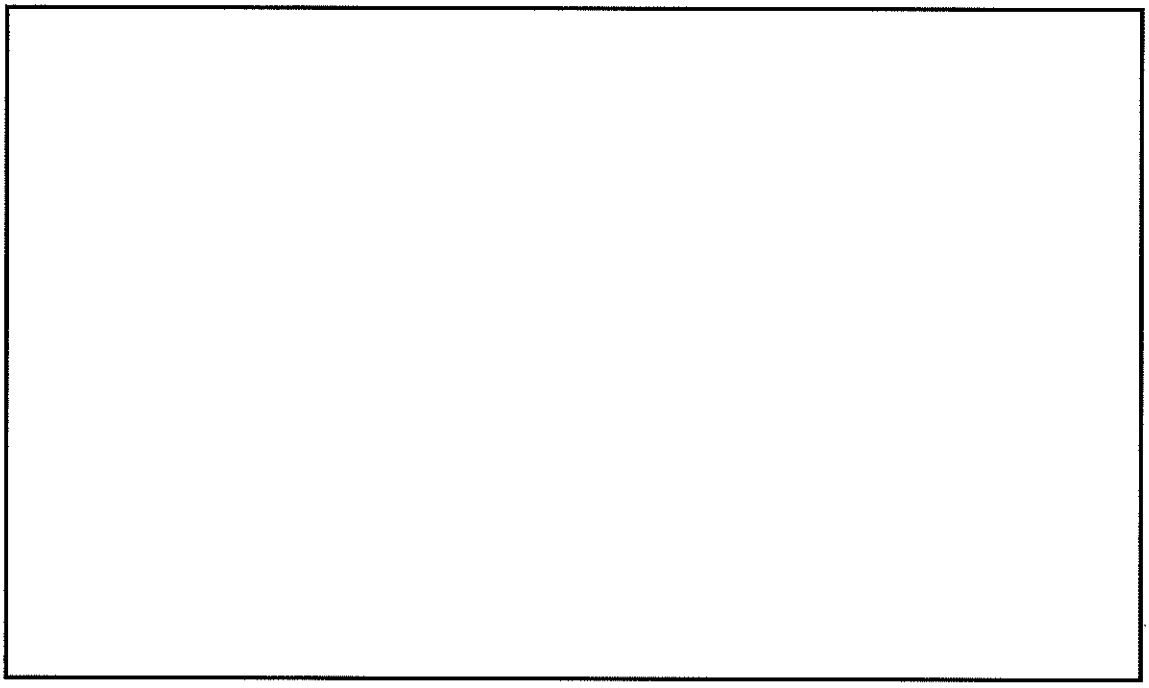
What is the main idea of the passage? How is it supported by details from the text? In the space below, draw an organizer that allows you to show the main idea. Select at least **three** supporting details from the passage that support the main idea.

Write 1-2 sentences that explain how the details you selected support the main idea.

Bonus

This article presents many different ecosystems. Think about how people interact with the plants and animals in these ecosystems. How do people impact the ecosystem?

Pick one ecosystem and explain how humans impact the ecosystem. Then draw a picture or diagram that explains how the plants, animals, and people interact.



Scoring Rubric

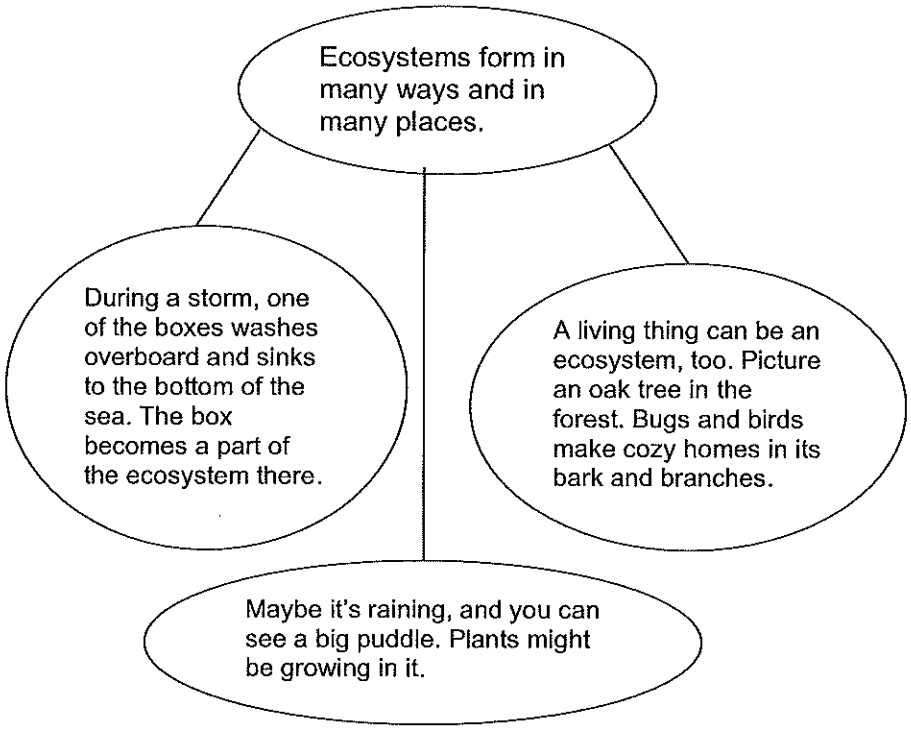
RI.4.2 Assessment #1:

"Don't Step on That Ecosystem"

Student Name: _____ Date of Administration: _____

Teacher Name: _____

Question / Level	Key / Rubric	Points
#1 DOK 1	The box becomes part of the ecosystem there	0 1
#2 DOK 1	d. The box becomes part of the ecosystem there. Crabs climb into it. A barnacle may attach to the side. *D is the correct answer because it shows how a new ecosystem forms from the metal box that drops into the water. C explains how the reef functions in the ecosystem, but does not explain how a new ecosystem forms.*	0 1
#3 DOK 2	d. New ecosystems form on the oil rigs and platforms in the ocean. Coral grow on the steel platforms, which feed fish. Turtles and sharks live off of the fish. *D is the correct answer because it shows how animals work together in an ecosystem. A and C show how two different animals work together, but it doesn't show the ecosystem. B shows an adaptation that an animal has.*	0 1
#4 DOK 2	This section of the text explains how an ecosystem could form from a metal box that fell overboard from a ship. Barnacles, anemone, and crabs could make the box home, which would attract octopus, hermit crabs, and other fish. This would bring other animals to eat these fish and eventually an ecosystem would form. **SCORING:** **2:** provides a short (3-5 sentence) summary of the text that explains the main points of this section	0 1 2

