2023-2024

# MSCS WINTER

## Student/Parent Packet

## Week 1

## 3rd Grade

## ELA

December 21, 2023 - January 3, 2024

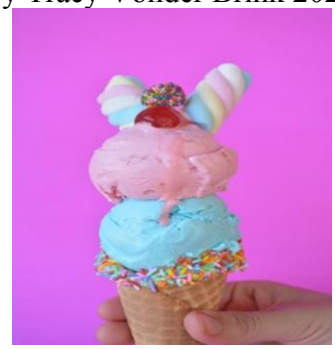
Have fun together!

Department of Curriculum & Instruction

# Literacy Support Parent Guide

## The Cold Hard Science Behind Ice Cream

by Tracy Vonder Brink 2022



*In this section of the Literacy Support Guide, we're reading anchor text, "The Cold Hard Science Behind Ice Cream" by Tracy Vonder Brink. In "The Cold Hard Science Behind Ice Cream," Tracy Vonder Brink describes the process of making ice cream.*

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**Ways to Support your Child**

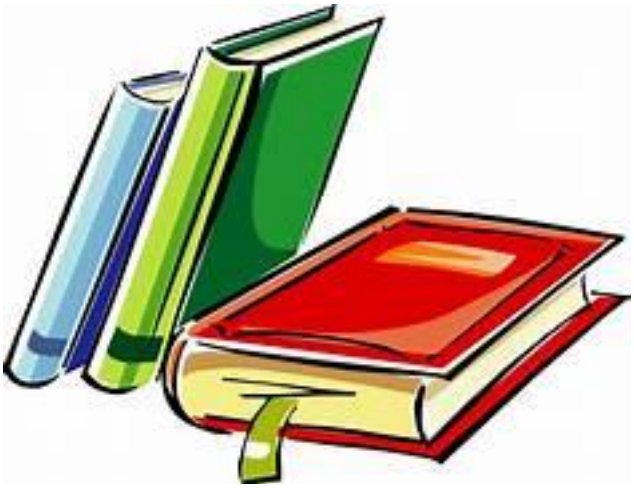
1. Ask your child about the informational texts: What was "The Cold Hard Science Behind Ice Cream" and the paired text, "We All Scream for Ice Cream" about?
2. **Parent Answer Keys**-Review written responses together

**Related Media**

1. Watch the following clips with your child at home:

    - 'Make Your Own Ice Cream! - #sciencegoals'
    - 'Who Invented Ice Cream? | COLOSSAL QUESTIONS'
    - 'What Ice Cream Looks Like In 7 Countries Around The World'

# ANCHOR TEXT



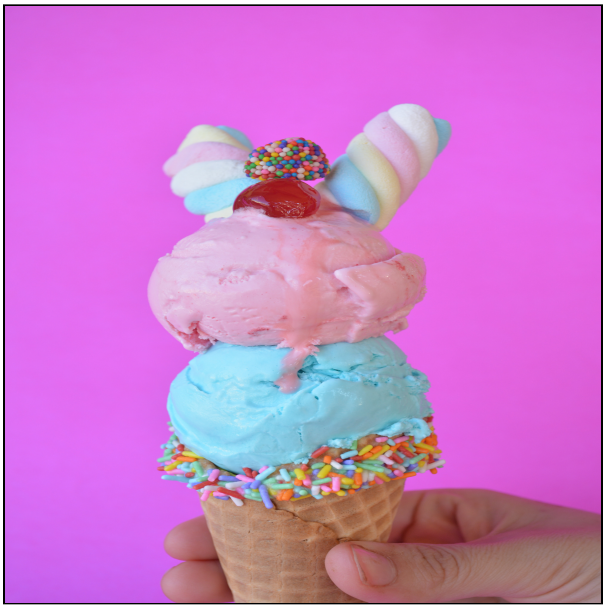
Name: _____ Class: _____

# The Cold Hard Science Behind Ice Cream

By Tracy Vonder Brink
2022

*Science is the study of the world around us. In this informational article, Tracy Vonder Brink explains the science of how ice cream is made. As you read, take notes on how ice cream is made.*

[1] People in the United States love ice cream. Each American eats about 20 pounds (9kg) of it every year! Even George Washington served it to his guests. Ice cream has three main ingredients:[1] Milk, cream, and sugar. How do three simple things become a tasty frozen treat?



*"Untitled" by La Albuquerque is licensed under CC0.*

It all starts with atoms. Atoms are the tiny building blocks that form everything around us. When two or more atoms are stuck together it is called a molecule. An object's atoms and molecules are always moving. (Atoms are much too small to see, so we don't notice the movement.) The hotter something is, the faster its molecules jiggle[2] around. Take water, for example. When water molecules move their fastest, they make steam. Water molecules with less energy[3] form the liquid we call water. Take away more energy, and the water molecules freeze into a solid. That's where ice cream begins.

Milk and cream both contain water. The water inside them is what freezes to make ice cream. How? Ice cream factories[4] put the ingredients into a big machine and surround[5] them with cold. The cold slows down the molecules in the mixture's water. Ice crystals[6] form.

Fats in the milk and cream keep the ice crystals from sticking together. The sugar in ice cream thickens some of the water to slow down the freezing process.[7] That's partly why it's ice cream and not an ice cube. But freezing ice cream as it sits makes large, rough ice crystals. Making smooth ice cream takes both mixing and air.

