Turning on the lights in our homes, watching TV, working on computers, our days are filled with activities that use electricity. How this electricity is made and where it all starts rarely crosses our minds. Coal is a fossil fuel created from decomposition of organic material subject to geologic heat and pressure over millions of years. Because coal is created over millions of years, it is considered a non-renewable resource. It is estimated that there are over 861 billion tons of proven coal reserves worldwide. This means that there is enough coal to last around 112 years at current rates of production. The biggest reserves are in the U.S., Russia, China and India. The world consumption of coal is 5,800,000,000 tons annually, 75% is used to create electricity. Being a non-renewable resource, we must closely monitor our use of coal. To make coal reserves last longer, other energy sources must be explored.

Getting coal from the earth is a dangerous, dirty and dark job. Coal cars take miners thousands of feet into the mine. Some mines have been mined for over a century. It all begins with a dynamite blast that breaks up the rock. Before dynamite, miners would start a fire at the face of the mine and keep the fire going for days. When the rock face was hot, cold water was poured on the mine face breaking up the rocks. The rock was removed by hand. Today after the dynamite blast, a machine called a “mucker” similar to a bulldozer, puts the rocks in coal cars which remove the rock from the mine. After the rock is removed, tracks are laid for the coal cars.

Creating a coal chute involves a high powered jackhammer to drill holes in the mine rock walls. The jackhammer creates holes for dynamite in about four minutes. Dynamite is placed in the hole to blast a place for the coal chute. Before the technology of the jackhammer, one miner would hold a long metal rod and slowly turn the rod while another miner hit the rod creating the hole. When the coal chute is created, screeners break up large coal pieces so it can travel down the chute into the coal cars. It can take two to four weeks for a coal vein to be worked out. This process is repeated over and over, becoming the job of a coal miner.
Illinois has a long history of coal mining. The first discovery of coal in North America was in Illinois by Marquette and Joliet.4 In 1673, they observed and recorded coal outcrops along the Illinois River.4 The outcropped coal was mined in the 1800s and used in blacksmithing and other domestic uses.4 It took longer for underground mining to start, but by 1848, Belleville became home to the first underground mining operation.4 Railroads flourished in Illinois during the Civil War, this helped coal mining in southern Illinois to boom. The first coal mines were tunnels widened into rooms that were mined by hand, this method is called “room and pillar”.4 Coal has been mined in 73 counties in Illinois.5 More than 4,500 coal mines have operated since commercial mining began, today, fewer than 50 are currently active.5

Mining was booming, people wanted coal for fuel. The goal was to mine as much coal as possible with little thought of the impact this would have on the future. Because these mines were not close to civilization, the long-term stability of the mines was not a concern.4 When the mines were “worked-out”, the miners left the ground unstable with the possibility of the land sinking. The Illinois State Geological Survey estimates that approximately 201,000 acres of urban and built up lands in Illinois are close to mines.4 This affects an estimated 330,000 housing units making them vulnerable to sinking of the ground surface.4

The worst mining disaster in Illinois history occurred in 1909 at the Cherry Mine in Cherry, Illinois.5 The mine produced 300,000 tons of coal a year.5 On November 13, 1909, 490 miners were 500 feet underground when a load of hay in the mine caught fire from a torch.5 The fire and poisonous gasses left 259 men and boys dead. Mining disasters are a risk every miner takes every day they are on the job.

The second worst mine disaster took place at the New Orient Coal Mine near West Frankfort in Southern Illinois.5 Sparks from electrical equipment touched off a pocket of methane gas, killing 119 miners.5 This resulted in the federal Coal Mining Safety Act of 1952, updated safety laws and provided more stringent inspections of mines.5

Places to go & Primary Sources to See

Moweaqua Coal Mine Museum  Although coal mining in Moweaqua dates back to 1891, the Moweaqua Coal Corporation was created by a group of local businessmen in 1932 in an effort to keep a coal mine operating in the town. The Moweaqua Coal Mine Museum is located 20 miles south of Decatur, Illinois. It houses a number of local mining artifacts from the Moweaqua Coal Mine, which ceased operation in 1935. The most remembered fact about the Moweaqua Coal Mine is the mine disaster; however pictures, newspaper clippings, coal mining tools and other mine related materials are also on display. There is no charge for the museum, donations are accepted. http://www.illinoislaborhistory.org/moweaqua-museum.html
Coal mining is a tough and dangerous job. The balance between life and death weighs on every miner each time they head into the mine. Their families are affected by the suspense of waiting. When an accident happened, all wives and mothers could do was wait for news on their family members inside the mine. Mining has a dramatic history along with the danger. The Molly Maguires were a secret society that violently confronted mine owners in Pennsylvania and West Virginia between 1862 and 1877, and saw ten men hanged for murder.6

