


Day 4: "The Serum Run to Nome"


Begin lesson

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

Before the Lesson

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	Teaching notes

Anchor Text

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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 brutal 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. During the relay to Nome, teams of mushers and their sled dogs would take turns traveling across the harsh Alaskan tundra toward Nome.

The relay's first musher, 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

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Name: _____ Date: _____

Student notes for: The Serum Run to Nome

Day: 4

- According to the glossary, what is a **musher**?
- What details show that dog sledging is not a sport for everyone?
- How were the contributions of Datto and Togo alike and different?



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

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Getting Started

Teaching notes

Introduction 1 of 2

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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 to which 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 survive. 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. Nurses only needed to make a daily call for serum. Other cities had written to ask for the way to get it to Nome. An motor vehicle of the time was a death for the high 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 town within was almost 700 miles away! The situation looked bleak.

Over the epidemic

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 drops, another takes over. On the relay to Nome, teams of mushers and their sled dogs would take turns traveling across the harsh Alaskan winter towards Nome.

The relay'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 knew his the serum team station just before midnight on January 27, but the temperature continued to drop as Bill and his dogs raced through the night towards the next team. The only way would continue the run, the next musher would carry the precious bundle for nearly 100 miles then and over again to the next station.

The mushers would not be stopped by blizzards, blinding 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 object.

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

Teaching notes

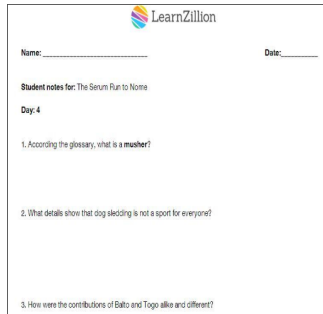
Pacing: 15 minutes

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.

Introduction 2 of 2

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Name: _____ Date: _____

Student notes for: The Serum Run to Nome

Day: 4

1. According to the glossary, what is a musher?

2. What details show that dog sledding is not a sport for everyone?

3. How were the contributions of Balto and Togo alike and different?

- 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: 15 minutes

Notes:

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- Make sure that students have their copy of the

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Exploring the Text

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Exploring the Text

Teaching notes

Supporting Question 1

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According to the glossary, what is a musher?

Teaching notes

Pacing: 5 minutes

Standard: RI.5.4

Purpose: Students should know what a musher is in order to understand their contributions, and recognize how they were heroes.

Answer: A musher is the person that commands or directs a team of sled dogs.

Look for students....

- Finding the bold-faced word in the text.
- Using the glossary at the end of the text.
- Identifying the meaning of musher.

Guiding questions and prompts:

- Prompt students to locate the word musher in the text.
- Ask students, "How does the author define musher in the glossary?"

Additional Notes:

- Struggling readers and ELL students may benefit from a vocabulary graphic organizer, such as the Frayer Model, to help provide a thorough meaning of the word.

Supporting Question 2

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What details show that dog sledding is not a sport for everyone?

Teaching notes

Pacing: 5 minutes

Standard: RI.5.8

Purpose: This information is important to know, because mushers need special equipment and well-conditioned dogs in order to participate in the sport, which sets a context for the reader to understand that dog sledding is more than just a recreational

activity.

Answer:

- Mushers need special equipment.
- Dogs have to be well-conditioned.
- Dog sledders face dangerous conditions.

Look for students....

- Recognizing that the phrase is explicitly stated in the text of the last section.
- Identifying that mushers need special equipment, dogs need to be well-conditioned, and sledders face many dangerous conditions.
- Using details from the text to support answers.
- Inferring that dog sledding is not just a sport for fun; it can also be very dangerous.


Guiding questions and prompts:

- Prompt students to reread the section 'Commemorating the Serum Run', and find where it talks about dog sled racing not being a sport for everyone.
- Ask students, "Why can't anyone just decide one day to be a dog-sled racer?"

Supporting Question 3

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How were the contributions of Balto and Togo alike and different?



Teaching notes

Pacing: 5 minutes

Standard: RI.5.3, RI.5.5

Purpose: The question provides more background information for the focus question, as it presents the contributions of two different dogs that are both considered heroes. Balto wasn't considered a very good race dog, but he finished the last leg, while Togo guided his team for over 90 miles over a

treacherous piece of frozen water.