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1. parts something is made of
2. **Jiggle** ***(verb)*** to shake back and forth
3. power something has
4. **Factory** ***(noun)*** a building or buildings where things are made
5. **Surround** ***(verb)*** to make a circle around
6. a special shape that is made when water freezes into ice
7. steps that make something

[5] An ice cream machine turns and mixes the ice cream as it freezes. Moving water doesn't have time to form large ice crystals as it freezes, so it makes small ones. Mixing also adds air. The air makes the mixture light and fluffy.[8] Together, small ice crystals and air create smooth, creamy ice cream. (Ice cream makers add other thickeners to help the ice cream stay smooth. And of course they also add plenty of flavors.)[9]

Ice cream doesn't refreeze well because of its ice crystals. They lose the air that was frozen into them as they melt. Unless new air is mixed in, ice cream refreezes with larger crystals. That's why the melted ice cream you put back into the freezer comes out grainy and rough.

So, what's the difference between ice cream, soft serve, and frozen custard? In the United States, ice cream is required[10] to have at least 10% milk fat. (Ice milk only has to have 2.5% milk fat. It's often sold as low-fat ice cream.) Soft serve is made with more air and less fat than regular ice cream. It's also served at a warmer temperature to keep it soft. Frozen custard has egg yolks in it as well as less air. Together they make frozen custard thicker than ice cream.

Whether you love ice cream, soft serve, or frozen custard, they all start the same way — with some yummy ingredients and a lot of science. What's your favorite kind?



8. **Fluffy** ***(adjective)*** soft and light
9. **Flavor** ***(noun)*** the way something tastes
10. needed or must have

# Text-Dependent Questions

***Directions: For the following questions, choose the best answer or respond in complete sentences.***

1. Which sentence best summarizes the passage?
    A. There are many different ways to make ice cream, but using a machine is the best way.
    B. Ice cream has only three simple ingredients, but it takes a special process to make.
    C. It is very difficult to get the ingredients for ice cream, and it is hard to make.
    D. Frozen custard and soft serve are more difficult to make than ice cream.

2. Which detail best explains how ice cream becomes smooth?
    A. "Milk and cream both contain water." (Paragraph 3)
    B. "But freezing ice cream as it sits makes large, rough ice crystals." (Paragraph 4)
    C. "An ice cream machine turns and mixes the ice cream as it freezes." (Paragraph 5)
    D. "They lose the air that was frozen into them as they melt." (Paragraph 6)

3. How does paragraph 2 help readers understand the text?
    A. It helps readers understand how ice cream can make steam.
    B. It helps readers understand how atoms are made of molecules.
    C. It helps readers understand how milk and cream come together to make water.
    D. It helps readers understand how liquid ingredients in ice cream can become solid.

4. What is the meaning of "contain" as it is used in paragraph 3?
    A. freeze
    B. have
    C. make
    D. stir

5. What steps are taken to make ice cream?

# Open Ended Written Responses

***Directions: Write your answers to the following questions in the space provided. Be prepared to share your original ideas.***

1. This article explains how the liquid ingredients of ice cream need to be cooled down to freeze into a solid. What other foods need an ingredient to be frozen? What other foods need an ingredient to be melted? Do you think it's easier to freeze an ingredient or melt an ingredient? Why?

2. Ice cream is a treat enjoyed by many people. What is your favorite dessert? How is it made? Why is it important to know how your food is made?

3. The end of the article describes the different kinds of frozen treats like frozen custard and soft serve. How do you think people discovered these other types of frozen treats? Have you ever mixed different ingredients together to make something new? What was it? If not, what ingredients could you mix together? What would you make?

# PAIRED TEXT

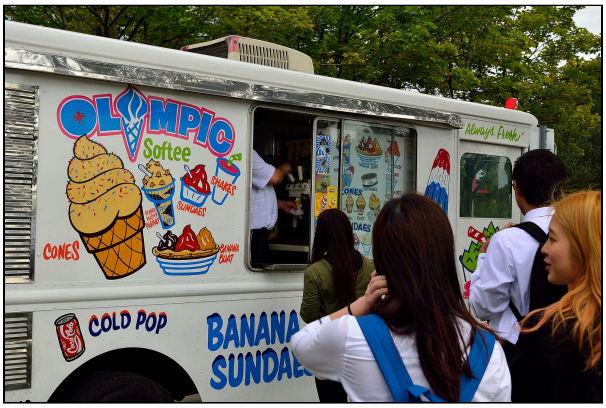
Name: _____ Class: _____

# We All Scream for Ice Cream

By Jennifer Sneed
2020

*Frozen desserts started being made as early as 500 B.C. Ice cream made with a milk base was first created in the 1600s in Italy. By the late 1700s, Americans were enjoying ice cream. In this short informational text, Jennifer Sneed explains how a favorite treat has changed over time. As you read, take notes on how ice cream has changed over time.*

[1] Americans have always loved ice cream. President George Washington loved it so much that he owned 10 ice-cream-making pots. But back in 1776, ice cream was a rare dessert for the rich. No one had refrigerators, and sugar and ice were very expensive.



*"OlympicSofteeIceCreamTruck" by Raysonho @ Open Grid Scheduler / Grid Engine is in the public domain.*

So how did Washington get his ice cream? In winter, he sent out teams of enslaved workers to cut blocks of ice from frozen ponds. Big sleds hauled[1] the ice to the ice house, a shed with a deep pit for storing ice. The ice was stacked in the pit and covered with straw to keep it cold all summer.

If Washington wanted ice cream for dinner, he had to tell the cook before breakfast. Someone had to milk the cow and skim the cream. Someone else went to get ice from the ice house. The cook's helper pitted cherries. The cook boiled the cream, maybe with some egg yolk to make it thicker. Then he added the cherries and sugar. Sugar was so expensive it was kept in a locked cupboard. This mix went into a metal canister with a lid. Then that sat in a bucket of salted ice to chill.

