



## ***LESSON: TRAVELING NEW HAMPSHIRE BY TRAIN!***

(To follow Amplify CKLA 2, Knowledge 7: Westward Expansion, Lesson 8: Working on the Transcontinental Railroad)

### **At a Glance**

In this lesson, students will extend their understanding of railroad expansion in the 19th century by examining and using historical documents related to railroads in New Hampshire to plan their own journey across the state.

### **Primary Focus Objectives**

- Students will watch and reflect upon a video about railroads in New Hampshire.
- Students will analyze a historic print.
- Students will read about the development of the railroad in New Hampshire.
- Students will use data on a historic timetable to plan a train trip through New Hampshire.

### **Formative Assessment**

- Notice and Wonder
- Group discussion of vocabulary card and infographic
- Train Trip plan

### **Standards**

CCSS.ELA-LITERACY.SL.2.2

Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.

CCSS.ELA-LITERACY.RI.2.2

Identify the main topic of a multi-paragraph text as well as the focus of specific paragraphs within the text.

CCSS.ELA-LITERACY.L.2.5a

Identify real-life connections between words and their use (e.g., describe foods that are spicy or juicy).

### **Materials**

- Video: [Mason Explains: Railroads in New Hampshire](#)
- Reasons for a Railroad chart
- Image: [Zig-Zagging Trains](#)
- Focus Text: [Unit 7: Building a State, Learn It! "A Transportation Network," pages 12 and 13](#)
- Reading Reflection worksheet
- Vocabulary Card: efficient
- Infographic: [Comparing Travel Times](#)
- Document: [Railroad Timetable 1882](#)
- Big Ticket worksheet

### **Learning Activity**

1. **Watch the video.** Project "Mason Explains: Railroads in New Hampshire." Pause to discuss and record on a chart the different purposes of railroads. See Educator Rationale and Answer Guide for specific instructions. (10 minutes)
2. **Analyze the print.** Distribute Notice & Wonder worksheets and project the image "Zig-Zagging Trains." Give students time to record observations and questions. Then discuss the image as a whole group. (10 minutes)



3. **Complete the Reading Reflection worksheet. Explore the Focus Text together.** Distribute the worksheet and give students time to identify the main ideas. *(15 minutes)*
4. **Discuss the Vocabulary Card.** Project or display the card and discuss the meaning of the word "efficient." *(5 minutes)*
5. **Examine the infographic.** Project or distribute the infographic and give students time to explore its content. Then discuss what the infographic explains and how the word "efficient" can be used to describe train travel. *(10 minutes)*
6. **Analyze the document.** Project the document and conduct a group analysis of its contents. See Educator Rationale and Answer Guide for specific instructions. *(10 minutes)*
7. **Complete a travel plan.** Project or distribute copies of the document and the Train Trip worksheet. Support students as they use data from the document to plan a trip and calculate the length of their trip. *(20 minutes)*



## ***EDUCATOR RATIONALE AND ANSWER GUIDE***

### **Connection to Amplify**

This lesson extends the learning goals in Amplify CKLA 2, Unit 7: Westward Expansion, Lesson 8: Working on the Transcontinental Railroad. Students engage with a variety of source material including videos, historic images, and documents to learn about how the spread of railroads impacted New Hampshire, particularly during the 19th century. Students use developing literacy skills, such as identifying the main idea in a paragraph of non-fiction text, and math skills related to telling and calculating time to make their own connections to the story of trains in New Hampshire.

### **Watch the video**

There are many appropriate points during this short video to pause and record what students learned about how and why trains were important as New Hampshire grew as a state. A template for a recording chart is provided; use the format that best serves your class. Guide students to identify that long ago, trains were used for moving people and cargo like textiles and lumber over 1,200 miles of track. Today, trains in New Hampshire are far fewer and used primarily for cargo and tourist attractions.