Country singer Loretta Lynn grew up in Kentucky, her father was a coal miner who raised eight children on three dollars a day.6 While working in the coal mines he contracted black lung disease and died.6 It is estimated that more than 100,000 miners have lost their lives in coal mining accidents.6 Over the years there have been significant improvements in coal mining safety but some dangers never go away for the nearly 65,000 people today employed as hourly wage coal miners.6 Coal mining liberates highly combustible methane from the earth and coal dust itself is explosive.6 Explosions and disease are not the only worries, working deep in the earth always exposes miners to cave-ins.6

Despite the dangers, coal mining is considered a good job and in some areas it is the only job. Big coal companies would swoop in and buy all the land around the mines to create “company towns.” They would build houses or shacks that they would rent to miners and their families. The company store was the closest place for families to purchase items they needed. Other stores could mean traveling half a day. Mining companies made money from the coal the miners worked, and also made money off the house the coal miners lived in and the items they rent from the miners homes and profit from items purchased by families at the company store.

Mining wives grew gardens for food and when times got tight, they would take in laundry, clean houses or babysit to earn extra cash. This money was necessary when mining was a seasonal job. In the summer less coal was needed, resulting in mining layoffs. In winter the demand for fuel from coal rose and miners would work long hours. Miners were paid by the ton, this system made it easy for some coal companies to cheat the miners. When the miner’s coal was weighed, they were sometimes told by a dishonest boss there was too much rock in their load, this resulted in a lower paycheck for the miner.

The main job of a miner’s wife was to take care of her husband, cook, clean, and raise the children who would become the next generation of coal miners. Children started working the coal mines during the Industrial Revolution. They started at a young age, picking coal pieces out of the chutes. By the time they were ten or eleven they were working along side their fathers, brothers, uncles and other family members.
**Primary Sources in the Classroom**

**Teacher's Page** [www.loc.gov/teachers](http://www.loc.gov/teachers) The Library of Congress offers classroom materials and professional development to help teachers effectively use primary sources from the Library's vast digital collections in their teaching.

**Collection Connections:** Historical context and ideas for teaching with specific Library of Congress primary source collections. [http://www.loc.gov/teachers/classroommaterials/connections/](http://www.loc.gov/teachers/classroommaterials/connections/)


**American Memory** American Memory provides free and open access through the internet to written and spoken words, sound recordings, still and moving images, prints, maps, and sheet music that documents the American experience. It is a digital record of American history and creativity. These materials from the collections of the Library of Congress and other institutions, chronicle historical events, people, places and ideas that continue to shape America, serving the public as a resource for education and lifelong learning. [Memory.loc.gov/ammem/index.html](http://memory.loc.gov/ammem/index.html)

**Photographs from the Chicago Daily News, 1902-1933** [http://memory.loc.gov/ammem/ndlpcoop/ichihtml/cdnhome.html](http://memory.loc.gov/ammem/ndlpcoop/ichihtml/cdnhome.html) This collection comprises over 55,000 images of urban life captured on glass plate negatives between 1902 and 1933 by photographers employed by the Chicago Daily News, then one of Chicago's leading newspapers. The photographs illustrate the enormous variety of topics and events covered in the newspaper, although only about twenty percent of the images in the collection were published in the newspaper. Most of the photographs were taken in Chicago, Illinois, or in nearby towns, parks, or athletic fields. Images from the Cherry Mine disaster are found in this collection.

**History of the American West 1860-1920: Photographs from the Collection of the Denver Public Library** [http://memory.loc.gov/ammem/award97/codhtml/hawphome.html](http://memory.loc.gov/ammem/award97/codhtml/hawphome.html) Over 30,000 photographs, drawn from the holdings of the Western History and Genealogy Department at Denver Public Library, illuminate many aspects of the history of the American West. Most of the photographs were taken between 1860 and 1920. They illustrate Colorado towns and landscape, document the place of mining in the history of Colorado and the West, and show the lives of Native Americans from more than forty tribes living west of the Mississippi River.