After about an hour, the cook opened the lid, scraped the frozen cream from the sides, and beat it smooth again. That was hard work! Then it froze some more until it was hard. And finally — ice cream!

[5] It was served in tiny cups. Each guest got a few spoonfuls.

## Hokey-Pokey

Over the next hundred years, ice, sugar, and milk got cheaper. A new crank-handled churn made it easier to make ice cream.

1. **Haul** ***(verb)*** to pull or drag

In the mid-1800s, some Italian immigrants[2] in New York and other cities discovered that they could make a living selling ice cream. They churned up a few batches[3] in their small apartments, kept it cold in a bucket of ice, and sold scoops from the back of a cart. Back then, most homes did not have refrigerators. Ice cream ready to eat was an amazing treat!

To advertise, the ice cream sellers cried out in Italian, "*Gelati! O che poco!*" which means "Ice cream! Oh, how little!" Many English speakers thought it sounded like "hokey-pokey," and that's what they called the ice cream.

Hokey-pokey was delicious and cheap. It sold for one penny. It was so popular that kids made up rhymes[4] about it.

## Is That Clean?

[10] Kids and adults loved hokey-pokey, but there were problems with it. The hokey-pokey makers often lived in crowded buildings with no running water or refrigerators. It was difficult to keep milk fresh. And the way it was eaten could spread germs.[5]

Hokey-pokey sellers served their ice cream in small glasses, called penny-licks. Customers licked the ice cream out of the penny-lick. The seller then wiped the glass and re-used it for the next customer. As you can imagine, people got sick.

In the early 1900s, doctors were just beginning to figure out how germs spread diseases. In 1906, new laws set rules for how food could be made, to keep it clean and safe. The penny-lick was outlawed. But people were still hungry for ice cream.

## A Good Idea

Harry Burt was a businessman with an imagination. He sold candy and ice cream from a truck with a freezer in it.

In 1920, he made his own version[6] of a popular new treat, the chocolate covered ice cream bar. But when his daughter tried it, the ice cream melted all over her hands. She told her dad it was too messy.

[15] When Harry went back to his workshop, he saw a pile of lollipop sticks. And that gave him a great idea. He put one into the ice cream bar. And ice cream on a stick was born! He called his invention the "Good Humor Ice Cream Sucker" because he believed that eating ice cream put people in a good mood.

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2. **Immigrant** ***(noun)*** one who moves to another country from the country they were born in
3. an amount of something created at one time
4. **Rhyme** ***(noun)*** a short and entertaining song or poem
5. **Germ** ***(noun)*** an invisible living thing that causes illness
6. a form of something in a certain style or point of view

## Ice Cream on Wheels

Burt painted his delivery truck white and hung bobsled bells on it so that customers would hear him coming. He wrapped each ice cream bar in paper to keep them clean. He loaded up his truck. Business boomed. Soon he had to buy more trucks and hire more drivers.

Burt painted all his trucks the same. He had his drivers wear clean white uniforms and told them to always be polite and friendly. He wanted everyone to feel good about buying ice cream from a truck.

Other ice cream sellers copied Burt's idea. Now ice cream trucks are found all over the world. They come in many shapes and colors and play all kinds of music. But inside every one is a freezer packed with a treat George Washington would love.

# Text-Dependent Questions

***Directions: For the following questions, choose the best answer or respond in complete sentences.***

1. Which alternate title best expresses the main idea of the passage?
    A. George Washington: Ice Cream's Biggest Fan
    B. Why Ice Cream Is Bad For Your Health
    C. The Many Sounds of Ice Cream Trucks
    D. Eating Ice Cream: Then and Now

2. The author of "We All Scream for Ice Cream" organizes the information —
    A. by asking questions about ice cream and then answering the questions.
    B. by going over the history of ice cream in America in order.
    C. by telling short stories about people who love ice cream.
    D. by listing the steps people use to make ice cream.

3. Which detail from the text shows the author's point of view on hokey-pokey?
    A. "Over the next hundred years, ice, sugar, and milk got cheaper." (Paragraph 6)
    B. "A new crank-handled churn made it easier to make ice cream." (Paragraph 6)
    C. "It was so popular that kids made up rhymes about it." (Paragraph 9)
    D. "Kids and adults loved hokey-pokey, but there were problems with it." (Paragraph 10)

4. What is the meaning of the word "advertise" as it is used in paragraph 8?
    A. to try to find something by placing a note in an open place
    B. to make people know about something being sold
    C. to present something as good or right
    D. to call attention to someone's riches

5. How has the way ice cream is eaten in America changed over time?

# Open Ended Written Responses

***Directions: Write your answers to the following questions in the space provided. Be prepared to share your original ideas.***

1. In the text, the author explains the history of ice cream. What is your favorite dessert? Do you know its history? Would you have enjoyed eating ice cream the way it was made in the past? Why or why not?

2. According to the text, Italian immigrants brought modern-day ice cream to America. They sold hokey-pokey cheaply and, as a result, many people were able to enjoy ice cream. How do immigrants help contribute to the countries they moved to? What are some ways your country has improved because of immigrants? What are some foods immigrants have brought to your country that you enjoy eating?

3. Harry Burt was a businessman with a lot of great ideas. Who is another inventor that you think has affected history? What did they invent or create?

4. As doctors learned about germs and diseases, they realized that the way hokey-pokey was eaten was unsanitary, or unsafe and unclean. They had to create laws to protect people from spreading germs. What laws do you know are put in place to keep people safe? How do people help stop the spread of diseases today? What are some ways to prevent people from getting sick?

# ANSWER KEYS

# Answer key > The Cold Hard Science Behind Ice Cream

by Tracy Vonder Brink ● 2022

1. Which sentence best summarizes the passage? **3.RI.KID.2**

   Determine the main idea of a text; recount the key details and explain how they support the main idea.