	1: provides a summary of the section, but misses some important details OR may include too many details (retell) **0:** incorrect or no answer	
#5 DOK 3	 The details I selected support the main idea because they show some of the different places that ecosystems are, like a tree or a puddle. They also show how ecosystems can form in different ways, like from a box that falls off a ship. *Other possible main idea & supporting details:* Living things work together in an ecosystem. 1. In a way, the oak tree helps the hawk find its food. The mice don't eat all the acorns. Some will get covered in dirt. 2. The reef is home to many plants and animals. A curious octopus comes to hunt shellfish. It eats the shellfish. Then it swims away, leaving empty shells behind. A hermit crab crawls over to find a new shell to live in. These details support the main idea because they show how the animals and plants work together to survive in the ecosystems. **SCORING:** **+1 point:** Provides correct main idea **+1 point:** Each relevant detail that supports the main idea (3 possible)	0 1 2 3 4 5

	+1 point: Writes an explanation that explains the connection between the main idea and supporting details.	
#BONUS	*This item is not scored and is an option for early finishers*	
TOTAL		____ / **10**

Assessments & Reading Passages

RI 4.2

Assessment #2

"It's a Cold (Hot, Dry, Cold, Dark) Cruel World!"

Standard RI.4.2

I can determine the main idea of a text, the details that support the main idea, and explain how the details support the main idea.

R.1.4.3

Name: _____ Date: _____

"A New Way to Play"

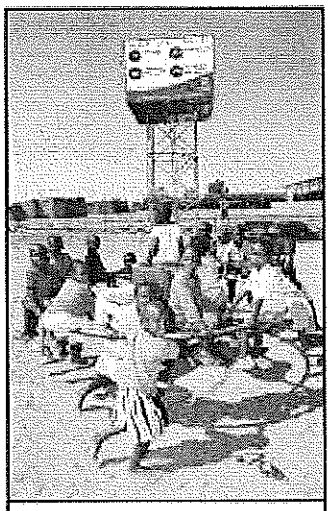
By STAAR

Lexile Level: 870 | F&P: Level T | DRA: 40 (396 Words)

Children grasp metal bars as the merry-go-round spins. One child jumps off and gives his friends a push. This is not an ordinary merry-go-round, however. It's a PlayPump, and it's unlike the merry-go-round you may see at a park. These PlayPumps offer hope to people in southern Africa.

Getting clean water in some areas of Africa is difficult. PlayPumps make it easier to get water needed for cooking, bathing, and drinking. This new water system can bring fresh, healthful water to many people living in southern Africa. A man named Trevor Field wanted to do something to help people in the parts of Africa where clean water can be hard to find. So he teamed up with an inventor, and together they created PlayPump.

The way a PlayPump works is simple. Children push the merry-go-round, and the energy the merry-go-round makes helps draw water up from deep underground. The water then travels to a large tower, where it is stored in a tank. Finally the water is routed to a tap that controls the flow of the water. People in the community are able to use the tap to get the fresh water they need.



Children play on a PlayPump that helps bring water to the holding tank.

Roundabout Water Solutions

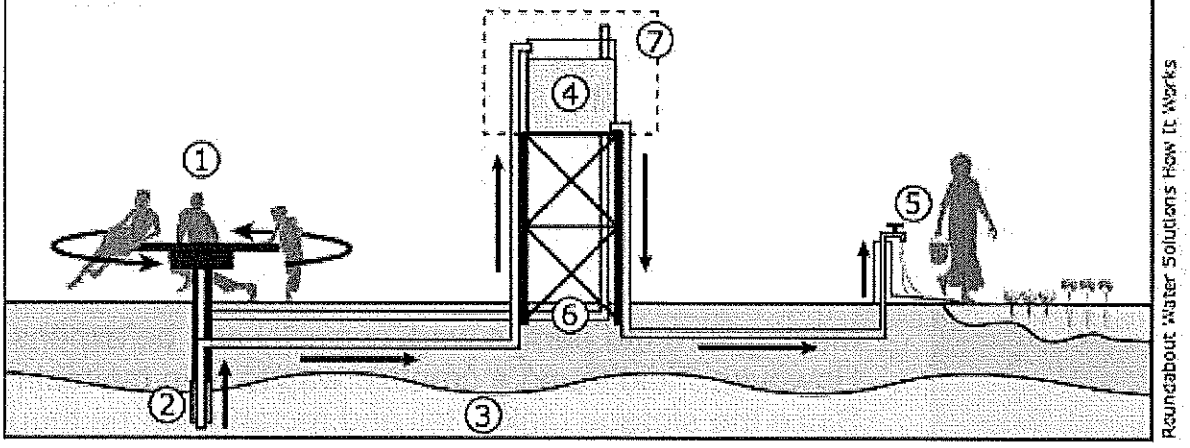
Making sure the pumps work correctly can be expensive. However, Field found a creative way to help maintain them. Since the storage tank is tall and rectangular, he thought that all four of its sides could be used to advertise to the community or make public announcements. Two sides of the tank may show tips for good health, such as how to wash your hands. The other two sides show advertisements from businesses. These businesses pay to have their messages on the tank. The money they pay is used to help keep the pumps working properly.

PlayPumps can be used in areas where there is already a water source nearby. The pumps are usually located near schools or community centers. This allows families to collect water whenever they choose. Having clean water close by helps families stay healthy. PlayPumps also give children a chance to play.

People in southern Africa are excited about the PlayPumps. Not only do the pumps make clean water readily available, but the water is also easy to access. Several other companies have also decided to build and install these pumps in some countries in southern Africa. With PlayPumps, clean water just may be one spin closer.

How PlayPumps Work

1. Children play on the merry-go-round.
2. The pump begins working.
3. Underground water is brought up through pipes.
4. The water is stored in a tank.
5. The tap allows people to get the water.
6. Any extra water in the tank drains down a pipe and back underground to keep it clean.
7. Companies and communities add messages to the outside of the tank.



Roundabout Water Solutions How It Works

Name: _____ Date: _____

Standard RI.4.3

I can use textual evidence to explain ideas in a scientific or technical text, including what happened and why.

1

DOK 1

What evidence does the author use to explain why PlayPumps are usually located near schools and community centers?

a. Businesses can pay to advertise on the side of the tanks.

b. Families can collect clean water whenever they want.

c. These are the only places with available land for the pumps.

d. Underground water comes up through pipes.

