Activity Guide -
The Railroads of South Dakota

- Curriculum
- Educators’ Guide
- Suggested Lesson Plans
- Additional References
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Letter of Introduction

Americans have always had a fascination for railroads — there is simply nothing else like them in size and scope. Railroads and our nation grew up together and in ways both good and bad, this dynamic combination changed this continent, its people, and its history forever. The study of this relationship remains important to us in modern times.

By the time Dakota Territory was divided into North and South Dakota in 1889, the railroad and commerce on the High Plains were intertwined. Agriculture depended on the railroads for shipping, as did mining and timbering in the Black Hills. Settlements were established based on the placement of the lines. South Dakota was realized, in large part, thanks to the men, women, investment, and machines of the railroad. The encroachment of the railroad and resulting white settlement into treaty lands impacted the indigenous Native Americans in ways that are still being felt today.

The goal of the South Dakota State Railroad Museum’s The Railroads of South Dakota Activity Guide project is to provide stand-alone educational lesson plans at four critical grade levels. Resources are also provided in the back of this guide for additional research and appreciation of railroading’s dynamic role in our history, its relevance in our lives today, and railroading’s continuing role as we move into the future.

Through the valued efforts and input of a panel of educators and rail authorities; the generosity and vision of both the Elmen Foundation and the South Dakota Community Foundation, plus the Museum’s staff and Board of Directors, this guide’s curriculum concentrates on age-appropriate topics and activities dealing with railroad construction, historic places, dates of development, communications, and significant aspects of the South Dakota rail experience.

We welcome your ideas and comments on this edition, and for future versions of The Railroads of South Dakota Activity Guide.

Rick Mills, Museum Director, and the Board of Directors, South Dakota State Railroad Museum
Activity Structure and Application

The purpose of *The Railroads of South Dakota Activity Guide* is to familiarize its users with relevant people, dates, and events of South Dakota railroad history, to help in a better understanding of railroading’s significance for today, and to provide additional resources for further research and enjoyment, either at the museum, in a classroom or in independent learning situations.

The study and understanding of historical events and themes remains an important subject in modern times. This guide offers insights into American and South Dakota history including the settling of the West: Manifest Destiny; contact and conflicts between Native Americans and white settlers; experiences of rail workers, and the technical, mechanical, and engineering challenges of building and operating railroads across Dakota’s varied landscapes.

The curriculum contained in *The Railroads of South Dakota Activity Guide* focuses on age-appropriate topics and activities in Science, Writing, Social Studies, and Statistics/Probability for Kindergarten, Fourth, Seventh, and Eleventh grade levels. Additional grade level curricula are being planned for future editions of the guide.

This guide book is based on information, methods, and resources gathered from a panel of certified educators, historians, and museum professionals. The lessons and projects included incorporate recognized levels of content, rigor, and developmental appropriateness. The suggested assignments are in accordance with the Common Core Standards adopted by the South Dakota Board of Education on November 29, 2010.

The TimeRail chronological concept was developed by the Board of Directors of the South Dakota State Railroad Museum, which reserves all rights for its use in its entirety.
ACTIVITY K.1 - All Aboard for the Black Hills!

Explore
Interpreting environmental clues to tell a story is integral to decision making and critical thinking. Understanding and applying the definitions of facts and guesses further develop these skills in historical and contemporary settings.

Examine
- We received a special envelope with clues to a wonderful adventure but we have to figure out what the clues are telling us! We need to answer these questions about the adventure:
  - Who is in the picture?
  - Where is the picture taken?
  - When is the picture taken?
  - What kind of transportation is in the picture?
  - What other information did you identify?
- Examining one Clue Card at a time, circle your thumb and fingers to form a magnifying glass. Carefully examine each Clue Card for answers to the questions. What kinds of details are you looking for in the picture? How will the clues help you answer the questions? (Use the Clue Cards of extreme close ups of train, passengers, staff, telegraph, environment from train, maps, horse and buggy, suitcases and trunks, schoolhouse, Black Hills)
- Display the large collage of all the pictures and match the small Clue Cards to a collage. What questions can you answer? Discuss the additional clues that were discovered.

Explain
- Some of the answers are guesses and some are facts. Using the collage, determine which answers are guesses and which are facts.
- Where is the horse? Where is the train? Where are the people? These answers are facts.
- What are the names of the people who are traveling? Where do they live? Where they are going? What year it is? These answers are guesses.
- Read All Aboard for the Black Hills! matching the Clues Cards to the illustrations in the book and answer all the questions with facts.
- Arrange the Clue Cards in the order of the story and retell the story.
- Arrange the Clue cards in a different pattern and tell a new story.
**Resources**
South Dakota State Railroad Museum kit containing Clue Cards, Clue Collage, *All Aboard for the Black Hills!*

**Common Core Standards**

**Reading**

**Key Ideas and Details**
With prompting and support, retell familiar stories, including key details

**Integration of Knowledge and Ideas**
With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts)

**ACTIVITY K.2 - The Journey in the Museum**

**Explore**
When families travel today the type of transportation, the method of purchasing tickets and packing for a trip varies greatly from the 1800’s. Comparing and contrasting the historical and contemporary elements of planning and going a journey will develop communication and forecasting skills.

**Examine**
Read and discuss the journey taken by the family in *All Aboard for the Black Hills!* Work stations available at the South Dakota State Railroad Museum focus on the various aspects of planning and traveling experienced by the family.

- Suitcases and trunks are packed for the five day train trip. Since you have to share a suitcase or trunk with another person, how will all the clothes fit into such small suitcases and trunks? What do you really need for the trip? Make good decisions!
- A Ticket Office sells tickets for various trips displayed on the map. Choose the trip to the Black Hills. “Money” is required for the tickets – how much is your ticket? Do you have enough money? Don’t lose your money!
- Seats are provided for waiting passengers. The conductor asks you where you are from and how old you are, and tells you how to keep your tickets safe, and rules for being around trains. What questions do you have for the conductor?
- Time to board the train. Look at the different parts of the train, what is similar and what is different from the book? What else do you see that is similar to the book? What is the biggest part of the train? The noisiest? The most comfortable?
- Friends and family want to know about your trip. Time to design a postcard about your favorite part of the journey. Make one to take home and one to give to the conductor as a “thank you” for the day.
- A group picture by the train will help everyone remember their journey to the South Dakota State Railroad Museum.
ACTIVITY K.2 - The Journey in the Museum (continued)

**Explain**
Share your postcards with the class. What do you remember about the museum? What was your favorite part of the day? What will you tell your friends and family about your journey?

