



Vocabulary Definitions

abandoned mine drainage

acid rain

anthracite: very hard, glossy black coal with a high carbon content; it burns with a low, smokeless flame; sometimes called hard coal

anticline: rock formation in which the layers of coal slope downward in opposite directions from the crest

bank: in coal mining, the top of the pit

barge: flat-bottomed boat for carrying freight on rivers, canals, and other inland waters

beehive coke oven: oven with a domed top used for heating coal to make coke; controlled amounts of air are admitted into the chamber that burn off the impurities; often built into a hillside

bituminous: black coal that burns with a smoky flame and has a low carbon content; sometimes called soft coal

black damp: mine gas that consists of carbon dioxide and nitrogen that is given off by a coal seam during an explosion; it is heavier than air and remains low on the floor of a mine

breaker: the building in which the coal is crushed and separated into different sizes so that it can be prepared for market

breast: the workplace in a mine; called a chamber in an anthracite mine

butty: a laborer who is a fellow miner; often works with a seasoned miner in order to learn the job; an old term from the mines of Great Britain

by-product coke oven: process of making coke by excluding air from the chamber and generating heat by burning the recovered coke gas

cage: iron framework in a coal mine that holds the containers of coal and the men in their passage through the shaft

cannel: thick, oily kind of coal; harder than lignite; it is weak and breakable

car: small, four-wheeled vehicle made of wood or metal for carrying coal

carbon: an element that is found in all living things; a common nonmetallic element

coal: black solid mineral used as a fuel

coaler: a ship or railroad that carries coal; also a person who sells or supplies coal

coal gas: a mixture of gases made up mostly of hydrogen and methane, produced by heating bituminous coal without air; it is used in open hearth furnaces and as a source of compounds such as benzene or ammonia

coal scuttle: pail or other container for carrying coal

coal tar: black sticky substance left after heating bituminous coal without air

coke: a processed form of coal; the basic fuel used in blast furnaces for smelting iron

coke oven battery: a set of ovens that process coal into coke

collier: coal miner; from an old British term; also a ship for carrying coal

colliery: a coal mine with all buildings, supplies, and equipment



compensation: money that is paid to someone who has suffered injury or loss as a result of working in the coal mines

culm: coal refuse and waste

curving: cutting into the coal and the preparation for blasting

deposit: to put down or lay by a natural process; a coal deposit is a layer of coal in the ground

donkey: machine that pushes the railroad cars that transport the raw materials

doorboy: boy who takes care of opening and closing the doors in the gangways

doors: various kinds of doors used to direct the ventilation in a mine

downcast/downcast shaft: shaft or division through which fresh air descends into a mine

drift: water-level entrance into a coal mine

drill: tool used in blasting to prepare a place in the coal for the powder charge

emphysema: the swelling of the lungs that causes breathing difficulties

explosives: chemicals, such as dynamite, that are used for blasting in mines

exports: goods that are sold abroad

feeder: a flow of water in a coal mine

fire damp: known as marsh gas or methane, it is a gas given off by coal seams and hangs high in the mine tunnels; lighter than air, it is highly explosive

fossil fuels: fuels formed when the remains of plants and animals are crushed under layers of sedimentary rock

fuel: a substance burned as a source of heat and power

gangway: passageway in the coal mine; it forms the base from which other parts of the mine are begun

galleries: tunnels that lead off from a mine shaft

geology: science that deals with the structure, composition, and history of the Earth; the structure and composition of the Earth in a particular area

gob piles: slate dumped from coal seams

growler: a miner's lunch container or canteen

hack: heavy kind of pick for breaking stone

head frame: something built over the top opening of a mine used for raising the loaded cars to the surface

hewer: worker with a pick who works at the face of the coal seam; miner who cuts the coal with a pickaxe



igneous rocks: rocks produced by intense heat from the Earth or volcanic action
imports: goods that one country buys from another country

knocker-up: a miner, usually retired, who went from house to house to wake the miners working the early shift

labor costs: wages and the other costs of employing workers and running a business
larry cars: small cars that run on a limited track in the plant that are used to transport ore
lignite: brownish-black coal that is of low quality; the texture of the original wood can be seen; sometimes called brown coal

metamorphic rocks: rocks in which changes in the texture, structure, and mineral composition are caused by processes beneath the surface of the Earth

