



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