**Built in America** [http://memory.loc.gov/ammem/collections/habs_haer/index.html](http://memory.loc.gov/ammem/collections/habs_haer/index.html) The Historic American Buildings Survey (HABS) and the Historic American Engineering Record (HAER) collections are among the largest and most heavily used in the Prints and Photographs Division of the Library of Congress. Since 2000, documentation from the Historic American Landscapes Survey (HALS) has been added to the holdings. The collections document achievements in architecture, engineering, and design in the United States and its territories through a comprehensive range of building types and engineering technologies. Over 200 images of coal mines are featured in this collection.
Tending the Commons: Folklife and Landscape in Southern West Virginia [link] Tending the Commons: Folklife and Landscape in Southern West Virginia incorporates 718 excerpts from original sound recordings, 1,256 photographs, and 10 manuscripts from the American Folklife Center’s Coal River Folklife Project (1992-99) documenting traditional uses of the mountains in Southern West Virginia’s Big Coal River Valley. This collection focuses on the coal miner and his life and job.

America from the Great Depression to World War II: Photographs from the FSA-OWI, 1935-1945 [link] The images in the Farm Security Administration-Office of War Information Collection are among the most famous documentary photographs ever produced. Created by a group of U.S. government photographers, the images show Americans in every part of the nation. In the early years, the project emphasized rural life and the negative impact of the Great Depression, farm mechanization, and the Dust Bowl. In later years, the photographers turned their attention to the mobilization effort for World War II. The core of the collection consists of about 164,000 black-and-white photographs. This release provides access to over 160,000 of these images; future additions will expand the black-and-white offering. The FSA-OWI photographers also produced about 1600 color photographs during the latter days of the project.

Prints and Photographs The collection for the Prints and Photographs Division include photographs, fine and popular prints and drawings, posters, architectural and engineering drawings. [link]

Historic American Buildings Survey/Historic American Engineering Record/Historic American Landscape Survey [link] A search for Coal Mining will results in images of company houses, coal mines and coal mining equipment.

Groups of Images [link] This collection holds images of coal miners, their families and mining towns.

National Child Labor Committee Collection [link] Trapper boys, greasers and nippers are just some of the jobs held by boys in the coal mines.

Farm Security Information/Office of War Information Black and White Negatives [link] Company stores and houses are found in this collection.

Miscellaneous Items in High Demand [link] Coal mines and miners are found in this collection using the search word “coal mining”.

Today in History Each day an event from American history is illustrated by digitized items from the Library of Congress American Memory historic collections.

September 2, 1885: The Rock Springs Massacre [link] On September 2, 1885, a mob of white coal miners attacked their Chinese co-workers (both groups were employed by the Union Pacific Coal Company) in Rock Springs, Wyoming Territory, over a dispute on who had the right to work in a particularly lucrative area of the mine. The violence occurred after Chinese workers refused to participate in a strike for higher wages planned by the American miners. Twenty-eight Chinese were killed and fifteen were wounded; seventy-nine homes were set ablaze. The bodies of many of the dead and wounded were thrown into the flames. Several hundred Chinese workers were chased out of town and fled to the surrounding hills. Property damage was estimated at $150,000.
Prints and Photographs

Library of Congress
Miner breaking coal off the face, Old Ben number eight. West Frankfort, Illinois

Library of Congress
Dinner 2-1/2 miles underground-miners with safety lamp, in a soft coal mine, Illinois

Library of Congress
Refuse heap behind company houses, Kempton, West Virginia

Library of Congress
Coal miner’s family, Pursglove, West Virginia

Library of Congress
National Child Labor Committee, No. 191 Frank, a Miner Boy, going home. About 14 years old; has worked in the mine helping father pick and load for three years: was in hospital one year, when his leg had been crushed by coal car

Library of Congress
Coal mine

Library of Congress
DETAIL VIEW OF COKE OVENS-Kaymoor Coal Mine, South side of New River, upstream of New River Gorge Bridge, Fayetteville, Fayette County, WV

American Memory

Library of Congress
Photographs from the Chicago Daily News, 1902-1933
Cherry mine disaster, Illinois, coalmine disaster
orphans standing around table.

Library of Congress
Photographs from the Chicago Daily News, 1902-1933
Cherry mine disaster, men looking at the destroyed
top works of the coal mine in Cherry, Illinois, after a fire, with a crowd gathered in the background.

Library of Congress
Photographs from the Chicago Daily News, 1902-1933
Cherry mine disaster, crowd, including women,
gathered around the scaffolding surrounding the main shaft of the St. Paul Coal Company mine after a fire.

Citations


3. Discovery Channel, Dirty Jobs, Season 2, Coal Miner, DVD, accessed 9.3.13