   A. There are many different ways to make ice cream, but using a machine is the best way.
   **B. Ice cream has only three simple ingredients, but it takes a special process to make.**
   C. It is very difficult to get the ingredients for ice cream, and it is hard to make.
   D. Frozen custard and soft serve are more difficult to make than ice cream.

2. Which detail best explains how ice cream becomes smooth? **3.RI.KID.1**

   Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.

   A. "Milk and cream both contain water." (Paragraph 3)
   B. "But freezing ice cream as it sits makes large, rough ice crystals." (Paragraph 4)
   **C. "An ice cream machine turns and mixes the ice cream as it freezes." (Paragraph 5)**
   D. "They lose the air that was frozen into them as they melt." (Paragraph 6)

3. How does paragraph 2 help readers understand the text? **3.RI.IKI.8**

   Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).

   A. It helps readers understand how ice cream can make steam.
   B. It helps readers understand how atoms are made of molecules.
   C. It helps readers understand how milk and cream come together to make water.
   **D. It helps readers understand how liquid ingredients in ice cream can bec solid.**

4. What is the meaning of "contain" as it is used in paragraph 3? **3.RI.CS.4**

Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area.

A. freeze
**B. have**
C. make
D. stir

5. What steps are taken to make ice cream? **3.RI.KID.3**

Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.

Answers will vary. Students should say that you need to combine the ingredients, make them cold, and mix them well. First, you need to put the ingredients of milk, cream, and sugar together (Paragraph 1). Next, you should put the ingredients into a machine and make them cold (Paragraph 3). Last, you need to turn on the machine to mix the ingredients together as the ice cream freezes (Paragraph 5). The mixing adds air, which makes the ice cream creamy and smooth (Paragraph 5). These are the steps to making ice cream.

# Answer key > We All Scream for Ice Cream

by Jennifer Sneed ● 2020

1. Which alternate title best expresses the main idea of the passage? **3.RI.CS.2**

Determine the main idea of a text; recount the key detailsand explain how they support the main idea.

A. George Washington: Ice Cream's Biggest Fan
B. Why Ice Cream Is Bad For Your Health
C. The Many Sounds of Ice Cream Trucks
**D. Eating Ice Cream: Then and Now**

2. The author of "We All Scream for Ice Cream" organizes the information — **3.RI.KID.3**

Describe the relationship between a series of historical events, scientific ides or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.

A. by asking questions about ice cream and then answering the questions.
**B. by going over the history of ice cream in America in order.**
C. by telling short stories about people who love ice cream.
D. by listing the steps people use to make ice cream.

3. Which detail from the text shows the author's point of view on hokey-pokey? **3.RI.KID.1**

Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as a basis for the answers.

A. "Over the next hundred years, ice, sugar, and milk got cheaper." (Paragraph 6)
B. "A new crank-handled churn made it easier to make ice cream." (Paragraph 6)
C. "It was so popular that kids made up rhymes about it." (Paragraph 9)
**D. "Kids and adults loved hokey-pokey, but there were problems with it." (Paragraph 10)**

4. What is the meaning of the word "advertise" as it is used in paragraph 8? **3.RI.CS.4**

Determine the meaning of words and phrases in a text relevant to a grade 3 topic or subject area.

A. to try to find something by placing a note in an open place
**B. to make people know about something being sold**
C. to present something as good or right
D. to call attention to someone's riches

5. How has the way ice cream is eaten in America changed over time? **3.RI.KID.3**

Describe the relationship between a series of historical events, scientific ides or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.

Answers will vary. Students should explain that ice cream has been eaten in various ways over the past few hundred years. At first, George Washington's ice cream was "served in tiny cups" (Paragraph 5). Then, when hokey-pokey was invented, it was sold in "small glasses, called penny-licks" (Paragraph 11). People would lick the ice cream out of the glass and then the next customer would lick their ice cream out of the same container. After a while, people realized this method got people sick. Then, Harry Burt started selling ice cream dipped in chocolate on a stick (Paragraph 15). According to the author, "He wrapped each ice cream bar in paper to keep them clean" (Paragraph 16). Today, people eat ice cream in many different ways; however, they often buy it out of ice cream trucks.

2023-2024

# MSCS WINTER

## Student/Parent Packet

## Week 2

## 3rd Grade

## ELA

December 21, 2023 - January 3, 2024

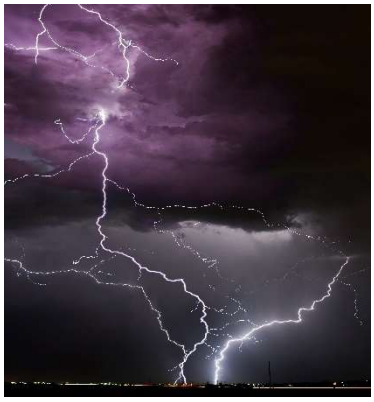
Have fun together!

Department of Curriculum & Instruction

# Literacy Support Parent Guide

# Lightning Is No Joke!

by Jesse Sullivan 2021



In this section of the Literacy Support Guide, we're reading anchor text "Lightning Is No Joke!" by Jesse Sullivan. In "Lightning Is No Joke!" Jesse Sullivan describes the dangers of lightning strikes.