2

DOK 1

Problem: Some places in Africa could not easily get clean water.

According to the article, what was the solution to this problem? Place an **X** by the correct answer.

____ Energy from the merry-go-round draws up clean water from underground.

____ PlayPumps are expensive to maintain.

____ Clean water can be shipped from the ocean.

3

DOK 2

Part 1

Which statement **best** explains why other companies have decided to install PlayPumps in other African countries?

a. They want to advertise their businesses on four sides of the tank.

b. They recognized that many African communities do not have safe and fun parks for children to play in.

c. They have realized how simple it can be to distribute clean water.

d. They can easily use the extra water being stored in the tanks.

Part 2

Which textual evidence **best** supports your claim in Part 1?

a. "PlayPumps also give children a chance to play."

b. "The money they pay is used to help keep the pumps working properly."

c. "The water then travels to a large tower, where it is stored in a tank."

d. "Not only do the pumps make clean water readily available, but the water is also easy to access."

4

DOK 2

Part 1

Use the information from the article and the diagram to explain how the people get the water to use.

a. The water is contained in a water tower or tank.

b. The people can get the water close by.

c. A tap allows the people to use the water from the tank.

d. Businesses put advertisements to show how to use fresh water.

Part 2

Where can the reader find this information in the text and in the diagram?

a. Paragraph 1; Step 2

b. Paragraph 2; Step 6

c. Paragraph 3; Step 5

d. Paragraph 4; Step 7

5

DOK 3

Most of the PlayPumps are expensive, and these communities do not have a lot of money. What was Trevor Field's idea to pay for the PlayPumps? In **two to three** sentences, explain why his idea is important for the successful use of the PlayPumps?

*

Bonus

How would your daily life be different if you did not have regular and easy access to clean water? Describe what changes you would have to make in your life if clean water was hard to find in your community.

Scoring Rubric

RI.4.3 Assessment #1:

"A New Way to Play"

Student Name: _____ Date of Administration: _____

Teacher Name: _____

Question/ Level	Key / Rubric	Points
#1 DOK 1	b. Families can collect clean water whenever they want.	0 1
#2 DOK 1	**X** Energy from the merry-go-round draws up clean water from underground.	0 1
#3 DOK 2	**Part 1** c. They have realized how simple it can be to distribute clean water. *It could be option **a**, but Paragraph 6 of the article specifically connects the ease and accessibility of water to the expansion of PlayPumps by other companies* **Part 2** d. "Not only do the pumps make clean water readily available, but the water is also easy to access." **SCORING** **1 point**: answers Part 1 correctly **1 point**: answers Part 2 correctly (must answer Part 1 correctly to receive credit for Part 2)	0 1 2

#4 DOK 2	**Part 1** c. A tap allows the people to use the water from the tank. **Part 2** c. Paragraph 3; Step 5 **SCORING** **1 point**: answers Part 1 correctly **1 point**: answers Part 2 correctly (must answer Part 1 correctly to receive credit for Part 2)	0 1 2
#5 DOK 3	**Model Student Response** Trevor Field came up with the idea to have local businesses advertise on two sides of the blank tank. The money they gave for the advertising space covers the cost of the expensive pumps and it also helps the local businesses. This is important because it shows how the pumps benefit everybody in the community. **SCORING:** **2 points**: explains Field's idea **2 points**: explains how the idea is important	0 1 2 3 4
#BONUS	*This item is not scored and is an option for early finishers.*	
TOTAL		**___ / 10**

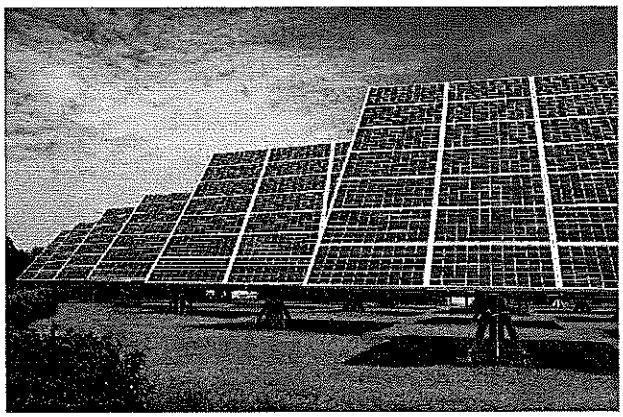
RI. 4.4

Name: _____ Date: _____

"Solar Energy"

By epa.gov

Lexile Level: 810 | F&P: Level S | DRA: 40 (474 Words)



Why is daytime brighter and warmer than nighttime? The answer is simple: solar energy. Solar energy is simply the light and heat that come from the sun.

People can harness the sun's energy in a few different ways:

- **Photovoltaic cells**, which convert sunlight into electricity.
- **Solar thermal technology**, where heat from the sun is used to make hot water or steam.
- **Passive solar heating**, which can be as simple as letting the sun shine through windows to heat the inside of a building.

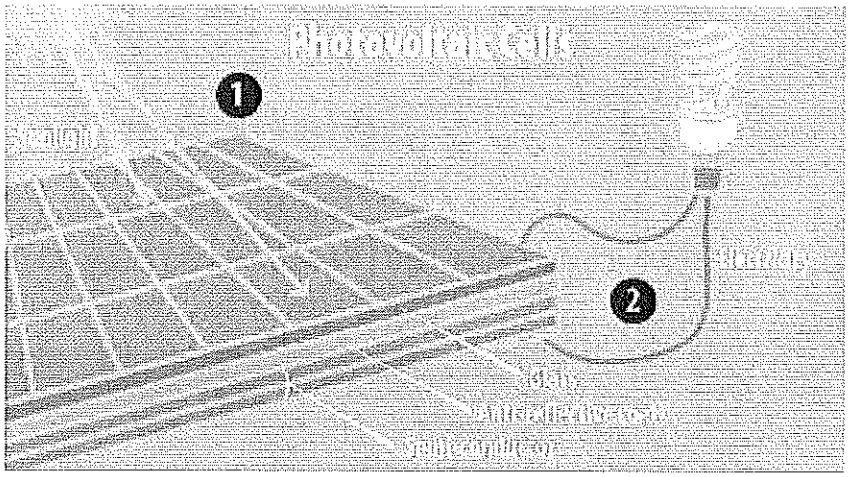
Photovoltaic Cells

Do you have a solar calculator or watch? These items are powered by photovoltaic cells. A photovoltaic cell absorbs light and converts it directly into electricity. A group of photovoltaic cells is known as a solar panel.