### **Analyze the print**

There is so much for students to discover in this busy, colorful image. Allow enough time for students to both discuss it as a group and have time to write their ideas independently or collaboratively. In addition to a variety of railroads depicted (passenger and cargo), other transportation methods are shown including horseback riding, horse-drawn carriages, and large and small boats on the river. While the image doesn't show how smoky and dirty railyards really were in the 19th century, it does capture the hectic feeling of industry and progress that railroads added to American life. There are so many small stories taking place in the picture. Consider asking students to expand one of the small moments in the picture during a creative writing session. Students will likely observe the many blank billboards and signs on the train cars. What would they advertise in those spaces?

### **Complete the Reading Reflection**

Consider exploring the Focus Text on the Learn It! page first and then have students complete the worksheet independently. The paragraphs on the Reading Reflection page are the same as those in the Focus Text. The main idea of the first paragraph is "when trains were introduced or invented" and the main idea of the second paragraph is "how trains were different from other transportation modes."

### **Discuss the Vocabulary Card**

Railroads were a far more efficient way to move people and goods over land than any previous mode of transportation. This challenging vocabulary word is important for students to know before they look at the infographic comparing travel times.

**Analyze the document**

This is a complicated document with a lot of data. Take time to explore each section of the timetable. Explain that this image is a timetable used by passengers who were traveling along the Boston, Concord, and Montreal Railroad over 140 years ago. This timetable helped people find out which stations the trains stopped at and what time they left the station or arrived at another. Show students the different types of trains featured across the top of the chart. There were sleeper car trains (accommodations) for long trips, mail trains, and trains just for passengers making day trips. Some trains were express and wouldn't make all the stops (dashes indicate the train doesn't stop at the station), so you had to be sure you read the timetable correctly. Focus on just one train, like No. 6 Express Passenger. Help students find the train's start time and then match it with its starting station (Concord). Practice together matching stations to their times and writing the time in analog format. Talk with students about when a timetable might be used like this today or if they've ever seen something similar, like an arrival and departure board at a bus station or airport.

**Complete the trip planner**

After students have had enough practice time using the timetable, distribute the Big Ticket worksheets and support them as they choose their own stations to travel between; then design a ticket to show the times. Again, it may be best to have students focus on a particular train. Consider challenging students to calculate the total time of their trip. Instruct students to cut out their tickets after they finish them and create a display of their different trips. Compare lengths. Who took the longest trip? Who took the shortest trip?

