

Railroading



For over a century and a half, rail transportation has played a major role in the growth and development of our country. Freight carriers, Amtrak, commuter railroads, subways and light-rail operations are all a part of this vast industry. Many people find model railroading to be an enjoyable hobby. Railroad life is celebrated in story and song. Rail museums make the history of railroading come alive. With recent technological advances, the industry continues to grow and change. This interest project will enable you to explore railroading past, present and future as a career and as a hobby.

Skill Builders

The starred activity is required.

***1** Explain six rules of safety to use aboard trains; on platforms; at crossings; and around bridges, yards, and tunnels. Describe an emergency way to signal a train to stop.

2 Rail services vary from place to place. What freight and passenger railroads serve your area? Does your area have Amtrak service, commuter railroads, subways or light rail service? Make an inventory of what's in your area.

3 Switches and signals determine how and where a train may be run. Show your understanding of switches and signaling by doing the following:

- ◆ Show two basic signals by color or configuration.
- ◆ Explain the meaning of five whistle signals.
- ◆ Be able to "read the iron" at switches.

4 Plan and take a rail trip of at least 25 miles. Buy your own ticket. Read timetables and footnotes correctly.

5 Railroads have their own language, both technical terms and slang. Sometimes the same word or phrase can mean two different things on two different railroads! Find out the jargon and slang terms used on railroads in your area.

6 Railroading is governed by many

state, federal, and local laws and agencies. Find out about the laws and agencies that govern railroading in your area.

Technology

1 Show your knowledge of equipment by doing the following:

- ◆ Explain how diesel and electric locomotives develop power.
- ◆ Identify by model or picture at least six different types of rail cars.
- ◆ Be able to give a general description of the automatic air brake system.

2 Visit a shop or repair facility. Find out how equipment is repaired, maintained, and if necessary rebuilt.

3 Visit a dispatcher's office or command center. Find out how the dispatcher communicates with trains and oversees "the big picture".

4 Explain the differences and similarities between the different types of passenger rail services (intercity, commuter rail, subway, and light rail).

5 Freight trains carry all sorts of goods and commodities.

- ◆ Name three types of modern freight trains. Explain why they are more efficient than mixed freights.
- ◆ Explain the use and function of the "EOTD" or "FRED" now generally used in place of cabooses.

6 Interview someone who has been involved in the railroad industry for more than 20 years. What changes have they seen - things that were commonplace "then" and

unheard of “now”, or vice versa?
What improvements in safety or
technology do they see in the future?

7 Model railroading is a fascinating hobby. Explore the modeler’s world by doing two of the following:

- ◆ Name the scale and track gauges for four different model railroad gauges. Show the correct way to clean and lubricate model railroad equipment.
- ◆ Draw to scale the layout of your own model railroad or one that could be built in your home. Have a point-to-point or loop with different routings. Include a terminal, a turnaround, or a yard and a siding.
- ◆ Alone or with others, build a model railroad to include ballast and scenery. Make connections from the power supply to the track and to any accessories.
- ◆ Build a scale model of a locomotive (powered or not) or two cars. Kits may be used.
- ◆ Draw scale plans and build two accessories.

Service Projects

1 Plan an activity that will help younger Scouts learn about railroading. You might display a model railroad, put on a play about railroads, or tell stories about railroad people.

2 Explore the possibility of providing service to a railroad museum or railroad historical society. Do they need ongoing service or help with special projects? You can help to fill the need by contributing your skills for a specific event or an ongoing project.

3 Women have always been involved in railroading. Do you know any stories that highlight women and trains? Interview women involved in the industry and develop a

booklet or display that focuses on women railroaders.

4 Find out what the “hot topics” are in your area, such as expansion of passenger service, safety of passengers and crews in accidents, transport of hazardous materials, design of new stations and equipment, or abandonment of service. Educate yourself on the topic from several sources, and write a letter to an elected official or newspaper editor expressing your opinion.

5 Songs and stories about railroads and railroad people have been with us almost from the beginning. Start a collection of railroad songs and stories OR read and review some railroad-related fiction OR write your own railroad song or story.

OR

The visual arts (painting, photography, video, art needlework, sculpture, etc.) are another area where railroads have been popular. Design your own activity linking railroads and the visual arts.

Share your creation with others.

Career Exploration

1 A railroad is far more than just trains on tracks. Many different jobs in different departments make it possible for a railroad to operate. Find out about the different departments on a railroad in your area.

2 Start a career file on railroad jobs. Investigate at least five fields in different departments.

3 Shadow a pro. Spend at least one day with a railroader, or

invite a railroader to tell you about their career if you are unable to visit their job site.

4 Visit a museum or an operating model railroad. Based on your visit, select at least one topic that interested you and explore it further on your own.

OR

View a video on railroad operations. Pick a topic your chosen video covers and explore it further on your own.

And Beyond

GO FURTHER DOWN THE ROAD by exploring these related interest projects:

- ◆ Travel
- ◆ Math, Maps, and More
- ◆ The Lure of Language
- ◆ Law and Order
- ◆ Inventions and Inquiry
- ◆ Computers in Everyday Life
- ◆ Architecture and Environmental Design
- ◆ Build a Better Future
- ◆ Generations Hand in Hand
- ◆ Digging Through the Past
- ◆ Women Through Time
- ◆ Folk Arts
- ◆ On A High Note
- ◆ Once Upon a Story
- ◆ Writing for Real
- ◆ From A to V: Audiovisual Production
- ◆ Photography

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