How it works:

1. Sunlight hits the surface of the photovoltaic cell.

2. A material called a semi-conductor converts the light into electricity.



You may have seen solar panels on houses, on electronic road signs, or in parking lots to power lights. People who have solar panels on their homes buy less electricity from their utility companies. This is because they are producing some electricity on their own. If you have enough solar panels, you might even be able to generate more power than you need. In some states, this means you can run your electric meter backwards and give your extra electricity to the rest of the community. The electric company ends up paying you!

Solar Thermal Technology

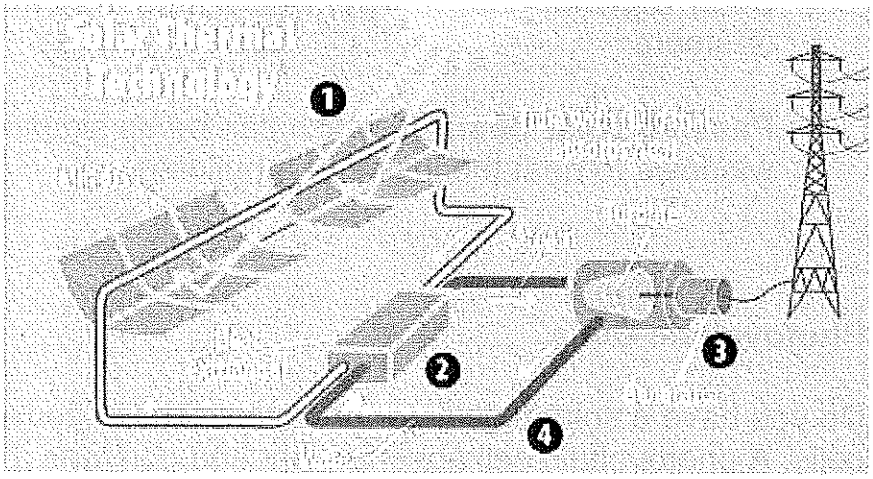
Another way to tap solar energy is by collecting the sun's heat. Solar thermal power plants use heat from the sun to create steam, which can then be used to make electricity. On a smaller scale, solar panels that harness thermal energy can be used for heating water in homes, other buildings, and swimming pools.

How it works:

1. Mirrors or reflectors concentrate the sun's rays to heat a special kind of liquid.

2. The heat from this liquid boils water to create steam.

3. Steam spins a turbine that is connected to a generator, which creates electricity.



4. The steam cools and condenses back to water, which is recycled, reheated, and converted into steam again.

Cool Facts

- **Solar–powered school buses.** A town in Wisconsin is using solar panels to charge hybrid electric school buses.

- **Google maps for solar panels.** If you live in San Francisco or Boston, you can see the solar panels in your neighborhood on a map.

- **How cool is this?** In 2010, China unveiled the first solar-powered air conditioner. If mass–produced, these devices could help reduce energy use and greenhouse gas emissions in China and other countries.

- **Solar joins the major leagues.** Taiwan's National Stadium is being touted as the world's largest sports stadium. It's nicknamed the "flying dragon" after its silver–blue canopy, which coils like a tail and contains nearly 9,000 solar panels. When it's not in use, the stadium powers homes and businesses.

Name: _____ Date: _____

Standard RI.4.4

I can determine the meaning of academic words and phrases in a text.

1
DOK 1

Match the terms with the correct definition.

_____ Solar Energy	1. the light and heat that come from the sun
_____ Solar Panel	2. a group of photovoltaic cells

2
DOK 1

Reread the following excerpts from the article:

> People can harness the sun's energy in a few different ways.
>
> On a smaller scale, solar panels that harness thermal energy can be used for heating water in homes, other buildings, and swimming pools.

According to the context clues in the article, what is the definition of the word harness?

a. to secure with a system of belt-like straps

b. to control and make use of something

c. to limit and restrict

d. to expand and increase the quantity of something

3

Part 1

DOK 2

Reread the excerpt from the text:

> You may have seen solar panels on houses, on electronic road signs, or in parking lots to power lights. People who have solar panels on their homes buy less electricity from their utility companies. This is because they are producing some electricity on their own. If you have enough solar panels, you might even be able to generate more power than you need.

What is a synonym for the word generate as it is used in the article?

a. consume

b. create

c. require

d. recycle

Part 2

Underline the context clue from the excerpt that helps the reader understand the meaning of generate.

> You may have seen solar panels on houses, on electronic road signs, or in parking lots to power lights. People who have solar panels on their homes buy less electricity from their utility companies. This is because they are producing some electricity on their own. If you have enough solar panels, you might even be able to generate more power than you need.

4

DOK 2

Which of the following statements accurately defines the term photovoltaic cells?

a. Photovoltaic cells convert the energy from hot water and steam into electricity.

b. Photovoltaic cells are a semi-conductor that send electricity to the solar panel after people harness the sun's energy.

c. Photovoltaic cells absorb sunlight that shines on them which is then transformed into electricity.

d. Photovoltaic cells are created from the electricity that is absorbed by the sunlight.

5

DOK 3

What is solar thermal technology? Write a definition for this term using context from the article. Provide **one** context clue that **best** supports your definition.

*

Bonus

The article shared some "cool facts" about how solar power is being used across the world. What possible challenges could exist that may slow down the production and use of solar power? Brainstorm some potential problems in the lines below.

Scoring Rubric

RI.4.4 Assessment #1:

"Solar Energy"

Student Name: _____ Date of Administration: _____

Teacher Name: _____

Question/ Level	Key / Rubric	Points
#1 DOK 1	**__1___ Solar Energy** **__2____Solar Panel** **SCORING** **+1/2 point**: correctly matches term to definition (up to 1 point total)	0 .5 1
#2 DOK 1	b. to control and make use of something	0 1
#3 DOK 2	**Part 1** b. create **Part 2** You may have seen solar panels on houses, on electronic road signs, or in parking lots to power lights. People who have solar panels on their homes buy less electricity from their utility companies. This is because they are **producing** some electricity on their own. If you have enough solar panels, you might even be able to generate more power than you need. **SCORING** **1 point**: answers Part 1 correctly **1 point**: identifies correct context clue (must answer Part 1 correctly to receive credit for Part 2)	0 1 2

#4 DOK 2	c. Photovoltaic cells absorb sunlight that lands on them which is then transformed into electricity.	0 2
#5 DOK 3	**Model Student Response** Solar thermal technology is when heat from the sun is collected and used to make hot water and steam. The water or steam "can then be used to make electricity." **SCORING** **2 points**: defines the term solar thermal technology **2 points**: includes context clues to support definition	0 2 4
#BONUS	*This item is not scored and is an option for early finishers.*	
TOTAL		**___ / 10**

Assessments & Reading Passages

RI.4.4

Assessment #2

"The History of Rosh Hashanah, Jewish New Year"

Standard RI.4.4

I can determine the meaning of academic words and phrases in a text.