newton: unit in which force is measured
nipper: an errand boy in the mines

peat: rotted plant matter found in bogs and swamps
pickax/pickaxe: a mining tool that is used for hacking
pillar: a column of coal that is left in the mine tunnel to support the roof
pinkertons: guards hired for protection during labor difficulties
pit: a natural or man-made hole in the ground
pithead: buildings at the top of a mine shaft
pit ponies: horses used to draw coal wagons or tubs underground

red dog: gob pile that has caught on fire
riding: ascending the shaft of a coal mine

safety lamp: a miner's lamp that was invented in the early 1800s; it prevented explosions that were caused by naked flames
scabs: workers who refuse to join a labor union, especially one who works when the union workers are on strike
seam: the technical term for a coal deposit
sediment: solid material such as rocks, gravel, or dirt, deposited by water, ice, or wind
sedimentary rocks: rocks formed by deposits of sediment
sewer rats: the name used by miners to refer to the coal operators
shaft: vertical entrance into a mine



shale: fine-grained rock that has been formed from hardened clay in very thin layers that separate easily

shanty: a crude, flimsily built hut or cabin

shift: one set of workers, or the usual number of consecutive hours from which one set of workers will work

shifter: an underground laborer in a coal mine

slate: dark shale that can be found next to a coal bed; fine-grained rock that splits easily into thin sheets or layers

slope: entrance into a coal mine that has been driven through a sloping coal seam

sprag: foot-long stick of wood that is used for braking a coal car

spragger: worker who uses a sprag to brake the coal cars

strike: to stop work until certain demands are met; refusing to work until demands such as higher pay, safer working conditions, or better hours are changed

strike breaker: person who continues to work during a strike; can take the place of workers on strike; someone who supplies the workers to take the place of striking workers

striker: worker who takes part in a strike

subsidence

switches/sidings: passing places in the subterranean railways of a coal mine, attended by switch keepers

syncline

tamping: packing a drilled hole around a cartridge with fine dirt from the mine floor

thill: the floor or sole of a coal mine

topography: detailed description of the natural and man-made surface features of an area; includes details such as hills, mountains, valleys, lakes, roads, bridges, and others

trapper: small boys in charge of opening or closing the doors that controlled the flow of air in the mine; also called a doorboy

trip: a train of mine cars

union: organization or association formed by workers in order to improve their working conditions and wages

upcast shaft: the shaft of a coal mine through which the return air escapes after ventilating the mine; works like a chimney

ventilate: to let air into; to circulate fresh air

ventilation: the act of ventilating; a system or means of letting in or circulating fresh air



vertical integration: an economic concept in which one corporation controls all of the aspects of production; Carnegie owned the coal fields, coke production, railroads for transport, iron ore resources and production, steel-making production, and all other parts necessary for the steel-making process

winding gear: the part of a machine that hoists and lowers the cage in an underground mine

Wobblies: members of the Industrial Workers of the World



Vocabulary

alloy

babbitt

bank

barge

bars

beehive coke ovens

Bessemer process

billets

blast furnace

bloom

breakout

by-product coke oven

cage

capacity

carbon

carbon steel

cast iron

charcoal

charge/charging

charging machine

chromium

coal

coal tar

coils

coke

coke oven battery

continuous caster

continuous casting

converter/processor

corrosion

curving

donkey

doors

downcast shaft

drill

ductility

electrogalvanizing

electroplating

feeder

ferrous

ferrous alloy

finishing mill

flat-rolled steel

galvanized steel

gauge

gob piles

hack

hardening

heat

hematite

hot metal

ingots

integrated mill

iron

iron carbide

iron ore

ladle

larry cars

limestone



**magnetism
magnetite
malleable
manganese
molten steel
molybdenum**

**newton
nickel**

**open-hearth furnace
ore yard
oxides**

**pascal
pattern
petroleum
phosphorus
pig iron
pinkertons
plate
plate mill**

**raw materials
recycle
red dog
riding
rod**

**scabs
scrap (ferrous)
seamless tube
sheet steel
shift
shifter
silicon
slabs
slab mill
slag
slag cars
slag heaps/slag dumps
specialty steel
specialty tube
stainless steel
steel
strip mill
sulfur
switches/sidings**

**teeming
thill
tin/chromium plating
titanium
ton
torpedo cars
tungsten
turbine**

upcast shaft

**vanadium
vertical integration**

**Wobblies
wrought iron**

yield