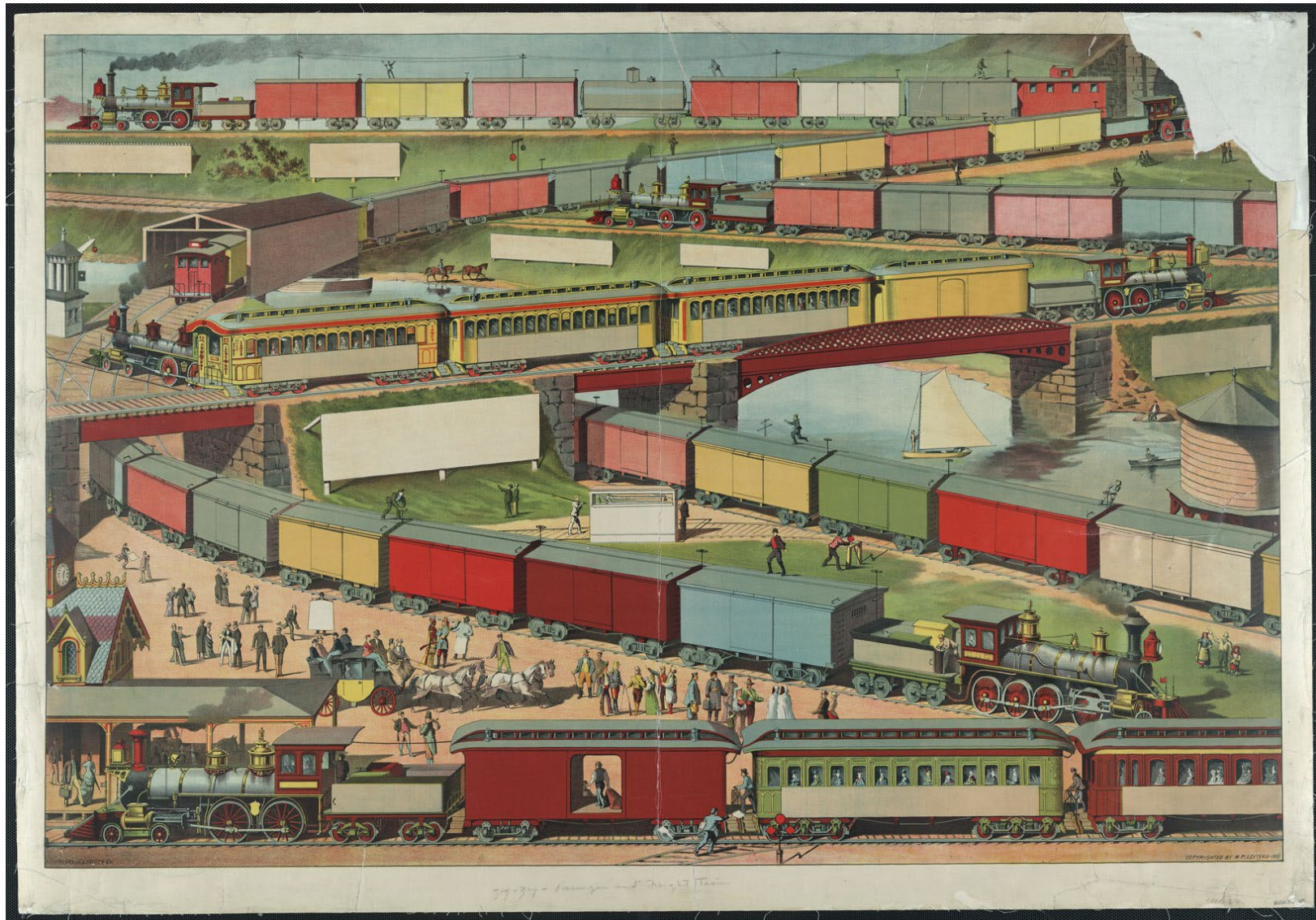


## ***REASONS FOR A RAILROAD***

As you watch the video, pause to write down the different ways people used the railroad in New Hampshire long ago and how it is used today.

Long Ago	Today

## Zig-Zagging Trains



Source: Library of Congress Prints and Photographs Division



## ***NOTICE AND WONDER: ZIG-ZAGGING TRAINS***

It's a busy day for these trains! Write down what you notice in this image. Write down the questions you have about what you see. What do you wonder?

<b>Notice</b>	<b>Wonder</b>





## ***READING REFLECTION: RAILROADS IN NEW HAMPSHIRE***

Read each paragraph. Write the **main idea** (what the paragraph is mostly about) in the box next to the paragraph.

Text	Main Idea
<p>Railroads were first invented in Great Britain. In 1827, the first railroad in America was built. It was called the Baltimore &amp; Ohio Railroad. Soon railroads were being built all over the United States. The first railroad in New Hampshire opened in 1838.</p>	
<p>Railroads took a lot of work to build, but once they were built, they offered the fastest form of transportation. They could cover great distances in just a fraction of the time it took to travel by boat or on horseback. They could also carry more people and goods than a boat, wagon, or stagecoach. And it was more comfortable to travel by train.</p>	





# ***EFFICIENT***

**Part of speech:** adjective

**Definition:** working well without wasting time, energy, or materials

**How to use it:** Taking the shortcut through the woods was the most **efficient** way to get to Grandma's house.

# COMPARING TRAVEL TIMES

How long does it take to get from Boston to the base of Mount Washington? Well, it depends on how you travel! Take a look at how long the trip would take using the different methods of transportation people have used.