**TABLE OF CONTENTS**

**Anchor Text**

1. Read the text.
2. Answer the text-dependent questions.
3. Complete open-ended written responses.

**Paired Text**

1. Read the text.
2. Answer the text-dependent questions.
3. Complete open-ended written responses.

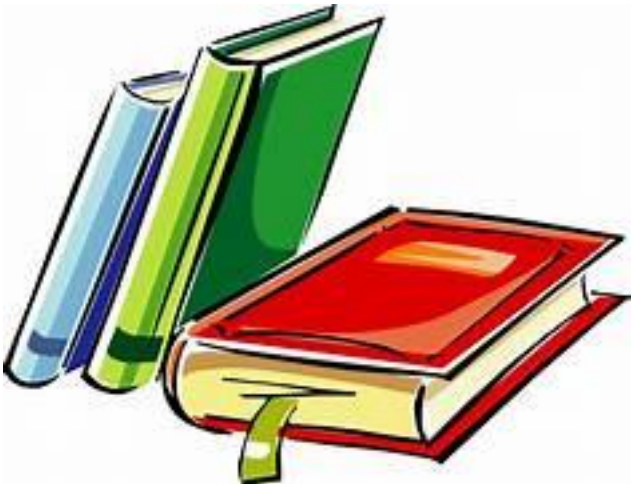
**Ways to Support Your Child**

1. Ask your child about the informational texts at home: What were "Lightning Is No Joke" and "The Pull of the Penguin" about?
2. **Parent Answer Keys:** Review written responses together.

**Related Media:** Watch the following clips with your child at home:

- 'Lightning safety tips from the National Weather Service'
- 'What Causes Thunder and Lightning? | Weather Science | SciShow Kids'

# ANCHOR TEXT



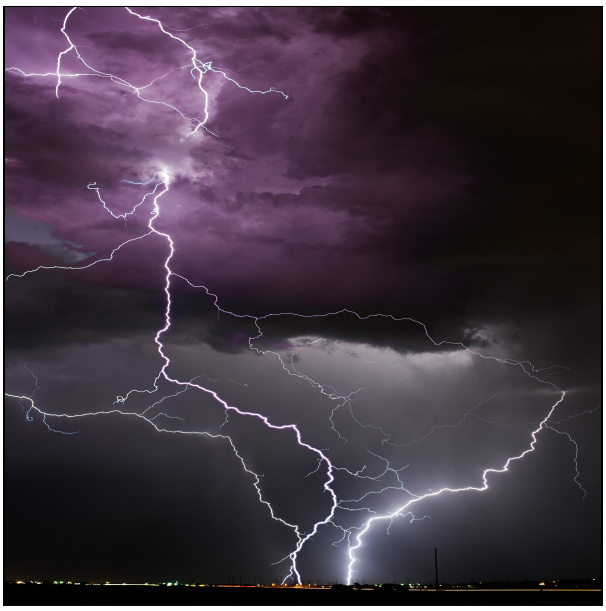
Name: _____ Class: _____

# Lightning Is No Joke!

By Jesse Sullivan
2021

*Jesse Sullivan is the author of the children's book* Spectacular Stories for Curious Kids: A Fascinating Collection of True Stories to Inspire & Amaze Young Readers*. In this excerpt from the book, Sullivan writes about what happens during a lightning strike. As you read, take notes on Michael and Sean McQuilken's story.*

[1] Ever since the dawn of time, humankind has been curious about lightning and thunder. Even though at this point we understand how it works, it still continues to amaze us. Why? Because it's simply out of this world.



*"Untitled" by David Moum is licensed under CC0.*

If you think of it on the local[1] level, it may seem that lightning strikes don't even happen that often. But hold onto your seats. This one's a whopper. Lightning actually strikes the Earth about 100 times every second. Yes, you read that right. Every. Single. Second. That makes it about a 1 in 700,000 chance a person has of being struck by lightning. And with lightning bolts reaching a temperature of 50,000 degrees...I've got to tell you, I don't like those odds.

Most people aren't overly concerned[2] about being struck by lightning. This was the case when two brothers went climbing on Moro Rock in California's Sequoia National Park, along with some other hikers. Michael and Sean McQuilken, ages eighteen and twelve, took a snapshot up there on August 20, 1975 and it turned out pretty funny, with electricity-charged air around them lifting their hair over their heads. It made one really fun picture.

Neither of them were worried. They had absolutely no idea what was coming. They even found the electricity-charged air funny. Now, almost 46 years later, Michael still remembers that

1. of or about a small area, like a town or city
2. **Concern** ***(adjective)*** worried

deadly flash of white, the explosion,[3] and being lifted off the ground. It all sounds too scary to be true, right? Almost like some alien invasion business.

[5] Michael remembers how it suddenly got all cold. Then out of nowhere, it began to hail. Of course, he and his brother figured that something wasn't right, so they headed down the path, with some of the other people. But it was too late.

The lightning bolt struck. Michael bent down. When he looked up, his brother was on his knees and his back was smoking. Sean was hit directly by lightning, and he was one of three people struck. He was unconscious, completely knocked out. Later in the hospital, it was revealed[4] he suffered[5] third-degree burns to his back and elbows.

Luckily, both brothers survived[6] but they learned a valuable lesson. If they had known the signs to look out for, they could have gotten to a safe place in time. Hair standing on end along with a tingling, goose-bumpy sensation of the skin, are both sure signs that lightning will strike soon.

If this happens, what should you do? Try to find shelter[7] right away. If you can't, then squat low to the ground away from trees or anything tall. Never remain in a standing position because that makes you a bigger target and therefore, easier to strike. While squatting, do so on the balls of your feet. The point is to minimize[8] contact with the ground. Then, only when it's safe...get the heck out of there!