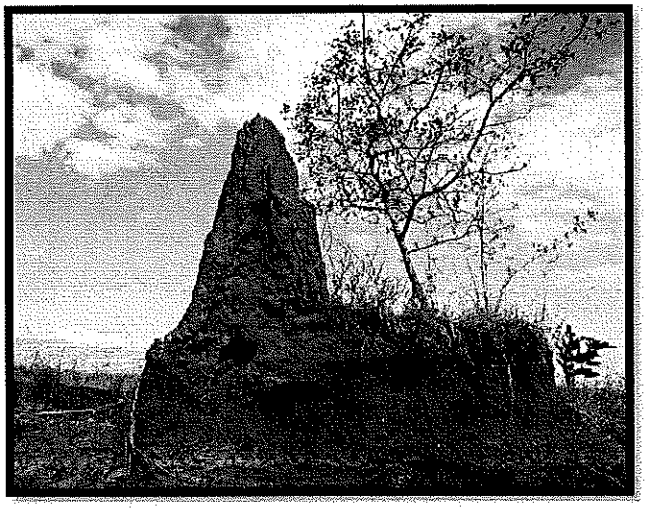
RI.4.5

Name: _____ Date: _____

"Animal Architects"

By Donna Henes

Lexile Level: 930 | F&P: Level U-V | DRA: 50 (429 Words)



Everybody Needs a Home

Homes protect us from weather and keep us safe and comfortable. Animals are no exception.

Humans live in a wide variety of structures. Around the world, people have designed and built their homes to suit their particular needs and ways of life. Animals do the same.

In addition to making living places, people and animals both build other structures: bridges, dams, traps, and storage areas. These structures help people and animals survive.

People and animals both use different materials and methods for their constructions. They build with wood, weave with fibers and vines, dig into the earth, and mold out of mud.

Assessments & Reading Passages

RI.4.5

Assessment #2

"Animal Architects"

Standard RI.4.5

I can analyze how information is organized to determine the overall structure of a text or parts of a text.

From sky-high nests to elaborate (or fancy) tunnels, the amazing works of animal architects (or building designers) rival those of the greatest human engineers. Let's take a look at some.

Beavers build lodges along the banks of lakes and ponds. Using branches they chewed apart themselves, beavers begin by building a cone-shaped frame. Then they fill in the gaps with mud and leaves. The entrance to the lodge is always at the bottom, underwater, so beavers can come and go without being seen by predators.

In addition to their lodges, beavers build dams. Water builds up behind the dams, creating flooded areas that are ideal places for beavers to find food. The flooded areas also provide pools for other wildlife.

Termites build 20-foot-high mounds out of dirt and their own saliva. These giant structures are like small apartment buildings. Besides living areas, these towers have food storage areas, nurseries for "baby" termites, a special chamber for the king and queen, and even gardens. (A chamber is like a room.) . . .

Wombats dig huge underground burrows that can be 100 feet long. Wombat tunnels are elaborate, with many entrances, side tunnels, and resting chambers. Inside the burrow, sleeping nests are built on raised "platforms" to keep them dry in case of flooding. Often, several burrows are connected, creating structures so huge they can actually be seen from space! . . .

Bald eagles build massive nests, 4 to 5 feet across and 3 to 6 feet deep, high in tall trees. They use their beaks and amazingly strong talons [or claws] to break branches and twigs for nest material. Like beavers, eagles begin by building a stick frame. Then they weave in smaller branches and twigs for added strength and protection. Finally, eagles line their nests with grasses and other soft material to make them comfy. . .

Take a look around you. [You may] find other examples of amazing animal architecture.

Name: _____ Date: _____

Standard RI.4.5

I can analyze how information is organized to determine the overall structure of a text or parts of a text.

1

DOK 1

Which statement summarizes the comparison in the first paragraph?

a. Animals and humans both need shelter to protect them from the elements.
b. Human homes and animal homes are very different.
c. Homes protect humans from various weather conditions where animals are able to survive without shelter.
d. Animals and humans are similar because they work together to create homes that protect them from the environment.

2

DOK 1

Read the paragraph from the passage and then underline the sentence in the paragraph that shows a comparison.

Bald eagles build massive nests, 4 to 5 feet across and 3 to 6 feet deep, high in tall trees. They use their beaks and amazingly strong talons [or claws] to break branches and twigs for nest material. Like beavers, eagles begin by building a stick frame. Then they weave in smaller branches and twigs for added strength and protection. Finally, eagles line their nests with grasses and other soft material to make them comfy.

3

DOK 2

Part 1: How is the paragraph below different from the paragraphs that come after it in the passage?

From sky-high nests to elaborate (or fancy) tunnels, the amazing works of animal architects (or building designers) rival those of the greatest human engineers. Let's take a look at some.

a. It describes the story of how animal homes are constructed, while the other paragraphs describe how human structures are made.
b. It helps a reader understand why humans and animals build homes, while the other paragraphs help a reader understand how animals and humans build homes.
c. It compares how animal architects are similar to human engineers, while the other paragraphs describe specific animal architects.
d. It helps a reader understand the amazing architectural abilities of animals, while the other paragraphs help a reader understand how human engineers build structures.

Part 2: Select the statement that **best** describes the importance of including this paragraph before the paragraphs that follow.

a. It is necessary so that the readers have background knowledge about the various structures animals are capable of building.
b. It is important for the reader to better understand that animal architects are similar to human engineers and that they are able to create intricately designed structures before describing specific animal designers.
c. It is important for the reader to know how talented animal architects are so they have a better understanding of how they are able to create such amazing structures.
d. It is important for the reader to first understand that the skills of animal architects can be compared to the talents of human engineers so that the reader can understand why each animal architect is similar to human engineers.

4

DOK 2

Part 1: Read the paragraph from the text to determine the text structure.

Wombats dig huge underground burrows that can be 100 feet long. Wombat tunnels are elaborate, with many entrances, side tunnels, and resting chambers. Inside the burrow, sleeping nests are built on raised "platforms" to keep them dry in case of flooding. Often, several burrows are connected, creating structures so huge they can actually be seen from space!