**Resources**
Materials and work stations will be provided by South Dakota State Railroad Museum.

**Standards**
South Dakota Social Studies Standards
K.E.1.3. Students are able to describe the role of money in everyday life.
K.E.1.2. Students are able to identify the difference between basic needs (food, clothing, and shelter) and wants (luxuries).

**Common Core Standards**
Writing
Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.

Speaking and Listening
Add drawings or other visual displays to descriptions as desired to provide additional detail.

ACTIVITY K.3 - Be Safe!

**Explore**
Railroads are a very integral component within our society today. It is important that people of all ages are aware of the safety guidelines around railroads as a pedestrian and as a passenger in a vehicle.

**Examine**
- Do you know where the railroads are located in your town? How many trains travel through your town every day? Every week?
- If you are walking or driving by railroad tracks, what should you watch for and listen for in order to remain safe?
- If you visited the Museum, what did the Conductor tell you about safety?
• Safety information to share with your family and friends:
  ○ Never climb over or through a fence by the side of the railway tracks.
  ○ Never climb on a bridge over the railway tracks.
  ○ Never play with a ball or any other toy near railroad tracks.
  ○ Never throw stones at a train or put anything on the railway track.

• Why is this important to you, your friends and your family?

• Practice this verse for safety at railroad crossings:
  STOP (hold your hand up in front of you)
  LOOK (point to your eyes)
  LISTEN (cup your hands behind your ears)
  WALK (swing arms by side)

• Practice and share these safety rules with your family and friends.

• As a class, design flyers to educate your friends and families about railroad and train safety.

• Visit other classrooms, the offices of the school, a library, an assisted living facility, hospitals, etc. and share your tips to be safe around railroads and trains.

Explain
Using maps from http://www.sddot.com/transportation/railroads/docs/railmap.pdf determine the closet railroads to your school or town. Who would use the roads near the railroad? What should people in these areas know about railroad and train safety?

Resources
http://oli.org/video
http://oli.org/education-resources/safety-tips/bicycle-safety-tips
http://oli.org/education-resources/for-kids/

South Dakota Social Studies Standards
K.G.1.1. Students are able to use map colors to recognize land and water.
1.C.2.1. Students are able to list rules in different groups for different situations.

Common Core Standards
Writing
Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.

Speaking and Listening
Add drawings or other visual displays to descriptions as desired to provide additional detail.
**Activity 4.1 - Communicating Through Codes**

**Explore**
Communication was crucial to the early railroads. The safety of the passengers and crew was dependent on timely and accurate communication. Telegraph offices, staffed with qualified staff, used Morse Code to send and receive messages.

**Examine**
Contemporary communication is fast and diverse. What modes of communication do you use or hear daily? Phones, texting, television, Facebook, magazines, billboards, school announcements and talking are ways to spread information quickly. Those were not options for the railroad in the early 1900’s so they employed the use of the telegraph.

- What do you know about Morse Code? How do you know about it? From movies or books? Discuss Samuel F.B. Morse and the development of code.
- Examine the copies of the Morse Code sheet. ([http://earthrenewal.org/morse.htm](http://earthrenewal.org/morse.htm)) What do you notice? How long do you think it would take you to learn the Code?
- What would be more difficult hearing or transmitting? Listen to this transmission [http://www.youtube.com/watch?v=JJtJve1Aqu8](http://www.youtube.com/watch?v=JJtJve1Aqu8)
- Can you connect the sounds to the symbols on the Morse Code chart? Why or why not?
- How can you learn to translate messages for the railroad if you don’t have a telegraph key?

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**MORSE CODE**

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**Explain**

- Practice the steps of learning Morse Code and send messages to your friends. (handout)
- This website will help you learn to read
  - http://www.brownielocks.com/morse_code.html
- After you have learned to hear the different sounds, practice listening to and sending messages with a telegraph sound at http://morsecode.scphillips.com/jtranslator.html.
- Teach others at school and at home the steps of learning Morse Code.

**Resources**

http://www.youtube.com/watch?v=JT9zM_-2S6g
http://www.youtube.com/watch?v=JJtJve1Aqu8
http://morsecode.scphillips.com/jtranslator.html
http://www.wikihow.com/Learn-Morse-Code
http://www.brownielocks.com/morse_code.html
Morse Code handout from SDSRM: http://earthrenewal.org/morse.htm and page 28, Additional Resources

**South Dakota Standards**

4.S.1.1. Interpret data from graphical representations and draw conclusions.
4.A.US.2.1 Students will identify one event that impacted the development of South Dakota.

**Common Core Standards**

**Reading Standards for Literature K–5 - Integration of knowledge and ideas**

Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.

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**Activity 4.2 - Working in a Railroad Office**

**Explore**

Personnel working for the railroad encompassed a wide variety of skills and titles. Locomotive firemen, head brakemen, baggage man, railway post office clerk, Porter, trainman, rear brakeman, and conductor were on the train crew. Those who worked on the tracks maintained and oversaw the maintenance of the tracks for safe passage by the trains. The station agent was responsible for the maintenance of the railroad depot, issuing railroad tickets, checking luggage and baggage in and out for passengers and railroad shipments; supervising mail shipments; safety and comfort of passengers. The baggage handler worked on the train platform and assisted the station agent as well as passengers when boarding and leaving train with baggage and other freight shipments.

**Examine**

- Locate and identify the various work stations in the museum that represent the station platform, the station office and track maintenance.
- You have been hired to work in the telegraph office.
  - Explore the station office, equipment used by the maintenance crew, the baggage wagon and the model trains.
  - What will you need to know at each station?
  - What are the safety issues?
  - How will you keep passengers and crew safe at each station?
Activity 4.2 - *Working in a Railroad Office* (continued)

- Using telegraph keys, send and interpret messages that are important to passenger and crew safety.
- Load the baggage onto a wagon so nothing falls off and everything fits!
- Observe the paths of the trains; what does the crew need to know about the tracks and the routes?
- How would you use the tools to pass messages to a moving train during a thunderstorm, a very windy day or snowstorm?
- How did trains affect the growth of South Dakota?