Answer:

- Both dogs participated in the relay race and faced the same dangers on the journey to Nome.
- Balto wasn't considered a very good racing dog or a strong leader, but he ran the last leg of the dog-sled relay.
- Togo guided his team for 90 miles over an extremely perilous sheet of ice that covered the Norton Sound.

Look for students....

- Recognizing that both dogs contributed to the relay race.
- Explaining how the individual contributions of each dog differed.
- Using details from the text to support answers.

Guiding questions and prompts:

- Prompt students to locate the paragraph where the text provides information about the two dogs.
- Ask students, "What details do we know about Balto?"
- Ask students, "What details do we know about Togo?"
- Prompt students to think about ways the dogs were alike and different.

Additional Notes:

- This question provides an opportunity for a mini-lesson on the compare/contrast text structure.

Supporting Question 4

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Why does the author say that only the best mushers and sled dog teams could be trusted to attempt the

serum as soon as they could get it.

Answer:

- Mushers had to have experience because they faced dangers such as frostbite, blinding snowstorms, and bone-chilling temperatures.
- They had to have knowledge of the trails because they had to complete their portion in order to get to the next sledder.

Look for students....

- Recognizing that, "only the best mushers and sled dog teams could be trusted to attempt the journey", is explicitly stated in the text.
- Explaining that mushers had to have experience because they faced many dangers.
- Inferring that they had to have knowledge of the trails because they had to complete their portion in order to get to the next sledder, so the journey could continue.
- Inferring that "only the best mushers and dog sled teams" could be used because the journey was so important to get serum to the people of Nome.
- Using details from the text to support answers.

Guiding questions and prompts:

- Prompt students to look back at the second paragraph of 'Out of Options' where it talks about the first musher and ask, "What were mushers expected to do in the relay race to Nome?"
- Ask students, "What obstacles and dangers did mushers face along the way?"
- Ask students, "How did these obstacles create a need for only the best mushers and dogs?"

Additional Notes:

- This question provides an opportunity for a mini-lesson on making inferences.

Teaching notes

Pacing: 5 minutes

Standard: RI.5.1, RI.5.8

Purpose: This information will help students understand that the mushers needed to know the trails and have experience at racing in order to overcome the obstacles they would face along the journey. They had to be reliable because the disease was spreading quickly, and the doctors needed the

Focus Question

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**Focus
Question**

Teaching notes

Focus Question

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The main idea of the "Four-Legged Heroes" section is that mushers and dogs are heroes. What details are used

Teaching notes

Pacing: 20 minutes

Standard: RI.5.2

Purpose: Students will utilize information from this question in the culminating task, as it relates to mushers and dogs overcoming the many obstacles they faced in order to get the serum to Nome. Exploration of their actions and commitment to the task will support the students' understanding of

how they exhibited the underlying idea of perseverance.

Answer: According to the article, mushers and dogs were heroes during the diphtheria outbreak of 1925 because they faced many dangerous obstacles and situations on their journey to help the people of Nome. Not only did they risk their lives, but they also encountered frostbite, blinding snowstorms, winds as strong as 80 mph, and temperatures that averaged 50 degrees below zero temperatures. Neither the mushers nor dogs let these obstacles stop them from getting the serum to Nome.

Look for students....

- Explaining that mushers and dogs risked their lives.
- Identifying specific obstacles and dangers faced by the dog sled teams.
- Using details from the text to support answers.

Guiding questions and prompts:

- Ask students, "What did mushers and dogs do for the people of Nome?"
- Ask students, "How did these actions make them heroes?"

Additional Notes:

- Give students time to return to the text to gather evidence. Encourage them to reread relevant 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

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After the Lesson

Teaching notes

Comprehension Skill Video

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Core Lesson

Reread the text to locate the main idea.

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 250 miles to Nome. A fracture in the ice sent Seppala and his team into water and they would have died in minutes. But they weren't the only heroes. Each dog was a dangerous, blizzard conditions. They ran at blistering paces and reached Nome in 11 days. It may sound like a long time, but as strong as 80 miles per hour, and temperatures that averaged 50 degrees below zero, it was amazingly fast!



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Visit <https://haywood.lzill.co/r/24093>

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.