

Day 3: "The Serum Run to Nome"

Begin lesson

Card 1 of 16

	Teaching notes
	Click the "Begin lesson" button to view this lesson. Teaching notes for each slide will appear in this box.

Before the Lesson

Card 2 of 16

	Teaching notes

Anchor Text

Card 3 of 16

The Serum Run to Nome
By Michael A. Signal

A Deadly Disease Spreads

Even in most modern cities in the 1920s, diphtheria was a very dangerous and contagious disease. So when diphtheria broke out in the remote Alaskan town of Nome in 1925, it could have been devastating. Doctors knew how to treat diphtheria, and their patients would usually make full recoveries if the disease was treated in time. But the doctors needed a special serum for the treatment. When they administered the diphtheria serum to infected people quickly, it wouldn't take long for them to get better. But even the best doctors could only treat diphtheria with the right serum. If the serum wasn't available, the disease would worsen. It would start to damage important organs and become fatal. It would also spread quickly between people and kill many people.

When diphtheria hit Nome in January, there was no serum on hand. Nome's only doctor made a frantic call for serum. Other cities had serum to spare, but no way to get it to Nome. No motor vehicle of the time was a match for the digital winter of north Alaska. Deep snow and temperatures well below zero made airplanes and automobiles useless. Ships could not pass through the frozen water, and the nearest train station was almost 70 miles away! The situation looked bleak.

Out of Options

With air, automobile, boat, and train travel out of the question, there had to be another option to get the serum to Nome. There was one other way to travel over long distances in the cold snow of harsh Alaskan winters. The governor of Alaska authorized a dog sled relay to Nome. During a relay race, teams of runners work together to run the full distance, each runner taking his or her own turn. When one runner stops, another takes over. Starting the relay to Nome, teams of **men** and their sled dogs would take turns traveling across the harsh Alaskan tundra toward Nome.

The relay's first member, a man named "Wild" Bill Shannon headed himself and the 20-pound

What is diphtheria?

It's no surprise that you may have never heard of the disease diphtheria. Today, thanks to the invention of an **immunization**, diphtheria is extremely rare. However, not long ago it was a dangerous illness. Diphtheria infects the throat and nose. People can spread it to one another by coughing, sneezing, or by touching the same objects.

Teaching notes

Download and print copies of the anchor text for each student.

Student Notes Sheet

Card 4 of 16



Name: _____ Date: _____

Student notes for: The Serum Run to Nome

Day: 3

1. What details suggest the author's use of the heading "Out of Options"?

Main Idea: The citizens of Nome were out of options.

Supporting Details:

-
-
-

2. What details suggest the author's use of the heading "Two Legged Men"?

Main Idea: Men were the only option.

Supporting Details:

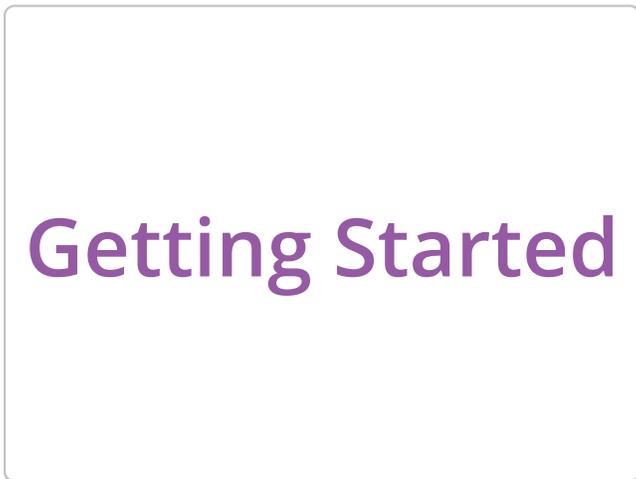
-
-

Teaching notes

- This guided notes sheet provides students with the text-dependent questions associated with this lesson, and relevant graphic organizers. You may modify these sheets as needed.
- During class, students can use these sheets to record their responses, notes, or ideas. Use the back to record responses to the focus question.
- Following class, collect student notes to use as a formative assessment.