**Explain**

- What was your favorite part of the train station and crew jobs?
- On a graffiti board, write the one word that represents your visit to the SDRRM.
- Write job descriptions for each of the area you explored – what would you need to know, to do, and understand for the various jobs?
- Design a poster advertising jobs and adventures the railroad offered to future employees.

**Resources**

Materials and work stations will be provided by South Dakota State Railroad Museum.

**South Dakota Standards**

4.US.1.1. Students are able to explain factors affecting the growth and expansion of South Dakota.
4.A.US.1.1 Students will recognize a factor affecting the growth of South Dakota.
4.US.2.3. Students are able to describe the influence of railroads and their employees on the development of our state.
4.A.US.2.1 Students will identify one event that impacted the development of South Dakota.

**Common Core Standards**

**Reading Standards for Informational Text K–5 - Integration of Knowledge and Ideas**

Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.
Activity 4.3 - Designing Your Own Communication Key

Examine
The telegraph key designs used by the railroads were basically the same but did vary in the details of the design. There was a great deal of equipment used to send and receive messages over great distances. Clear and precise communication is vital when transporting people, livestock and goods from one city to another. Communication is also important in schools, at home and in the community. How has communication changed since the era of telegraphic equipment?

Explore
- Brainstorm the various ways you can communicate to your friends besides using written words. (lights, tapping with a pencil, clapping, hand signals, guitar strings, pictures and symbols, etc.)
- Working with a partner, implement your communication design the letters in this message – This is a test
- Practice sharing the message until you are “fluent” in your communication.
- Share with another group. Can the send the message with your code?

Explain
- What was challenging about designing and practicing your code? What was easy?
- What was challenging about learning and sending the message in another code? What was easy?
- Why is communication important to all of us? If you meet someone who speaks another language, how do you communicate? How can you practice good communication skills at school, at home and in the community?

Resources
Photos of various telegraph keys: https://www.google.com/search?q=telegraph+key+images&client=firefox-a&hs=3kF&rls=org.mozilla:en-US:official&tbm=isch&tbo=u&source=univ&sa=X&ei=cn3IUrCZLOeCyAGe2oDI&ved=0CCsQsAQ&biw=1093&bih=471
http://www.telegraph-office.com/pages/photo_gallery.html#Landline
Morse Code Chart http://earthrenewal.org/morse.htm

South Dakota Standards
4.S.1.1. Interpret data from graphical representations and draw conclusions.

Common Core Standards
Reading Standards for Informational Text K–5 - Integration of Knowledge and Ideas
Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, timelines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.
ACTIVITY 7.1 - What If You Could Only Read About It?

Explore
“The introduction of so powerful an agent as steam to a carriage on wheels will make a great change in the situation of man.” Thomas Jefferson, 1802

The steam engine changed the face of the country. As the science of the steam engine evolved, more and more businesses and people were taking advantage of this new way to move cargo and people from place to place. It was much faster than stagecoach travel and could carry much more cargo and people in one trip.

Examine
If you were not able to see a steam engine pulling train cars across the country, the closest you might get to imagining the process is through newspaper stories and marketing from the railroad.

● Share the descriptions at these sites:
  ○ http://www.explainthatstuff.com/steamengines.html and
  ○ http://science.howstuffworks.com/transport/engines-equipment/steam1.htm

● What challenges do you have understanding the descriptions?
● What was easier to understand?
● What additional information would improve your learning?

● These websites offer animation of the steam engine:
  ○ http://www.youtube.com/watch?v=g8LrAsL4oH0
  ○ http://www.youtube.com/watch?v=d1OpJzWTk8g

● How did the animation clarify your understanding of the steam engine?
● What would improve your understanding?

● Review the diagram and explanation and complete experiment at this website:
  ○ http://www.slideshare.net/AussieSteamTrains/inside-a-steam-locomotive

Explain
● Using all the information from the sites, design a poster explaining the steam engine process to readers of an 1899 newspaper
● Include a description of each part of the process.
● Share your poster with others to share your knowledge of the steam engine.

Resources
http://www.explainthatstuff.com/steamengines.html
http://science.howstuffworks.com/transport/engines-equipment/steam1.htm
http://www.youtube.com/watch?v=g8LrAsL4oH0
http://www.youtube.com/watch?v=d1OpJzWTk8g
http://www.slideshare.net/AussieSteamTrains/inside-a-steam-locomotive

South Dakota Standards
7.S.1.1. Students are able to describe how science and technology are used to solve problems in different professions and businesses.
7.N.2.1. Students are able to conduct scientific investigations using given procedures.
7.W.1.4 Students can summarize and paraphrase information from references to compose text.

Common Core Standards
Reading Standards for Literacy in History/Social Studies 6–12 - Integration of Knowledge and Ideas
Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts
ACTIVITY 7.2 - Steam in a Contemporary World

Explore
Protecting the environment is an issue faced around the world. Engines powered by steam have been affecting history since the 1700’s. Originally, the use of steam was not an environmental factor in railroad development and growth. Steam engines are rare in contemporary rail travel and are generally advertised as historical tributes to early railroads.

Examine
- Share this website:
  - http://www.youtube.com/watch?v=6NPpelLCIkK
- How many applications of steam were discussed? List the applications.
- Which is your favorite application? Why?

Explain
- What are the advantages to the environment of your favorite application?
- What examples of steam application have you observed in your community?
- If you could design an application for future steam use in the global community, what would you improve with your design?
- Illustrate your new design for the future.

Resources
http://www.youtube.com/watch?v=6NPpelLCIkK

South Dakota Standards
7.S.2.1. Students are able, given a scenario, to predict the consequence(s) of human activity on the local, regional, or global environment.
7.A.E.1.2. Students are able to identify an economic activity that affects the standard of living

Common Core Standards
Reading Standards for Literacy in History/Social Studies 6–12 - Integration of Knowledge and Ideas
Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table)
Activity 11.1 – Perspectives on Time

Explore
The timeline on the South Dakota State Railroad Museum Web site (http://sdsrm.org/photo-gallery/) reflects the history of the railroad, the components of the railroad system, people and events from 1776 to 2014. Within the timeline are quotes, statistics and facts that shaped the railroad culture in South Dakota.