The paragraph is an example of which informational text structure?

a. Sequence & order
b. Description
c. Cause & effect
d. Problem & solution

Part 2: Which textual clues help the reader determine the structure of the text?

_____

_____

5

DOK 3

What comparison does the author begin the passage with? Describe **three** reasons why the author began the passage with this comparison.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Bonus

The construction of beaver, wombat, bald eagle, and termite structures are described in the passage. Create your own paragraph describing the construction of a different animal's home or that of a manmade structure.

Scoring Rubric

RI.4.5 Assessment #2:

"Animal Architects"

Student Name: _____ Date of Administration: _____

Teacher Name: _____

Question / Level	Key / Rubric	Points
#1 DOK 1	a. Animals and humans both need shelter to protect them from the elements.	0 1
#2 DOK 1	Like beavers, eagles begin by building a stick frame.	0 1
#3 DOK 2	Part 1: c. It compares how animal architects are similar to human engineers, while the other paragraphs describe specific animal architects. Part 2: b. It is important for the reader to better understand that animal architects are similar to human engineers and that they are able to create intricately designed structures before describing specific animal designers. *Choice C could be the answer except the knowledge about animal architects does not provide the reader with a better understanding of how they are able to create certain structures. Choice B is the best choice since it explains that specific animal designers will be described in the paragraphs following the comparison of animal architects and human engineers.* **SCORING:** **1 point:** Correct response to Part 1 **1 point:** Correct response to Part 2 (only if part one is correct)	0 1 2

#4 DOK 2	Part 1: b. Description Part 2: The paragraph is an example of the description text structure as the author provides several details about wombat homes to give the reader a mental picture. **SCORING:** **1 point:** Selects correct answer in Part 1 **1 point:** Writes a relevant explanation in Part 2 (only if part one is correct)	0 1 2
#5 DOK 3	The student must identify the correct comparison and provide at least three reasons why the author began the passage with the identified comparison. Answers will vary. Comparison: The author begins the passage comparing human structures to animal structures. Possible reasons for comparison: • To explain the importance of homes for both animals and humans. • To describe how humans and animals adapt their structures for their environments. • To show that animals have just as complex dwellings as humans. • To set a frame of reference about how similar human structures are to animal structures. • To help the reader build background knowledge about human and animal structures. **SCORING:** **1 point:** Identifies correct comparison **+1 point:** Each reason that supports the answer (3 possible)	0 1 2 3 4
#BONUS	*This item is not scored and is an option for early finishers*	
TOTAL		___ / **10**

Student Name

I can analyze how information is organized to determine the overall structure of a text or parts of a text

RI.4.5

Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.

RI 4.6

Name: _____ Date: _____

Excerpt from *Hanging Out With Chimps*

by Peter Winkler

Lexile: 860 | F &P: Level S/T | DRA: 40 (388 words)

"Where's Jane?" No one knew. Four-year-old Jane Goodall had vanished. Her mother searched the English countryside for hours. No luck. It was time to call the police.

Then someone came running. Yes, it was Jane. She smelled awful. She had straw all over her clothes. And she was smiling.

Jane had been in a chicken coop. Why? Well, she wanted to see how a hen lays eggs. So she sat for hours—waiting and watching.

Jane's mother didn't get mad. She listened and supported Jane's curiosity. That encouragement sparked a great career.

From Chickens to Chimps

As Jane Goodall grew, so did her passion for nature. She saved up and went to Africa. There she met Louis Leakey, a famous scientist.

In 1960 Leakey sent Goodall to a place called Gombe (GAHM bee). It's a wildlife reserve in the country of Tanzania (tan zuh NEE uh). Goodall's job was to study chimpanzees, a type of ape. To do so, she hiked steep hills and crawled through thick forests. At first the apes ran off anytime they saw Goodall. But, after a while, they got used to her.

Goodall watched eagerly—hour after hour, day after day. She took careful notes. Her work gave the world a new picture of chimps.

At Work in the Wild

Understanding chimps is a huge task. Goodall created the Gombe Stream Research Centre in 1965 so others could help.

Gombe researchers eat breakfast before dawn, then trek into the woods. Meanwhile the chimps are asleep—high in the trees. They will wake up at first light. So researchers need to be nearby.

What happens next? Well, that's up to the chimpanzees. Researchers usually follow an individual or a small group. One scientist, for instance, studies how chimps care for their young. So she focuses on a mom and kids.

Extreme Science Project

Like all scientists, Gombe researchers collect data, or facts. Some carry checklists of chimpanzee actions. At set times, each chimp-watcher notes what an ape is doing.

Researchers also use cameras, video recorders, and other high-tech tools. Yet the heart of the job remains simple: You watch chimps. You write about chimps. You think about chimps.

All those checklists, maps, notes, photos, and videos add up to a mound of information. Observing chimps at Gombe has become one of the most important animal studies ever.

"The Lady and the Chimps: An Interview with Jane Goodall"

by Wonderlust Travel Magazine

Lexile: 1000 | F &P: Level Y/Z | DRA: 70 (83 words)

Jane:

Through my childhood I would watch birds and spiders and make little notes. I used to sit there with my little notebook, a watch, pencil and rather bad binoculars. So I would just watch and note down the times when things changed and what happened. Eventually [at Gombe] I got to have check-sheets and tape recorders, but initially I didn't see enough detailed behavior to do that.

Name: _____ Date: _____

Standard RI.4.6

I can compare and contrast first and secondhand accounts of the same event or topic.

1 According to both accounts, how did Jane spend her childhood?

DOK 1

2 Which of the following statements identifies a difference between the two accounts?

DOK 1 *Hanging Out with Chimps* includes details about the importance of Jane's work.

3 Summarize Jane Goodall's focus and work at Gombe. Write **3-4** sentences that describe what she did at Gombe and include **1** detail from each passage to support your explanation.

DOK 2

4

DOK 2

Part 1

What theme do **both** of the accounts develop?

Jane Goodall had limited resources when watching apes at Gombe but her

Part 2

Which of the following quotes **best** develops your claim in Part 1?

"So I would just watch and note down the times when things changed and

5

DOK 3

Create a chart that compares the information in each account. Support your comparison statements with evidence to justify whether that makes it firsthand or secondhand. Then include reasons and details (**at least 3**) from **each** account to support your claim.

*

Bonus

Both passages describe Jane's curiosity with the world around her. What are you curious about? Write a firsthand account describing your curiosities. How do you think they will help you choose your career someday?