3. **Explosion** ***(noun)*** a sudden blast that makes a loud noise and may damage or destroy nearby objects
4. to make known; tell
5. **Suffer** ***(verb)*** to feel pain
6. to continue to live
7. **Shelter** ***(noun)*** a place that keeps you safe
8. to make as small as possible

# Text-Dependent Questions

***Directions: For the following questions, choose the best answer or respond in complete sentences.***

1. Which line from the text shows that lightning can be harmful?
    A. "Lightning actually strikes the Earth about 100 times every second." (Paragraph 2)
    B. "That makes it about a 1 in 700,000 chance a person has of being struck by lightning." (Paragraph 2)
    C. "Later in the hospital, it was revealed he suffered third-degree burns to his back and elbows." (Paragraph 6)
    D. "Never remain in a standing position because that makes you a bigger target and therefore, easier to strike." (Paragraph 8)

2. What happens before lightning strikes?
    A. your hair stands on end
    B. your body feels hot
    C. you see smoke
    D. you fall down

3. Which of the following best describes the author's point of view about lightning?
    A. Lightning is scary and you should know how to avoid it.
    B. Lightning is beautiful and you should try to go see it up close.
    C. Lightning is fun to see as long as you remember to hide by trees.
    D. Lightning is unlikely to happen but it is always good to be prepared.

4. What does the word "valuable" mean as it is used in paragraph 7?
    A. important
    B. rewarding
    C. simple
    D. unusual

5. How does Michael and Sean McQuilken's story support the main idea of the text?

# Open Ended Written Responses

***Directions: Write your answers to the following questions in the space provided. Be prepared to share your original ideas.***

1. Does the place that you live in have a lot of lightning strikes? If so, what advice have you been told about staying safe when lightning might strike? How is this information similar to or different from what you read in the article?

2. Why do you think it is important to learn about the early warning signs of a lightning strike and what to do when a strike takes place? How can learning more about nature and the world around us help us stay safe?

3. The author shares how, before getting struck by lightning, the McQuilkens were joking around and taking funny pictures. Have you ever been in a situation that you did not realize was dangerous until later? Describe the situation and how you came to realize that you were in danger.

# PAIRED TEXT

Name: _____ Class: _____

# The Pull of the Penguin

By Christy Mihaly
2021

*McMurdo Station is the United States Antarctic research station, where scientists and volunteers come to learn more about this special part of the world. In this text, Christy Mihaly tells about Elaine Parker's experience working and living at this remote, or far away, location. As you read, take notes on details that describe the setting.*

[1] *There! A penguin! Elaine Parker stared out at the dark, distant dot on the ice.*

*The low autumn sun sat between sea and sky, splashing pink and violet across the craggy mountains. Elaine breathed in the pure, crisp air, enjoying her escape from McMurdo Station.*

*"2007 Snow-Hill-Island Luyten-De-Hauwere-Emperor-Penguin-46" by Denis Luyten is in the public domain.*

## Work on the Ice

The past summer in Antarctica, Elaine had spent long hours inside the plain, practical[1] buildings of the McMurdo research station. Her job was to look after the fire extinguishers and fire alarms in the machine shops, sheds, boiler rooms, dorms, and warehouses of this remote outpost. But on her days off, Elaine loved to strap on skis and explore the sparkling ice and crystal caves beyond the station. Sometimes she was so filled with the wild beauty of Antarctica that she started to sing — or yodel!

With winter coming, she'd be heading home soon. But before she left there was one more thing Elaine wanted to do. She was determined[2] to see a penguin — up close. She'd heard tantalizing[3] tales from the biologists, about how penguins played and took care of one another, how they were curious and often approached people. She had spotted a few, but only from far away. But that night after dinner, someone said there was a lone penguin on the ice on the far side of the station. Elaine rushed out, hoping to get a closer look.

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1. **Practical** ***(adjective)*** useful; ordinary
2. **Determined** ***(adjective)*** showing that one will not back down from a choice
3. making one feel interested in something that is usually beyond their reach

## On the Ice

Now her neck tingled[4] with excitement…and cold. The day had been sunny and warm (for Antarctica, meaning around 20°F or –6°C, still below freezing). But a frosty wind circled, a warning. Elaine knew the weather could change in a heartbeat. A sudden storm could drop the temperature by 50° in just a few minutes.

She gazed across the icy plain. Although it looked solid, this ice sheet was in constant motion, squeezed and warped by the glacier — the vast[5] river of ice sliding slowly down the mountains toward the ocean. The glacier's tremendous pressure[6] created jagged cracks and zig-zagging ridges of ice. Crevasses — deep blue cracks in the ice — lurked[7] beneath the snowy surface. Rows of blue and red flags marked a safe path through this hazardous[8] zone.

A frosty gust of wind blasted, and she reached up to cover her bare earlobe. Oh no, where was her hat? Elaine had left her backpack—with her warm parka, hat, and emergency radio — back at McMurdo! Normally, she carried that orange pack everywhere. But hearing about the penguin, she'd dashed out without it. Her stinging ears were in danger of frostbite. This was trouble. She was out on the ice alone, without her gear.

Maybe the cold had slowed down her brain, but Elaine didn't consider the danger. All she could think of was the penguin. Watching the swaying bird shape coming closer, she spied a flash of yellow. It was an emperor penguin!

Elaine tried to ignore her ears and lowered herself to sit on the snow. It was against the rules to approach a penguin, she knew. So she had to wait and see if the bird would come to her. The bitter wind blew through her clothes. Elaine held her breath, concentrated on the penguin waddling toward her, and willed it to keep coming. Soon the bird stood right in front of her. Its eyes were level with hers, its beak almost touching her nose.

She admired the golden-orange stripes edging the bird's beak. She tried not to blink as the penguin eyed her closely. Then it reached out its beak, leaned in, and tapped her cheek.

Elaine's heart leapt with the thrill. The penguin bent forward, then dipped its beak inside her collar. It tickled! Elaine couldn't help it — she giggled.