Examine
Using the dates from the timeline:

- Determine the specific dates directly related to Dakota Territory and South Dakota
- Using a regional map, determine and record the points and paths of growth and expansion as the railroad developed in the region
- Compare the timeline and the map to developments, events, and issues for the Lakota, Dakota and Nakota people in the same regions. Record the paths of these events on the map
- How do the paths relate to one another? Where were the areas of conflict? The areas of compatibility?
- Design representation of the culture of tribes using quotes, photos, treaties, etc. during the years of interaction between the railroad and the tribes. Remember, a linear representation does not reflect the culture of the tribes. Circles were very important in many aspects of their spiritual beliefs and recoding of history on winter counts. How can the representation of the timeline accurately reflect the culture?

Explain

- How did the interactions change the course of history for the railroads and the tribes?
- As a class, design a graffiti board*, compiling the information from this lesson using railroad and tribal references.

* A graffiti board is a great review of information and what has been learned and applied. Ask students to write on the board using one color for a railroad reference and another color for a tribal reference. The writing is done in graffiti style - at different angles, different types of writing, using drawings, dates, quotes, etc. The students then follow the references in chronological order and discuss what they know about the references they added to the board.

Resources
http://sdsrm.org/photo-gallery/

South Dakota Standards
9-12.A.US.1.1. Students are able to recognize a timeline from the Reconstruction to the present.
9-12.U.S.2.1. Students are able to describe the causes and effects of interactions between the U.S. government and Native American cultures.
9-12.A.US.2.2. Student will recognize one group or movement that affected U.S. history.

Common Core Standards
Reading Standards for Informational Text 6–12 - Key Ideas and Details
Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text.
**Activity 11.2 - History or Hype**

**Explore**

Depending upon the source recording an event in history, the perspective and recollection of the moment may be very different from the perspective and recollection of another source.

Many aspects create diverse primary source recordings. A western reporter in the 1800’s might record an event, telegraph the information to a newspaper on the East Coast and the information was edited to fit their specific audience. Diaries offer different perspectives of people and events. Military or railroad records document events or even battles from a very different perspective than the oral history of the Native Tribes or homesteaders. People may be misquoted and judged on that misinformation.

**Examine**

Research novels, poems, TV shows, video games, and films (including animated films) based on historical events, people or issues:

- Determine the perspective of the project. Does it accurately reflect the real event, issue or people? Is it fictionalized? What has changed? What is historically accurate?
- Why would changes be made when the historical information is adapted to contemporary forms of media? How do the changes differ between the different forms of media?
- How do the changes affect the understanding of history?
- Debate the pros and cons of altering historical facts as they relate to a specific audience (reader, movie and TV fans, researchers, young children, etc.)
- How do you personally feel about the changes after comparing the actual events to the contemporary representations in the media?
- Compose a letter to an author who has changed the facts for a media project. State your view on the changes, how the project affected you and detail specific examples of changes in the project.

**South Dakota Standards**

9-12.G.1.1. Students are able to use resources, data services, and geographic tools that generate and interpret information.

9-12.S.1.2. Students are able to evaluate and describe the impact of scientific discoveries on historical events and social, economic, and ethical issues.

**Common Core Standards**

**Speaking and Listening Standards 6–12 - Comprehension and Collaboration**

Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.

**Writing Standards 6–12Text - Types and Purposes**

Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
1776 • Thirteen American Colonies declare independence from England
• Oglala and Brule bands of Lakota Sioux inhabit most of current-day South Dakota
• Scotsman James Watt perfects first “modern” stationary steam engine in England

1800 • American Oliver Evans creates the earliest successful non-condensing high-pressure stationary steam-engine

“The time will come when people will travel in stages moved by steam engines from one city to another, almost as fast as birds can fly, 15 or 20 miles an hour....
A carriage will start from Washington in the morning, the passengers will breakfast at Baltimore, dine at Philadelphia, and sup in New York the same day....”
Oliver Evans, 1800

“The introduction of so powerful an agent as steam to a carriage on wheels will make a great change in the situation of man.” Thomas Jefferson, 1802

1803 • United States acquires Louisiana Purchase from France

1804 • Lewis and Clark Expedition moves upstream through what is now South Dakota

1815 • First North American railroad charter for Camden & Amboy in New Jersey

1825 • Colonel John Stevens builds a “steam waggon” which he placed on a circular track around his New Jersey home

1826 • Switch Back Gravity Railroad in Pennsylvania began operation in May; first freight common carrier

1827 • Baltimore and Ohio Railroad is chartered in Maryland; the first passenger and freight common carrier railroad

1828 • 23 miles of railroad in the United States

1829 • English-built steamer Stourbridge Lion, is operated on the Delaware & Hudson

1829 • Peter Cooper builds the Tom Thumb, (1.4 HP), for the Baltimore & Ohio (it hauled 36 passengers at 18 mph in August, 1830)

1831 • The 3.5 ton De Witt Clinton hauls 5 stage coach bodies on railroad wheels at 25 mph on the Mohawk & Hudson Railroad in New York

1832 • The American No. 1, the first 4-4-0, was designed by John B. Jervis, Chief Engineer for the Mohawk & Hudson. It was capable of regular speeds of 60 mph

1844 • Samuel Morse sends the first long-distance telegraph message from Washington, D.C., to Baltimore, ushering in a new era in communication

1848 • First steam locomotive (the Pioneer) arrives in Chicago, Illinois; operates on predecessor of the Chicago and North Western Railway (C&NW)

1850 • President Millard Fillmore signs the first Railroad Land Grant Act to attract settlers, increase taxable wealth, and unify and strengthen the growing nation

9,000 miles of railroad in the United States

“Railroad iron is a magician’s rod, in its power to evoke the sleeping energies of land and water.” Ralph Waldo Emerson

“We do not ride on the railroad; it rides upon us.” Henry David Thoreau

1851 • Telegraph first used for dispatching trains

A treaty establishes a Sioux Reservation west of the Missouri River and north of the Platte River/Overland Trail

1852 • First rail connection between East Coast and Chicago
1853 • Scottish immigrant Andrew Carnegie launches his career as a $35-per-month telegraph operator
1855 • First land grant railroad, the Illinois Central, arrives in Dunleith, Illinois (now East Dubuque)
1856 • First railroad bridge (Rock Island Railroad) across the Mississippi River is completed between Rock Island, Illinois, and Davenport, Iowa
1857 • Settlement at the site of present-day Sioux Falls
1860 • 30,000 miles of railroad in the United States
1861 • Civil War begins (the first war that railroads play a significant role in transporting soldiers and equipment)
• Dakota Territory (east of the Missouri River) is established by President Buchanan, with Yankton as the first capital
1862 • President Abraham Lincoln signs the Pacific Railway Act, authorizing the construction of a transcontinental railroad with federal land grants
1864 • Second Pacific Railway Act doubles the size of federal land grants
1865 • First railroad sleeping car, designed by George Pullman, appears in the United States.