Scoring Rubric

RI.4.6 Assessment #1:

Excerpt from *Hanging Out With Chimps* and "The Lady and the Chimps: An Interview with Jane Goodall"

Student Name: _____ Date of Administration: _____

Teacher Name: _____

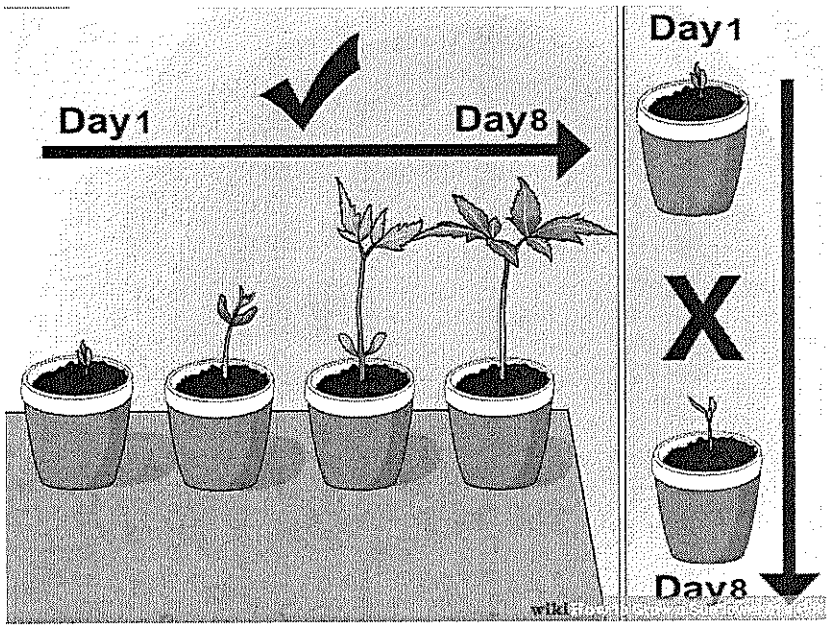
Question / Level	Key / Rubric	Points
#1 DOK 1	b. waiting, watching, and taking notes about her observations	0 1
#2 DOK 1	a. *Hanging Out with Chimps* includes details about the importance of Jane's work.	0 1
#3 DOK 2	**Model Student Response** At Gombe, Jane Goodall said that she "got to have check-sheets and tape recorders" to help her watch the animals and study their behavior. In *Hanging Out with Chimps*, the author describes how Goodall's "job was to study chimpanzees, a type of ape." She researched, collected data, and watched the chimps. **SCORING:** **+1 point:** summarizes Goodall's work in Gombe **+1 point:** determines 1 detail from each account to support summary (1/2 pt. each)	0 1 2

Name: _____ RI4.7 Date: _____

Resources on **Growing a Sunflower**

Lexile Level: 700 | F&P: Level N | DRA: 30 (102 Words)

Growing a sunflower is easy if you have a flowerpot, sunflower seeds, soil, and water. First, put some small stones in the bottom of a large flowerpot. This will help to drain water out of the flowerpot. Next, pour some soil into the flowerpot up to about one inch from the top. Next place six sunflower seeds in the flowerpot about one inch apart. Gently cover them with soil. Water the seeds every day. Keep the seeds moist, or a little wet until the seeds sprout. Place the flowerpot in a sunny spot in your house. Soon, you will have a sunflower!



Name: _____ Date: _____

Standard RI.4.7

I can connect information from a visual source to information presented within a text.

1

DOK 1

According to the text, what will a sunflower gardener be able to determine by Day 8?

a. the amount of leaves the sunflower will have
b. the height of the sunflower stem
c. if the sunflower seed is successfully germinating or not
d. if the soil provided enough nutrients

2

DOK 1

According to the illustration, which of the following is **NOT** true about growing a sunflower?

a. Fill a large flowerpot with soil.
b. Water the seeds every other day.
c. Keep the flowerpot in a sunny spot.
d. Plant six sunflower seeds in each flowerpot.

3

DOK 2

Part 1

Which of the following statements **best** explains one reason why a sunflower would **not** successfully sprout and grow within its expected timeframe?

a. The gardener used stones to help drain water out of the flowerpot.
b. The seeds were spaced one inch apart in the flowerpot.
c. The gardener waited 8 days to see the seeds germinate.
d. The flowerpots were kept out of direct sunlight.

Part 2

Which piece of evidence from either the illustration or the text supports this statement? Write it on the lines below.

_____

_____

4

DOK 2

Underline **at least one** sentence from the text that is supported by the illustration.

Growing a sunflower is easy if you have a flowerpot, sunflower seeds, soil, and water. First, put some small stones in the bottom of a large flowerpot. This will help to drain water out of the flowerpot. Next, pour some soil into the flowerpot up to about one inch from the top. Next place six sunflower seeds in the flowerpot about one inch apart. Gently cover them with soil. Water the seeds every day. Keep the seeds moist, or a little wet until the seeds sprout. Place the flowerpot in a sunny spot in your house. Soon, you will have a sunflower!

5

DOK 3

Part 1

How does the illustration support a reader's understanding of a sunflower's growth as it is explained in the text? Select all statements that apply.

a. The illustration helps the reader visualize how much soil should be placed in the pot with the seeds.
b. The illustration shows the effect that large quantities of sunlight and water can have on a sunflower's growth.
c. The illustration provides the step by step actions that gardeners must make to get their flowerpots ready for germination.
d. The illustration demonstrates to the reader that if the plant hasn't germinated in 8 days it is not a healthy plant.
e. The reader can use the illustration to understand what factors cause a sunflower not to grow after 8 days.
f. The reader can visualize the significant changes that occur to a sunflower seedling in just 8 days.

Part 2

Compare the illustration with the text. What information is given in the text that isn't given in the illustration? How might this illustration be confusing to some students?

Bonus

Visual aids are often important when teaching new skills like planting sunflowers! Draw your own visual that depicts one of your favorite skills or hobbies. For example, draw a visual aid about baking cupcakes, scoring a goal in soccer, or playing Pokemon!