Her laugh startled the penguin. Flipping onto its belly, the bird tobogganed away. It slid across

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4. **Tingled** ***(verb)*** to have a light stinging or prickly feeling
5. **Vast** ***(adjective)*** a very large area
6. **Pressure** ***(noun)*** a steady force upon a surface
7. **Lurk** ***(verb)*** to be hidden, so as to cause harm
8. having a great number of dangers

the ice into a billowing cloud of snowflakes. Elaine stood and stomped her feet, trying to warm her toes. Well, that was that. She'd lost her penguin, a storm was brewing, and it was past time to head back to McMurdo.

Just then the screen of snow parted. Elaine got a glimpse[9] of her bird friend, and felt the pull of the penguin. Surely she'd be safe out here just a little longer! She leaned into the blowing snow and followed the bird farther out on the ice, away from the base.

## A Friend in Need

Suddenly…*Whoosh*! A strong gust knocked her off her feet. She tumbled over and over, sliding like a hockey puck across the slippery plain and into the whirling snow. Then the wind picked her up and slammed her face-down onto the ice.

[15] Elaine was pinned down by the wind and scared to move. She squinted through icy eyelashes, straight down into a neon-bright blue glow. Oh no! That beautiful blue was the color of danger. It came from a deep hole below her. She was lying on a thin skin of ice above a blue crevasse.

Elaine heard a *tink* as tiny cracks shot through the ice. Icy cold seeped[10] into her belly. Crunch! The crust gave way slightly, and she dropped a little lower. If she broke through, she'd drop into the crevasse, where nobody would ever find her. The storm swirled and Elaine's thoughts spun.

Then, as quickly as it began, the wind died. In the sudden quiet, Elaine felt someone near. She peeked up.

Her penguin stood peering down at her. Seeing Elaine move, the bird walked away, then stopped and looked back. It seemed to be inviting her to follow.

As Elaine tried to decide on her next move, she heard a snap. Cracks spiderwebbed around her. She made up her mind. She would trust this bird.

[20] She spread her arms on the ice like wings, keeping her body flat and spreading her weight across the fragile[11] surface. She breathed out a steamy cloud and pushed forward on her belly, inching along. Ahead, the penguin wove a trail between the cracks. Elaine scraped along behind, slow-motion tobogganing. Icy shards collected along her arms and scratched her nose and cheeks. She lost track of time as she focused on following the penguin's path.

Finally, with one last pull of her arms, Elaine crawled after her penguin onto solid, white ice.

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9. **Glimpse** ***(noun)*** a quick look
10. **Seep** ***(verb)*** to spread slowly
11. not strong; easily breakable

Safety! Standing on quivery legs, she turned to look back. In the distance, an Elaine-shaped imprint marked the spot where she'd landed, right over a giant crack.

Phew. Elaine bent over, her hands on her knees. Once her heartbeat had slowed to normal, she turned toward the penguin. How could she thank her friend?

But the bird was already gone, retracing its steps across the maze of cracks. As Elaine watched, the penguin paused atop a ridge. It stood up on its toes, stretched its wings wide and pointed its beak skyward.

"EHEHEH-UHUHUH-EHEH!" it trumpeted. The ecstatic[12] cry sent shivers up Elaine's spine.

[25] She threw back her head and yodeled her reply: "*Oh yoyodelayeeoheoheeoheeoh*!"

The penguin waited until the last echo faded. It looked back at Elaine across the terrible, beautiful ice. Then it was gone.

Elaine pulled out her knife and cut a strip of fleece from the bottom of her jacket. Wrapping the fabric around her head, she sighed with relief, and turned at last toward McMurdo Station. She knew her way back from here.

Her penguin guide would rejoin its colony for the long winter ahead. Elaine, thanks to that bird, would head home with a story that she'd never forget.



12. in a condition of delight or overpowering emotion

# Text-Dependent Questions

***Directions: For the following questions, choose the best answer or respond in complete sentences.***

1. Which alternate title best expresses the main idea of the passage?
    A. Life at the McMurdo Research Station
    B. Amazing Antarctic Animals
    C. How to Stay Safe on Ice
    D. Penguin to the Rescue

2. What is the meaning of the phrase "the pull of the penguin" as it is used throughout the text?
    A. The penguin is leading Elaine to safety.
    B. The penguin has taken hold of Elaine.
    C. Elaine wants to help the penguin.
    D. Elaine is amazed by the penguin.

3. How does the author introduce the story in paragraphs 1-2?
    A. by telling details about the main character
    B. by showing the solution to the problem
    C. by giving a hint about what will happen
    D. by describing the final outcome

4. Which TWO lines from the text shows that Elaine is unprepared to go out on the ice? SELECT TWO.
    A. "The day had been sunny and warm (for Antarctica, meaning around 20 ˚F or –6 ˚C, still below freezing)." (Paragraph 5)
    B. "Rows of blue and red flags marked a safe path through this hazardous zone." (Paragraph 6)
    C. "Elaine had left her backpack—with her warm parka, hat, and emergency radio — back at McMurdo!" (Paragraph 7)
    D. "The bitter wind blew through her clothes." (Paragraph 9)
    E. "If she broke through, she'd drop into the crevasse, where nobody would ever find her." (Paragraph 16)
    F. "Elaine pulled out her knife and cut a strip of fleece from the bottom of her jacket." (Paragraph 27)

5. Which sentence uses "bitter" in the same way as it is used in paragraph 9?

    A. My parents punished me for being bitter about not getting the gift I wanted.
    B. Pamela was bitter that her teacher had not called on her more often.
    C. The weather has been very bitter these past few weeks.
    D. She scrunched up her face at the lemon's bitter taste.