Getting Started

Card 5 of 16



Teaching notes

Introduction 1 of 3

Card 6 of 16

The Serum Run to Nome
By Michael A. Signal

A Deadly Disease Spreads

Even in most modern cities in the 1920s, diphtheria was a very dangerous and contagious disease. In some diphtheria broke out in the remote Alaskan town of Nome in 1925, it could have been devastating. Doctors knew how to treat diphtheria, and their patients would usually make full recoveries if the disease was treated in time. But the doctors needed a special serum for the treatment. When they administered the diphtheria serum to infected people quickly, it wouldn't take long for them to get better. But even the best doctors could only treat diphtheria with the right serum. If the serum didn't completely cure disease would return. If it would start to damage important organs and become fatal. It could also spread quickly between people and kill many people.

When diphtheria hit Nome in January, there was no serum on hand. Nome's only doctor made daily calls for serum. Other cities had written to spare for the way to get it to Nome. An entire vehicle of the town was a death for the high number of deaths. Deep snow and temperatures well below zero made airplanes and automobiles useless. Ships could not pass through the frozen water, and the nearest train station was almost 500 miles away! The situation looked bleak.

Out of Options

With no automobile, boat, and train near out of the question, there had to be another option to get the serum to Nome. There was one other way to travel over long distances in the cold snow of harsh Alaskan winters. The governor of Alaska authorized a dog sled relay to Nome. During a winter race, teams of runners work together to run the full distance, each runner taking his or her own turn. When one runner drops, another takes over the relay. In Nome, teams of mushers and their sled dogs would take turns traveling across the harsh Alaskan winter towards Nome.

The race's first musher, a man named "Old" Bill Shannon hounded himself and the 20-pound package of diphtheria serum to protect them both from the bitter cold. The temperature was 52 degrees below zero when Bill Shannon left the serum from station just before midnight on January 27, but the temperature continued to drop as Bill and his dogs ran through the night towards the next team. The only way to continue the run, the dog and musher would carry the precious bundle for nearly 1000 miles over and over again to the next musher.

The mushers would not be stopped by blizzards, biting snowstorms, or bone-chilling temperatures. A few patients had already died in Nome, and more people had been diagnosed with diphtheria. The mushers had to get to Nome fast!

What is diphtheria?

It's no surprise that you may have never heard of the disease diphtheria. Today, thanks to the invention of an immunization, diphtheria is rare in you.

However, not long ago it was a dangerous illness. Diphtheria infects the throat and nose. People can spread it to one another by coughing, sneezing, or by touching the same objects.

- Informational article by Michael Signal
- Details the spread of diphtheria in Alaska during the 1920s

Teaching notes

Pacing: 20 minutes

Notes:

- Remind students that this week, they are reading the article, "The Serum Run to Nome" closely. This means going back and rereading the article in order to answer questions based on evidence in the text.
- Make sure that students have their copy of the article and the student notes worksheet.

- Read the text aloud fluently. Remind students to follow along with the text as you read aloud.
- Tell students that today, they will focus on two sections. They will need to reread "Out of Options" and "Four-Legged Heroes" independently.

Introduction 2 of 3

Card 7 of 16

Out of Options

With air, automobile, boat, and train travel out of the question, there had to be another option to get the serum to Nome. There was one other way to travel over long distances in the cold snow of harsh Alaskan winters. The governor of Alaska authorized a dog sled relay to Nome. During a relay race, teams of runners work together to run the full distance, each runner taking his or her own turn. When one runner stops, another takes over.



Norton Sound is a 70-mile body of water to the west of Alaska. Ships can only access Nome through Norton Sound for about half of the year. In the winter, the water becomes too icy for boats. Leonhard Seppala took a shortcut over a frozen part of the sound, even though he did not know if that ice would break.