1866 • In Jackson County, Indiana, the Reno Gang, a band of outlaw brothers, is credited with the first organized transcontinental train robbery
• “The one moral, the one remedy for every evil, social, political, financial, and industrial, the one immediate vital need of the entire Republic, is the Pacific Railroad.”
   The Rocky Mountain News, Denver
• “The more we can kill this year the less will have to be killed the next year, for the more I see of these Indians the more convinced I am that they all have to be killed or be maintained as a species of paupers.”
   General William T. Sherman regarding the Plains Indians
1867 • Pullman introduces the refrigerator car
1868 • Fort Laramie Treaty redefines the Great Sioux Reservation, including lands west of the Missouri River and Black Hills
• Major Eli Janney, a Confederate veteran of the Civil War, invents the knuckle coupler replacing the “link and pin” coupler, a major cause of injuries to railroad workers
1869 • George Westinghouse, an inventive Civil War veteran, develops the straight air brake, and patents the first automatic air brake three years later

1870 • 53,000 miles of railroad in the United States
1871 • Federal government discontinues its Railroad Land Grant policy
1872 • Winona and St. Peter (C&NW) extends one mile of line to Headquarters (Gary), Dakota Territory • satisfying its land grant in Dakota
• Dakota Southern Railroad becomes the first railroad to operate in regular service in current-day South Dakota, running from Vermillion, Dakota Territory, to Sioux City, Iowa
1873 • Dakota Southern completed to Yankton
• Winona and St. Peter extends to Lake Kaneska (Watertown)
• Jay Cooke & Co brokerage fails because of problems financing the Northern Pacific Railway. Failure of Cooke and 37 additional brokerages and banks precipitates the Panic of 1873. New York Stock Exchange closed for 10 days. Five-year depression follows.
1874 • Lt. Colonel George Custer’s military expedition to the Black Hills confirms presence of gold near present-day Custer City
1876 • Gold discovery in Deadwood Gulch
    • The Battle of the Little Bighorn in Montana Territory
    • “My God, It talks!” Emperor Dom Pedro of Brazil exclaimed after putting Alexander Graham Bell’s strange telephone device to his ear, and then quickly dropping it, at the 1876 Philadelphia Centennial Exhibition

1877 • Black Hills region annexed into Dakota Territory

1878 • Without federal assistance, railroad builder James J. Hill commences the expansion of his St. Paul, Minneapolis and Manitoba (later the Great Northern Railway) across northern Dakota toward the Pacific Northwest

1878 • Homestake Mining Company puts the J.B. Haggin locomotive into service • the first railroad steam locomotive in the Black Hills
    • Milwaukee reaches Big Stone City
    • Worthington and Sioux Falls (C&NW) extended to Salem

1880 • 93,000 miles of railroad in the United States
    • Dakota Central (C&NW) reaches Huron and Pierre
    • Milwaukee builds from Big Stone to Milbank and Webster
    • Milwaukee rails reach Madison, Mitchell and Chamberlain

1881 • Two lines of the Milwaukee reach Aberdeen from Webster and Mitchell

1882 • C&NW builds connecting route from Hawarden, Iowa through Beresford, Centerville, Parker, and Salem to Iroquois to meet Dakota Central mainline

1883 • Transcontinental Northern Pacific Railway is completed at Gold Creek, Montana
    • General Time Convention, a railroad trade group, replaces local time with standard time in the United States and Canada; four standard time zones go into effect.
    • Milwaukee extends west from Aberdeen to Ipswich

1884 • Charles Dow creates stock average (precursor to Dow Jones Industrial Average) which includes nine railroad issues: Chicago, Milwaukee & St Paul, Chicago & North Western, Delaware Lackawanna & Western, Lake Shore, Louisville & Nashville, Missouri Pacific, New York Central, Northern Pacific, and Union Pacific
    • Minneapolis and St. Louis completed to Watertown
    • C&NW builds branch from Centerville to Yankton
    • Burlington, Cedar Rapids and Northern (Rock Island) extends from Pipestone, Minnesota to Watertown
1885 • Fremont, Elkhorn and Missouri Valley (C&NW) completed to Buffalo Gap, Dakota Territory • the first standard-gauge railroad to the Black Hills region
1886 • Fremont, Elkhorn and Missouri Valley completed from Buffalo Gap to Hermosa and Rapid City
1886 • Dakota Central builds branch from Redfield to Faulkton
• Milwaukee builds from Ipswich to Bowdle
• Burlington, Cedar Rapids and Northern (Rock Island) reaches Sioux Falls
1886 • Dakota Central builds branch from Redfield to Faulkton
• Milwaukee builds from Ipswich to Bowdle
• Burlington, Cedar Rapids and Northern (Rock Island) reaches Sioux Falls
1887 • Congress passes the Interstate Commerce Act. The legislation establishes the ICC to control aspects of the railroad industry, the first in America to be subject to regulation by a federal government agency
• St. Paul, Minneapolis and Manitoba (GN) builds from Benson, Minnesota to Watertown
• The Chicago, St. Paul, Minneapolis and Omaha (C&NW) extended from Salem to Mitchell
• Illinois Central arrives in Sioux Falls
1888 • Nikola Tesla patents the first alternating-current electric motor. Tesla’s motor, purchased by the Westinghouse Company, paves the way for the manufacture of automobiles
• Construction begins on the narrow-gauge Deadwood Central Railway between Deadwood and Lead
• St. Paul, Minneapolis and Manitoba (GN) builds from Watertown to Huron
1889 • South Dakota becomes the 40th State
• The Grand Island and Wyoming Central Railroad (CB&Q) reaches Edgemont
• St. Paul, Minneapolis and Manitoba (GN) line completed to Aberdeen
1890 • Fremont, Elkhorn and Missouri Valley reaches Belle Fourche, Deadwood, and Hot Springs; Black Hills and Fort Pierre reaches Piedmont
• Wounded Knee Massacre, Pine Ridge Reservation
1891 • Grand Island and Wyoming Central reaches Deadwood and Hot Springs
• Grand Island and Wyoming Central (CB&Q) reaches Custer, Hill City, and Mystic
• 164,000 miles of railroad in the United States
1893 • After 12 years of trying to improve on the efficiency of the steam engine, Rudolf Diesel debuts his internal-combustion engine
• Grand Island and Wyoming Central reaches Spearfish
• Great Northern Railway drives its last spike on its transcontinental line at Scenic, Washington; builds line from Sioux Falls to Yankton
• Federal Railway Safety Appliances Act instituted mandatory requirements for automatic air brake systems, automatic couplers, and specifications for safety appliances in interstate rail traffic
• “Yet there isn’t a train I’d rather take, no matter where it’s going.” Edna St. Vincent Millay (from “Travel”)
1897 • Ransom E. Olds receives a patent for a horseless carriage
1900 • 193,000 miles of railroad in the United States
• Illinois Central Railroad engineer Casey Jones rode the “Cannonball” into immortality, at Vaughn, Mississippi
• Milwaukee builds from Bowdle to the Missouri River at Evarts. Evarts quickly became a major shipping point for cattle from western South Dakota
1901 • Minneapolis, St. Paul and Sault Saint Marie (Soo Line) builds branch to Pollock
1902 • CB&Q converts the former Deadwood Central Line between Deadwood and Lead for electric trolley service
• C&NW extends “Rosebud” route to Bonesteel