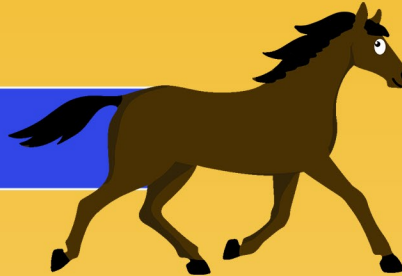
**16 DAYS**

**Walking**  
(10 miles per day)



**8 DAYS**

**Horseback**  
(20 miles per day)



**3 DAYS**

**Stagecoach**  
(60 miles per day)



**Train**

**1 DAY**



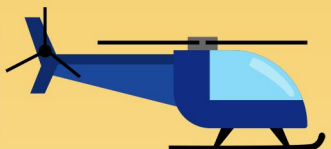
**Car**

**4 HOURS**



**Helicopter**

**1 HOUR**



1. How much faster is it to travel by a stagecoach than walking? How much faster is it to travel by car than by horseback?
2. Based on the information above, about how far is it from Boston to the base of Mount Washington?
3. How do you think changing methods of transportation impacted people's lives?



## Railroad Timetable 1882



### 1882. TIME-TABLE 1882. Commencing June 26, 1882.

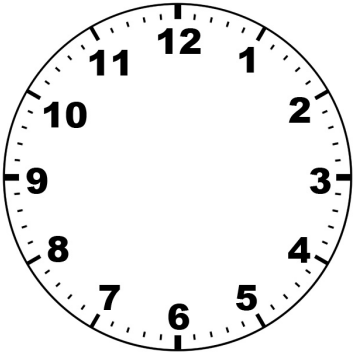

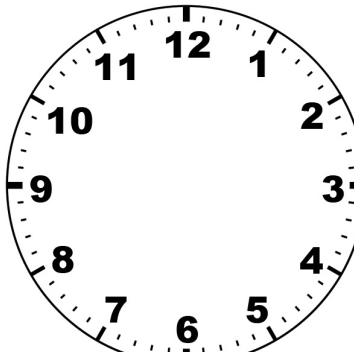
Stations.	GOING NORTH.					
	1 Montreal Night Express.	2 Accom- moda- tion.	3 Mail.	4 White Mountain Express.	5 Montreal Day Express.	6 Express Pass- enger.
LEAVE						
Philadelphia via P. & N.Y. & N.E. R.R. ....				7.05 p.m.	7.05 p.m.	
Philadelphia via P. & R.R.R. ....	7.30 a.m.			5.40 "	5.40 "	
Philadelphia via P. R. R. and Fall River Line ..				3.00 p.m.	3.00 p.m.	
Philadelphia via P. R. R. & Ston'g or Norwich Lines ..				1.30 "	1.30 p.m.	
New York via W. & S. ....	11.00 "			9.00 "	9.00 "	
Jersey City via N.Y. & N.E. R.R. and Transfer Str. ....				9.50 p.m.	9.50 p.m.	
Jersey City via Annex Str. and Fall River Line. ....				5.20 "	5.20 p.m.	
New York via Stonington or Norwich Lines. ....				5.00 "	5.00 "	
New York via Fall R. Line ..				5.30 "	5.30 p.m.	
Stonington .....				4.00 a.m.	4.00 a.m.	
Providence, via Worcester	2.10 p.m.	7.20 a.m.		6.10 a.m.	6.10 a.m.	
Fall River .....				6.00 a.m.	6.00 a.m.	
New Bedford .....	3.40 p.m.			5.15 "	5.15 a.m.	
Taunton .....	4.32 "			6.30 "	6.30 "	
New Haven, via Springf'd ..	1.21 "			12.02 p.m.	12.02 p.m.	
Hartford, via Springf'd. ....	2.24 "	5.55 a.m.		1.27 "	1.27 "	
Springfield, via Wore .....	2.22 "	7.15 "		5.45 a.m.	5.45 a.m.	
Worcester .....	5.00 "	11.15 "	6.30 a.m.	7.30 "	7.30 "	
Boston, via Lawrence. ....	5.00 "	12.03 m.	7.30 "	7.30 "	7.30 "	
Boston, via Lowell. ....	7.00 "	12.00 "	7.00 "	8.30 "	8.30 "	
Lowell .....	7.53 "	1.00 p.m.	8.20 "	9.21 "	9.21 "	
Nashua .....	8.23 "	1.40 "	9.00 "	9.48 "	9.48 "	
Lawrence .....	6.05 "	1.05 "	8.28 "	8.25 "	8.25 "	
Manchester .....	8.56 "	2.22 "	9.48 "	10.20 "	10.20 "	