Four-Legged Heroes

From "Wild" Bill to Leonhard Seppala, who raced across the unstable, frozen surface of Norton Sound, every musher knew he was risking his life to deliver the life-saving serum across 674 dangerous miles to Nome.



- We will focus on the sections "Out of Options" and "Four-Legged Heroes"
- Reread both sections on your own

Teaching notes

Pacing: 20 minutes

Notes:

- Remind students that this week, they are reading the article, "The Serum Run to Nome" closely. This means going back and rereading the article in order to answer questions based on evidence in the text.
- Make sure that students have their copy of the article and the student notes worksheet.

- Read the text aloud fluently. Remind students to follow along with the text as you read aloud.
- Tell students that today, they will focus on two sections. They will need to reread "Out of Options" and "Four-Legged Heroes" independently.

Introduction 3 of 3

Card 8 of 16

Name: _____ Date: _____

Student notes for: The Serum Run to Nome

Day: 3

1. What details support the author's use of the heading "Out of Options?"

Main Idea: The citizens of Nome were out of options.

Supporting Details:

-
-
-

- As we explore the text we will be asking and answering questions.
- We will find and keep track of evidence from the text to support our ideas about each question.

Teaching notes

Pacing: 20 minutes

Notes:

- Remind students that this week, they are reading the article, "The Serum Run to Nome" closely. This means going back and rereading the article in order to answer questions based on evidence in the text.
- Make sure that students have their copy of the article and the student notes worksheet.

- Read the text aloud fluently. Remind students to follow along with the text as you read aloud.
- Tell students that today, they will focus on two sections. They will need to reread "Out of Options" and "Four-Legged Heroes" independently.

Exploring the Text

Card 9 of 16

Teaching notes

Exploring the
Text

Supporting Question 1

Card 10 of 16

What details support the author's use of the heading "Out of Options?"

Main Idea: *The citizens of Nome were out of options.*

question.

Answer:

- Remoteness of Nome
- Harsh weather: deep snow and freezing temperatures
- Lack of transportation by airplane, car, boat, or train

Look for students....

- Identifying the remoteness, lack of transportation, and harsh weather conditions as contributing factors.
- Using evidence from the text to support answers.

Guiding questions and prompts:

- Say, "Sometimes an author uses a heading or the title of a section to introduce an important idea. An author also includes key details in the section, which provide more information about the idea or point."
- Prompt students to look at the section "Out of Options" and ask, "What is an option?"
- Ask students, "How were the people of Nome out of options?"

Additional Notes:

- This question provides an opportunity to embed mini-lessons on main idea/supporting details and text features.

Teaching notes

Pacing: 5 minutes

Standard: RI.5.8

Purpose: Students will use details related to the remoteness, lack of transportation, and harsh weather conditions in order to support the author's use of the heading. This information will provide background knowledge needed to answer the focus

Supporting Question 2

Card 11 of 16

What details support the author's use of the heading "Four-Legged Heroes?"

Main Idea: Mushers weren't the only heroes.

Teaching notes

Pacing: 5 minutes

Standard: RI.5.8

Purpose: Students will use information related to the dog-sled relay race and the contributions of mushers and dogs to support the author's use of the heading. These details will provide background knowledge needed to answer the focus question.

Answer:

Mushers and dogs faced dangers such as:

- Frostbite
- Snowstorms
- Freezing temperatures
- Winds up to 80 mph

Look for students....

- Recognizing that the author refers to dogs as "Four-Legged Heroes."
- Explaining that the author's purpose in using this heading was to give details to specify how dogs contributed to the solution.

Guiding questions and prompts:

- Say, "Sometimes, an author uses a heading or the title of a section to introduce an important idea. An author also includes key details in the section which provide more information about the idea or point."
- Ask students, "What is the author referring to when he says 'Four-Legged Heroes'?"
- Draw attention to the word heroes in the section title and ask, "What is a hero?"
- Ask students, "How were the dogs heroes for the people of Nome?"