Unloading an iced refrigerator car in Sioux Falls, 1890s

Pine Ridge Reservation, 1890s
1903 • Henry Ford founds the Ford Motor Company
• First coast-to-coast crossing of the North American continent by car
• 65 days from San Francisco to New York
• Orville and Wilbur Wright make their first airplane flight in Kitty Hawk, North Carolina

“If God had meant for us to fly, he wouldn’t have given us the railways.” Unknown

• Fremont, Elkhorn and Missouri Valley is merged into the Chicago and North Western Railroad
• Milwaukee builds from Woonsocket to Wessington Springs

1904 • Grand Island and Wyoming Central, Burlington and Missouri River, Black Hills and Fort Pierre, and Deadwood Central Railroads all formally merged into the Chicago, Burlington and Quincy (CB&Q)
• Pierre wins bitter state capital election campaign that pitted East River against West River South Dakota. Both the C&NW, which served Pierre, and the Milwaukee, which served Mitchell, transported large numbers of visitors to the cities at greatly reduced rates, or on free passes
• South Dakota Central builds from Sioux Falls to Colton

1906 • Missouri River and Northwestern Railroad (Crouch Line) is completed from Rapid City to Mystic
• Milwaukee began construction of its Pacific Coast extension from the new town of Mobridge
• Minneapolis and St. Louis completed from Watertown to Aberdeen and Leola

1907 • C&NW and Milwaukee lines reach Rapid City from Pierre and Chamberlain, respectively
• South Dakota Central completed as a through route from Sioux Falls to Watertown
• Minneapolis and St. Louis completed from Conde to LeBeau

1908 • Billy Durant incorporates General Motors. Within days, GM buys Buick, and later Oldsmobile and Cadillac
• Henry Ford introduces his first Model T, a car that will achieve unparalleled popularity and change the automotive industry, American life, and railroading forever

1909 • Milwaukee completes construction of its Pacific Coast route. The extension puts South Dakota on a transcontinental rail line. The Olympian and The Columbian passenger trains are introduced to operate on a 72-hour service between Chicago, Mobridge, and Seattle

1910 • 240,000 miles of railroad in the United States
• New capitol building in Pierre was opened for use
• Milwaukee builds branch lines to Isabel, and from Trail City to Faith

1911 • C&NW’s “Rosebud Line” extended from Colome to Winner

1913 • First commercially successful internal combustion engine locomotive in the U.S. built by General Electric

1914 • Soo Line branch completed from Fairmount, North Dakota to Veblen and Grenville

1916 • National rail mileage peaks at just over 254,000 miles
• South Dakota Central purchased by GN

1918 • The Standard Time Act is passed, instituting the standard time zones that have been in use in America since 1883. The act also implements daylight saving time, in an effort to conserve resources for the war effort

1918 • C&NW and CB&Q begin to abandon narrow gauge lines in the northern Black Hills
1920 • Passenger rail travel reaches its all-time high, with 1.2 million passengers boarding 9,000 inter-city trains and racking up 47 million passenger miles every day

1923 • The Electro-Motive Engineering Corporation begins building gas-electric railcars in Cleveland, Ohio

1924 • M&StL abandons Akaska to LeBeau line

1925 • Milwaukee files for reorganization; re-emerged in 1928 as the Chicago, Milwaukee, St. Paul and Pacific Railroad

1926 • Commercial airlines carry 5,800 passengers nationwide

1927 • Designers produce prototypes of air-conditioned passenger cars
• Construction of Mount Rushmore and Rapid City’s Alex Johnson Hotel begin
• Milwaukee Road introduces Chicago to Sioux Falls/Rapid City train service named The Sioux

1928 • Wyoming and Missouri River Railroad abandoned from Belle Fourche to Aladdin, Wyoming

1929 • C&NW extends line from Winner to Wood

1930 • Last of the northern Black Hills narrow gauge lines (CB&Q) abandoned from Piedmont to Lead
• Milwaukee abandons its Springfield to Running Water line

1934 • Union Pacific M-10000 is dedicated in February. This 3-car all-aluminum articulated train was the first streamliner in the U.S.
• CB&Q’s Zephyr is dedicated in April. On May 26, this 3-car articulated train made a record breaking run from Denver to Chicago, 1016 miles, at an average speed of 77.6 mph and a top speed of 112.5 mph
• CB&Q abandons its flood-ravaged line through Spearfish Canyon

1939 • Warren-Lamb Lumber Railroad abandoned southwest of Rapid City

1940 • 233,000 miles of railroad in the United States
• Milwaukee introduces The Midwest Hiawatha streamlined passenger service between Chicago and Omaha, Sioux City, and Sioux Falls