Concord .....	9.40 "	3.10 "	11.02 "	10.55 "	10.55 "	5.25 a.m.
Tilton .....	10.20 "	3.49 "	11.47 "	11.35 "	11.35 "	6.18 "
Laconia .....	10.39 "	4.08 "	12.07 p.m.	11.54 "	11.54 "	6.38 "
Lake Village .....	10.52 "	4.12 "	12.12 "	12.00 "	12.00 "	6.42 "
Weirs (St'bt L'ding .....	11.05 "	4.22 "	12.23 "	12.10 "	12.10 "	6.53 "
Meredith Village .....	11.12 "	4.30 "	12.31 "			7.02 "
<b>PLYMOUTH</b> Lve. ....	11.46 "	5.00 "	1.00 "	12.45 p.m.	12.45 p.m.	7.35 "
<b>Profile House (stage) Arr.</b>	1.20 p.m.	1.20 p.m.	7.00 p.m.	7.00 p.m.	7.00 p.m.	7.45 "
Warren .....	12.36 a.m.	5.52 p.m.	2.15 p.m.	1.52 p.m.	1.41 p.m.	8.29 a.m.
Haverhill .....	1.09 "	6.20 "	2.59 "	2.22 "	2.12 "	9.07 "
Woodsville .....	1.28 "	6.40 "	3.25 "		2.32 "	9.34 "
Wells River .....			3.30 "			9.50 "
Woodsville .....		6.40 p.m.	4.00 "			10.00 "
Lisbon .....		7.00 "	4.26 "	3.00 "		10.15 "
Littleton .....		7.21 "	4.52 "	3.22 "		11.11 "
Wing Road .....		7.32 p.m.	5.05 p.m.	3.38 p.m.		11.25 a.m.
Bethlehem Junc. ....		7.40 "	5.20 "	3.45 "		11.40 "
Profile Hse (rail) .....		10.00 "	6.00 "	4.25 "		2.00 p.m.
Twin Mt. Ho se. ....		7.50 "	5.35 "	4.03 "		11.54 a.m.
Wh. Mt. House .....		7.57 "	5.50 "	4.15 "		12.06 p.m.
Fabyan House .....		8.00 "	5.55 "	4.20 "		12.10 "
Base Station .....				4.30 "		9.20 a.m.
Summit Mt. Wash .....				5.15 "		10.00 "
				6.45 "		11.30 "
Whitefield .....		9.40 p.m.	5.20 p.m.	3.58 p.m.		11.40 p.m.
Jefferson .....		10.15 "	5.55 "	4.30 "		12.30 "
Lancaster .....			5.50 "	4.30 "		12.10 "
Groveton Junction, Arrive			6.17 "			12.55 "
Quebec (via Grove- ton Junction), Montreal (via Grove- ton Junction),						
St. Johnsbury .....		2.26 a.m.			3.15 p.m.	
Newport .....		4.10 "			4.49 "	
Montreal (via M. & B. Air Line) Arrive		4.10 "			4.49 "	
		8.25 a.m.			8.45 "	





## ***THE BIG TICKET: TRIP PLANNER***

Use "Railroad Timetable 1882" to complete your ticket to ride! Draw hands on the clocks to show the time you leave one station and arrive at the next. Remember to include the names of the stops and the railroad line. Add your own designs and drawings to turn your ticket into a souvenir of your trip.

Passenger Name: _____		Date Valid: _____		
<b>ONE WAY</b>	<div>Station: _____</div> <div></div> <div>Leave at: _____</div>		<div>Station: _____</div> <div></div> <div>Arrive by: _____</div>	<b>SINGLE FARE</b>