6. How does the author help the reader picture the setting of "The Pull of the Penguin"?

# Open Ended Written Responses

***Directions: Write your answers to the following questions in the space provided. Be prepared to share your original ideas.***

1. Elaine realizes that she has left her emergency backpack and hat behind in her hurry to see the penguin. Have you ever been in such a rush that you have forgotten something essential? What was it and how did not having it impact you? What are some ways you can be prepared in case you find yourself in a dangerous place?

2. Elaine describes the ice as "terrible and beautiful." What is something in nature that you find "terrible and beautiful"? How can nature be both amazing and dangerous?

3. Elaine must think quickly and not panic when she realizes she is in danger of falling through the ice. Have you ever been in danger? What happened? How did it make you feel? How did you get out of this dangerous situation?

4. In this story, the penguin helps to save Elaine. Have you ever experienced or heard about an animal helping or rescuing a human? What does this show about the important relationship between humans and nature?

# ANSWER KEYS

# Answer key > Lightning Is No Joke!

by Jesse Sullivan ● 2021

1. Which line from the text shows that lightning can be harmful? 3.RI.KID.1

   A. "Lightning actually strikes the Earth about 100 times every second." (Paragraph 2)
   B. "That makes it about a 1 in 700,000 chance a person has of being struck by lightning." (Paragraph 2)
   **C. "Later in the hospital, it was revealed he suffered third-degree burns to his back and elbows." (Paragraph 6)**
   D. "Never remain in a standing position because that makes you a bigger target and therefore, easier to strike." (Paragraph 8)

2. What happens before lightning strikes? 3.RI.KID.3

   **A. your hair stands on end**
   B. your body feels hot
   C. you see smoke
   D. you fall down

3. Which of the following best describes the author's point of view about lightning? 3.RI.CS.6

   A. **Lightning is scary and you should know how to avoid it.**
   B. Lightning is beautiful and you should try to go see it up close.
   C. Lightning is fun to see as long as you remember to hide by trees.
   D. Lightning is unlikely to happen but it is always good to be prepared.

4. What does the word "valuable" mean as it is used in paragraph 7? 3.RI.CS.4

   A. **important**
   B. rewarding
   C. simple
   D. unusual

5. How does Michael and Sean McQuilken's story support the main idea of the text? 3.RI.KID.2

Answers will vary. Students should explain that the McQuilken's story helps show how dangerous lightning can be, especially if you do not know the signs to look out for. As teenagers, Michael and Sean McQuilken were hiking and took funny pictures with their hair standing on end: "They even found the electricity-charged air funny" (Paragraph 4). They did not realize that this was a warning sign that lightning was about to strike, so they just played around. Then, Sean McQuilken got struck by lightning and badly hurt: "Later in the hospital, it was revealed he suffered third-degree burns to his back and elbows" (Paragraph 6). Because of this, the McQuilkens learned an important lesson about the dangers of lighting, which helps support the main idea of the text that lightning is dangerous and people should know the warning signs to look out for so that they can keep themselves safe.

# Answer key > The Pull of the Penguin

by Christy Mihaly ● 2021

1. Which alternate title best expresses the main idea of the passage? **3.RI.KID.2**

   A. Life at the McMurdo Research Station
   B. Amazing Antarctic Animals
   C. How to Stay Safe on Ice
   **D. Penguin to the Rescue**

2. What is the meaning of the phrase "the pull of the penguin" as it is used throughout the text? **3.RI.CS.4**

   A. The penguin is leading Elaine to safety.
   B. The penguin has taken hold of Elaine.
   C. Elaine wants to help the penguin.
   **D. Elaine is amazed by the penguin.**

3. How does the author introduce the story in paragraphs 1-2? **3.RI.CS.5**

   A. by telling details about the main character
   B. by showing the solution to the problem
   **C. by giving a hint about what will happen**
   D. by describing the final outcome

4. Which TWO lines from the text shows that Elaine is unprepared to go out on the ice? SELECT TWO. **3.RI.KID.1**

   A. "The day had been sunny and warm (for Antarctica, meaning around 20℉ or –6℃, still below freezing)." (Paragraph 5)
   B. "Rows of blue and red flags marked a safe path through this hazardous zone." (Paragraph 6)
   **C. "Elaine had left her backpack—with her warm parka, hat, and emergency radio—back at McMurdo!" (Paragraph 7)**
   **D. "The bitter wind blew through her clothes." (Paragraph 9)**
   E. "If she broke through, she'd drop into the crevasse, where nobody would ev her." (Paragraph 16)

Help

F. "Elaine pulled out her knife and cut a strip of fleece from the bottom of her jacket." (Paragraph 27)

5. Which sentence uses "bitter" in the same way as it is used in paragraph 9? **3..RI.CS.4**

A. My parents punished me for being bitter about not getting the gift I wanted.
B. Pamela was bitter that her teacher had not called on her more often.
**C. The weather has been very bitter these past few weeks.**
D. She scrunched up her face at the lemon's bitter taste.

6. How does the author help the reader picture the setting of "The Pull of the Penguin"? **3.RI.KID.3** **3.RI.IKI.8**

Answers will vary. Students should explain that the author gives details about what Antarctica sounds and feels like to help the reader picture the setting. The author includes sounds that Elaine hears while she is on the ice like "*tink*" and "Crunch!" (Paragraph 16). These words help the reader picture how scary it is to be on the cracking ice with no one around. The author also includes details about the weather like "billowing cloud of snowflakes" (Paragraph 12) and "the wind picked her up and slammed her face-down onto the ice" (Paragraph 14). These details help the reader understand how cold it is in Antarctica by including details that show how cold it feels to be out on the ice.