1946 • Railroads handle two-thirds of the nation’s commercial passenger traffic. Yet the railroad industry fails to revitalize itself after the war, even though it invests millions in new passenger equipment

1947 • Milwaukee’s streamlined Olympian Hiawatha began service from Chicago, Aberdeen, Mobridge, and on to Seattle

1948 • Rapid City, Black Hills and Western Railroad (Crouch Line) abandoned from Rapid City to Mystic

1948 • First American Freedom Train visits Rapid City, Pierre, and Aberdeen

1949 • The infamous “Blizzard of ’49” cripples most of the Northern Plains for weeks beginning in early January
• Number of airline passengers in the United States reaches 16.7 million
• Last passenger train operates on CB&Q from Deadwood and Hill City to Edgemont

1950 • C&NW debuts the streamlined Dakota 400 between Chicago and Huron (extended to Rapid City in 1955)
• U.S. railroad mileage • 224,000 miles

1951 • Last Milwaukee Road Sioux passenger train operates between Rapid City and Chicago

1952 • To service Americans’ growing love for car travel, Holiday Inn opens the nation’s first motel chain. Americans are increasingly taking car vacations; the chain is an instant success

1953 • Rock Island abandons service to Watertown

1954 • Chicago, St. Paul, Minneapolis and Omaha formally merged into C&NW

1956 • Federal Aid Highway Act authorizes the construction of an interstate highway system of more than 40,000 miles. Railroads and public transportation systems remain unsubsidized.
1957 • For the first time, air travel boasts more passengers than rail travel, and airlines introduce jet airplanes
• Black Hills Central Railroad’s steam-powered tourist passenger trains begin operation on the Burlington’s Hill City to Keystone line

1958 • ICC issues a report stating that the passenger train is becoming obsolete, and will “in all probability take its place in the transportation museum along with the stagecoach, the sidewheeler, and the steam locomotive.”

1960 • Last Chicago and North Western Dakota 400 passenger train leaves Rapid City for Chicago
• Minneapolis and St. Louis Railway merged into the C&NW

1965 • Last Milwaukee Road Arrow passenger train leaves Sioux Falls for Chicago

1969 • Last Milwaukee passenger train operates from Aberdeen to Minneapolis in April
• Last CB&Q passenger train operates through Newcastle and Edgemont in August

1970 • CB&Q, GN, Northern Pacific, and the Spokane, Portland and Seattle Railroads are merged to form the Burlington Northern Railroad (BN)
• Congress passes the Rail Passenger Service Act creating Amtrak, the national network of intercity trains; no routes established in SD

1972 • Flooding destroys last mile of BN/Black Hills Central line to Keystone • line is rebuilt to a mile west of Keystone
• Rock Island abandons service to Sioux Falls

1975 • Second American Freedom Train visits Sioux Falls

1977 • Milwaukee files for bankruptcy

1979 • Milwaukee abandons its Woonsocket to Wessington Springs, Isabel and Faith lines

1980 • President Jimmy Carter signs The Staggers Act. The legislation triggers massive reforms by allowing railroads to function competitively, placing increased reliance on the marketplace and not on total government regulation
• Milwaukee abandons service on over one thousand miles of track in South Dakota, and ends services west of Miles City, Montana, to the Pacific Coast. The abandonment idles more than half of South Dakota’s total railroad mileage
• Illinois Central Gulf abandons service to Sioux Falls

1981 • Governor Bill Janklow calls a special session of the state legislature to deal with the Milwaukee abandonment. Much of the in-state Milwaukee track purchased by State and forms an essential state core rail system with most track leased to the Burlington Northern Railroad for operation
• The D & I Railroad is incorporated by L. G. Everist Inc., in Sioux Falls, to operate part of the ex-Milwaukee between Dell Rapids and Sioux City

Burlington Northern passes Crazy Horse Memorial, 1982

Dakota Southern grain train at Draper, 2002
1982 • South Dakota purchases former Milwaukee line from Ortonville to Miles City, Montana. BN assumes operation of the line under a lease-purchase agreement
• Dakota Rail (later Sisseton Southern, then Sisseton-Milbank) resumes operations on the ex-Milwaukee Milbank to Sisseton line

1983 • BN abandons High Line north from Custer to Hill City, Deadwood, and Lead

1986 • C&NW sells track from Rapid City, Pierre, Huron, and Brookings to Winona, Minnesota, to the L. B. Foster Company; new operating company renamed the Dakota, Minnesota & Eastern Railroad (DM&E)

1987 • Dakota Southern Railway takes over operation of former Milwaukee line from Mitchell to Chamberlain

1988 • C&NW abandons service into Sioux Falls
• Dakota Southern Railway begins operation of Chamberlain to Kadoka line

1989 • Ellis and Eastern assumes operation of former C&NW at Sioux Falls

1991 • Ownership of the SD-owned Ortonville, Minnesota, Aberdeen, Mobridge, to Terry, Montana, main line was transferred to the BN

1995 • C&NW merged into the Union Pacific Railroad

1996 • Union Pacific line from Chadron to Rapid City and Belle Fourche sold to the DM&E

1998 • Dedication of the entire 106-mile George S. Mickelson Trail from Edgemont to Deadwood on former CB&Q High Line grade

2001 • Black Hills Central rebuilds line into Keystone/resumes tourist passenger service into Keystone after 29-year absence

2005 • SD sells the Core System (Aberdeen to Mitchell, Mitchell to Canton, Canton to Sioux Falls, and Mitchell to Sioux City) to BNSF

2007 • U.S. railroad mileage -140,695 miles

2008 • Canadian Pacific Railway given formal approval by Surface Transportation Board to purchase and operate DM&E

• “This is all happening because my father didn’t buy me a train set as a kid.” Warren Buffett, investor, on his company’s $26 billion purchase of BNSF in 2009

2009 • Dakota Southern Railroad sold to new owners

2010 • Amtrak serves passengers at more than 500 destinations in 46 states on 21,000 miles of rail lines, none in South Dakota

2014 • Since 1872, 4,420.5 miles of railroad have been constructed in South Dakota. Beginning in 1909, rail abandonments reduced the maximum system to today’s 1,839.5 miles of operating rail lines in South Dakota
Railroad Abbreviations and Names Common to South Dakota