Scoring Rubric

RI.4.7 Assessment #2:

Resources on **Growing a Sunflower**

Student Name: _____ Date of Administration: _____

Teacher Name: _____

Question / Level	**Key / Rubric**	**Points**
#1 DOK 1	c. if the sunflower seed is successfully germinating or not	0 1
#2 DOK 1	a. Fill an entire large flowerpot with soil.	0 1
#3 DOK 2	**Part 1** d. The flowerpots were kept out of direct sunlight. **Part 2** The text instructs gardeners to keep the flowerpot in a sunny spot. The illustration shows the plant not germinating after 8 days and what might happen if a plant is kept from sunlight. **SCORING:** **2 points:** both answers are correct. **1 point**: only Part 1 is correct.	0 1 2
#4 DOK 2	Growing a sunflower is easy if you have a flowerpot, sunflower seeds, soil, and water. First, put some small stones in the bottom of a large flowerpot. This will help to drain water out of the flowerpot. Next, pour some soil into the flowerpot up to about one inch from the top. Next place six sunflower seeds in the flowerpot about one inch apart. Gently cover them with soil. Water the seeds every day. Keep the seeds moist, or a little wet until the seeds sprout. Place the flowerpot in a sunny spot in your house. Soon, you will have a sunflower! **SCORING**: **+2 points**: underlines each supporting detail from source	0 1 2

Name: _____ RI 4.9 Date: _____

"Biography: Dr. Mae C. Jemison"

Adapted by Goalbook

Lexile 950 | F&P: U-V | DRA: 50 | Word Count 261

Astronaut and physician Mae Jemison was born on October 17, 1956, in Decatur, Alabama. She was the youngest child of Charlie Jemison, a roofer and carpenter, and Dorothy (Green) Jemison, an elementary school teacher. Her sister, Ada Jemison Bullock, became a child psychiatrist. Her brother, Charles Jemison, is a real estate broker. The family moved to Chicago, Illinois, when Jemison was 3 years old to take advantage of better schools. She calls Chicago her home town.

During her school years, Jemison's parents were supportive and encouraging of her talents and abilities. She was always in the school library reading about science, especially astronomy.

Later in her adult life, Jemison made a career change. She wanted to be an astronaut. In October of that year, she applied for admission to NASA's astronaut training program. Jemison was one of the 15 candidates chosen from a field of about 2,000. She became the first African-American woman to be admitted into the astronaut training program. After more than a year of training, she became the first African-American female astronaut. Her job title was science mission specialist. She conducted crew-related scientific experiments on the space shuttle.

Jemison finally flew into space on September 12, 1992, with six other astronauts aboard the Endeavour. She became the first African-American woman in space. During her eight days in space, she conducted experiments on weightlessness and motion sickness on the crew and herself. Following her historic flight, Jemison noted that society should recognize how much both women and members of other minority groups can contribute if given the opportunity.

"Mae C. Jemison"

by Reading A-Z

Lexile 700 | F&P: O | DRA 34 | Word Count 139

When Mae was a child she examined the stars.
She read about Mercury, Neptune, and Mars.
She grappled with questions, tried to understand,
And dreamt about travels to far distant lands.

Science enthralled her.
She studied and yearned
To teach other people
The things that she'd learned.
She became a physician and traveled the world,
To places she'd dreamed of when she was a girl.

Then something happened one wonderful day.
The telephone rang and she heard someone say,
"You've been chosen to fly on a mission to space."
At last she would visit that mysterious place.

Up in space, Mae remembered all of those nights
When she'd lain on her back
And gazed up at the lights.
And now she was up there, a bit closer to Mars,
Looking down at the Earth,
Looking out at the stars.

Name: _____ Date: _____

Standard RI.4.9

I can integrate information from multiple texts to write knowledgeably about a subject.

1

DOK 1

Match the title of each passage with the statement that describes it.

1. "Biography: Dr. Mae C. Jemison" _____ A poem that gives an overview of her dreams as a child.

2. "Mae C. Jemison" _____ An informational text that provides specific details on her life.

2

DOK 1

Reread the following quotation from "Biography: Dr. Mae C. Jemison".

> She was always in the school library reading about science, especially astronomy.

Which detail from "Mae C. Jemison" supports this statement?

a. "When Mae was a child she examined the stars./She read about Mercury, Neptune, and Mars."

b. "She became a physician and traveled the world,/To places she'd dreamed of when she was a girl."

c. "Mae remembered all of those nights/When she'd lain on her back/And gazed up at the lights."

d. "Looking down at the Earth,/Looking out at the stars."

3

DOK 2

What common idea do **both** passages share?

a. Outer space is still a mystery.

b. With a lot of hard work, childhood dreams can come true.

c. Science is a very popular subject to study.

d. Becoming an astronaut is a difficult challenge.

4

DOK 2

Part 1

According to **both** passages, which of the following adjectives **best** describe Mae C. Jemison? Select **two** correct adjectives.

a. Creative

b. Athletic

c. Argumentative

d. Thoughtful

e. Judgmental

f. Intelligent

Part 2

Which of the following quotes **best** supports your claim in Part 1?

a. "Later in her adult life, Jemison made a career change." ("Biography: Dr. Mae C. Jemison")

b. "She was the youngest child of Charlie Jemison, a roofer and carpenter, and Dorothy (Green) Jemison, an elementary school teacher." ("Biography: Dr. Mae C. Jemison")

c. "She grappled with questions, tried to understand,/And dreamt about travels to far distant lands." ("Mae C. Jemison")

d. "Then something happened one wonderful day." ("Mae C. Jemison")

5

DOK 3

Reread the following quotations from both passages.

> During her school years, Jemison's parents were supportive and encouraging of her talents and abilities. She was always in the school library reading about science, especially astronomy. ("Biography: Dr. Mae C. Jemison")

> She grappled with questions, tried to understand,
> And dreamt about travels to far distant lands. ("Mae C. Jemison")

What do these two quotations reveal about setting goals and having dreams for yourself? Use **four** to **five** sentences to explain. Include at least **one** detail from each passage to support your explanation.

Bonus

Science "enthralled" Mae C. Jemison. How do you feel about studying science? What school subject enthralls you? Why? Explain in the lines below.

Scoring Rubric

RI.4.9 Assessment #2:

"Biography: Dr. Mae C. Jemison" and **"Mae C. Jemison"**

Student Name: _____ Date of Administration: _____

Teacher Name: _____

Question / Level	Key / Rubric	Points
#1 DOK 1	**2** A poem that gives an overview of her dreams as a child. **1** An informational text that provides specific details on her life.	0 1
#2 DOK 1	a. "When Mae was a child she examined the stars./She read about Mercury, Neptune, and Mars."	0 1
#3 DOK 2	b. With a lot of hard work, childhood dreams can come true.	0 2
#4 DOK 2	**Part 1** d. thoughtful f. intelligent **Part 2** c. "She grappled with questions, tried to understand,/And dreamt about travels to far distant lands." ("Mae C Jemison") **SCORING** **+½ point**: selects correct answer in Part 1 (up to 1 point total) **1 point**: answers Part 2 correctly	0 .5 1 1.5 2