Additional Notes:

- This question provides an opportunity to embed a mini-lesson on main idea/supporting details and text features.
- Struggling readers may be supported by adding 1 detail to the chart and asking them to provide 2-3 more.

Supporting Question 3

Card 12 of 16

What text structure does the author use to present the information in this article?

Teaching notes

Pacing: 5 minutes

Standard: RI.5.5

Purpose: Information from the previous days' focus and supporting questions should support students' ability to recognize the text structure as problem/solution. If students can recognize the text structure, they will be able to explain that the "Out

of Options" section identifies the problem, and the "Four-Legged Heroes" section explains how the dogs were the solution. This information will allow students to complete focus question for Day 3.

Answer:

- The overall structure of this text is problem/solution

Look for students....

- Identifying the text structure as problem/solution.
- Recognizing that the citizens of Nome had a dangerous diphtheria outbreak and no way to get the serum to patients are the problems.
- Recognizing that the governor authorizing a dog sled relay to carry the serum is the solution.

Guiding questions and prompts:

- Prompt students to reread the subheadings.
- Ask students, "How is this text organized?"
- Ask students, "What is the purpose of the section 'Out of Options'?"
- Ask students, "What is the purpose of the section 'Four-Legged Heroes'?"

Additional Notes:

- Mini-lessons on each text structure may be utilized in conjunction with this question.
- Graphic organizers for each text structure may be utilized for struggling readers or ELL students if needed, such as a Venn diagram, timeline, cause/effect chart, etc.

Focus Question

Card 13 of 16

Focus Question

Teaching notes

Focus Question

Card 14 of 16

How does the section "Out of Options" connect to the section "Four-Legged Heroes?"

Teaching notes

Pacing: 20 minutes

Standard: RI.5.3

Purpose: This question utilizes information from the previous days' focus questions in order to help students explore the relationship between the two sections. Signal uses 'Out of Options' to develop the context of the problem, and he uses "Four-Legged

Heroes" to develop support for the solution.

Answer: The author of this article uses the heading "Out of Options" to develop the problem of the story, and he uses the heading "four-legged heroes" to support the solution. Signal supports the idea of being out of options by providing details related to the remoteness of Alaska, lack of transportation, and harsh weather conditions. Even though he introduces the solution of the dog-sled relay in this section, he provides support in the "Four-Legged Heroes" section. His details outline the contributions of "Wild" Bill Shannon, Leonhard Seppala and his dog, Togo, and Gunnar Kaasen and his dog, Balto. Even though it seemed that they were out of options, the mushers and their dogs made the dangerous 674 mile journey to get the serum to Nome.

Look for students....

- Using text evidence as support.
- Explaining that the "Out of Options" section develops the problem.
- Explaining that the "Four-Legged Heroes" section supports the solution.
- Recognizing that the solution is actually provided in the "Out of Options" section, but the supporting details are given in the "Four-Legged Heroes" section.

Guiding questions and prompts:

- Ask students, "What does the section 'Out of Options' tell you?"
- Ask students, "What does the section 'Four-Legged Heroes' tell you?"

Additional Notes:

- Struggling readers or ELL learners may benefit from a T-chart graphic organizer.
- Give students time to return to the text to gather evidence. Encourage them to reread both sections.
- Provide students time to write the response independently.
- This response should be in writing, so the teacher can assess each student's understanding.

After the Lesson

Card 15 of 16

Teaching notes

After the
Lesson

Comprehension Skill Video

Card 16 of 16

Core Lesson Use your knowledge of text structure to help you determine how the ideas are related.

Out of Options | Four-Legged Heroes

- Disease was spread quickly



Visit <https://haywood.lzill.co/r/24082>

Teaching notes

Use this video as an intervention tool for students who struggle to answer the focus question. The video uses a metacognitive approach to model the targeted reading comprehension skills.