BH&FtP – Black Hills and Fort Pierre (1881-1904)
BNSF – Burlington Northern Santa Fe (1995-current)
CP – Canadian Pacific (1881-current)
C&NW – Chicago and North Western (1848-1995)
CB&Q – Chicago, Burlington and Quincy (1850-1970)
CM&StP – Chicago, Milwaukee and St. Paul (1849-1927)
CMStP&P – Chicago, Milwaukee, St. Paul and Pacific (1927-1986)
D&I – Dakota and Iowa (1981-current)
DM&E – Dakota Minnesota and Eastern (1986-current/owned by CP)
DS – Dakota Southern Railroad (1872-1881)
DS – Dakota Southern Railway (1987-current)
DC – Deadwood Central (1888-1904)
EE – Ellis and Eastern (1989-current)
GN – Great Northern (1893-1970)
IC – Illinois Central (1848-1996)
M&StL – Minneapolis and St. Louis (1888-1960)
MStP&SStM – Minneapolis, St. Paul and Sault Saint Marie (Soo Line (1888-current/owned by CP)
RCBH&W – Rapid City, Black Hills and Western (1893-1948)
SDC – South Dakota Central (1906-1916)
SM – Sisseton Milbank (1990-current)
UP – Union Pacific (1862-current)
Suggested Reading


Steps to Learning Morse Code

1. **Listen carefully to slow morse code recordings.**
   - What you’re listening for is a combination of dots and dashes (also referred to as dits and dahs).
   - A dit is a short beep
   - A dah is a longer beep (three times longer)
   - Every letter is separated by a short pause, and every word is separated by a longer pause (three times longer).
   - You can search or shop for practice recordings, or use a shortwave receiver to listen to the real thing.
   - Never count dots and dashes, learn the sound of the letter.
   - This is the way to learn Morse as a language, 15-25 words per minute or more.

2. **Refer to a copy of the Morse Code alphabet.** You can use a basic chart match up of what you heard to the letters in the alphabet. What does it say? Were you correct?
   - Some people find it easier to learn by writing down the letter with dots/periods and dashes as they are listening to the message, and comparing it to a Morse Code chart.
   - This creates an additional step that will only slow you down in learning Morse code. Do whatever feels more comfortable for you.

3. **Sound it out.**
   - Practice translating basic words and sentences into Morse code. In the beginning, you can write it down, then sound it out, but eventually you’ll need to go straight to sounding it out. For example, the word “cat”.
     Write it down:   --.  .-  -
     then transmit the word (you can use the buttons on a mobile phone, or beep vocally -- the latter will probably help your mind pick up the code faster).
   - To pronounce Morse Code, dit is pronounced di with a short i sound and a silent t.
   - Dah is pronounced with a short a sound. So cat is pronounced dah-di-dah-di di-dah dah.
   - Make a list of short words and phrases (your name, Time for lunch. The cat is black. The door is open) and try to transmit the content in Morse code without writing anything down. Record yourself and play it back later to see if you were correct!
   - Be conscious of your spacing. Each letter needs to be separated by a space that's the same duration as a dah (three times the duration of a dit).
   - Each word needs to be separated by a space that lasts about seven times the duration of a dit. The better your spacing, the easier your code will be to understand.

4. **Start with the easiest letters first.**
   - A single dah is a “T”
   - A single dit is an “E”
   - A dah-dah is an “M”
   - A dit-dit is an “I”
   - Memorize the letters for 3 and 4 dits and dahs in a row. Once you’ve got those down, start memorizing the combinations: dit-dah, dit-dah-dah, dit-dah-dah-dah, and so on.
   - Leave the more complex combinations for last.

5. **Make associations to remember the sounds and words.**
   - For every letter, think of a memorable “sound alike”. Here’s an example: The letter “C” is dah-dit-dah-dit (long short long short).

6. **Have fun with it!**
   - Want to get your friends into it? Learn how to blink code looking in a mirror or with a friend. Find a way to do it in Morse code, and you’ll learn it much faster.

Adapted from http://www.wikihow.com/Learn-Morse-Code
Some Railroad Slang Terms

Ambulance: A caboose
Bake a Cake: To build up steam
Banjo: A fireman’s shovel
Boomer: Transient railroad worker
Buggy: Observation car
Bull: Railroad policeman
Crowbar Hotels: Jail
Crummy: Caboose
Diamonds: Coal
Doubleheader: Train with two engines
Flip: To board a moving train
Fresh Fish: A new hand
Gaffer: A section boss
Gandy Dancer: Section worker
Gasket: A doughnut
Gay Cat: A hobo willing to work
GrassWagon: A tourist car
Grease the Pig: Oil the engine
Gum Shoe: Railroad detective
Hasher: A waitress
Hog: Railroad engine
Hogger: Engineer
Hotbox Dick: A car inspector
Hotshot: A fast train
Jailhouse Spuds: Waffled potatoes
Jerkwater: Small town or local train
Jerry Gang: A section crew
Jungle: Hobo camp
Junk File: A worn out locomotive
Keester: A suitcase or trunk
Kettle: A small locomotive
Lamb’s Tongue: A fifty cent tip
Lizard Scorcher: A cook
Make-up: Assemble cars into a train
Mountain Pay: Overtime
Mud Chicken: A surveyor
Mule: A brakeman
Night Owl: A late passenger train
Nosebag: A lunch bucket or bag

Parlor Boy: A flagman
Pearl Diver: A dishwasher
Pot Walloper: Dishwasher
Pussyfooter: Railroad policeman
Rail Head: End of a railroad line
Rat: A freight car
Rattler: A fast freight train
Red Eye: Stop signal
Redball: Fast freight train
Rintail: A hobo
Reefer: Refrigerator car
Roughneck: A brakeman
Rubberneck Car: Observation car
Saw ‘er Off: To cut a car off a train
Shack: A brakeman
Shiny Pants: A railway clerk
Shoofly: A temporary track
Shuffle: To switch cars
Silk Hat: A railway official
Sinker: Doughnut
Skipper: Engineer
Snoozer: A Pullman car
Soup: Water
Spur: A dead end track
Straw Boss: Section gang foreman
Swellhead: Engineer or Conductor
Tallowpot: Fireman
Tin Can: A buffet car
Tin Hat: A railway official
Toothpick: A railroad tie
Torpedoes: Beans
Ukelele: A short-handled shovel
Whiskers: Seniority
Yard Geese: Switchman
Yard Goat: Yard switch engine