

Illustrated Glossary Answer Key

1. Black powder was used to ____ the wall rock in the mine so they could get at the ore minerals more easily. **Blast/ Blow Up**
2. Blasting was usually done at the end of a shift, so the fumes and dust could settle before miners went back into the area the next day. **End**
3. Some bear holes were so _____ that, it is thought, children must have sometimes worked in the mines. **Small**
4. COBBING WAS OFTEN DONE ABOVE GROUND IN OR NEAR A CREEK WITH A HAND-HELD _____. **Hammer**
5. MANY CORNISH PEOPLE IMMIGRATED TO _____ AND EVERY OTHER MINERAL DISTRICT AROUND THE WORLD. **Wisconsin**
6. EARLY LEAD MINERS OFTEN _____ IN THEIR DIGS, WHICH IS ONE REASON WHY THEY WERE CALLED BADGERS. **Lived/ Slept**
7. DOUBLE JACKING REQUIRED _____ THE DRILL A QUARTER
8. Drifts were built to branch off a main _____ to follow an ore vein or a bedding plane. **Shaft**
9. The southern Driftless Area was an important region for ____ lead and zinc. **Mining**
10. A DRILL ROD AND A HAMMER WERE USED BY TWO MEN FOR THE _____ TECHNIQUE. **Double Jacking**
11. The fuse was most likely lit with a miner's _____. **Candle**
12. The town of Shullsburg in the state of _____ had a weekly newspaper named "Pick and Gad." **Wisconsin**
13. This mineral was so important, it's the reason the town in the state of _____ was named Galena. **Illinois**
14. Waste rock would often be used to build a gob wall as _____ for the roof and walls within a mine because plenty of waste rock was all around. **Support**

TURN AFTER EACH HAMMER STRIKE, IN ORDER TO CREATE A HOLE. **Rotating/ Turning**

15. _____ WAS THE MOST IMPORTANT LEAD ORE MINED IN THIS AREA. **Galena**
16. A MINE SHAFT WAS THE _____ INTO THE MINE. **Entrance**
17. The Mucker would use a _____ to collect all the rock and ore within a mine. **Shovel/ Ore Bucket/ Ore Can**
18. Lead and Zinc ores were extremely _____ in the Upper Mississippi Valley Region. **Valuable/Profitable/Important**
19. Ore buckets were originally made from _____. **Wood**
20. Usually, a pick had a pointed end for prying and a _____ end for hammering. **Flat/ Straight**
21. This hook is appropriately named after a ___ due to its curly nature. **Pi**
22. After the double jackers drilled a hole, one of the miners loaded _____ into the drill hole using a powder spoon. **Gun Powder/ Black Powder**
23. Since ___ was a softer metal, it was easily formed into different shapes, or in this case, letters! **Lead**
24. Often mistaken for gold, pyrite is nicknamed "_____." **Fool's Gold**
25. It was common for miners to have to buy their own _____ like shovels, hammers, and gads. **Tools**
26. Lead shot production _____ during war times. **Increased**
27. Pounding into rock required quite a bit of work and miners would often take turns between holding the _____ and swinging the hammer. **Drill Steel**
28. In order to get _____ from ore, it needs to be melted. **Metal**
29. The miner needed more light to see the vein of galena, so he stuck his sticking tommy into a crevice to hold his _____. **Candle**
30. Timber posts and _____ were used for structural support within mines. **Gob Walling/Metal Bolts/Roof Bolts**

31. Waste rock was rock that couldn't be sold for _____. **Profit/ Money**
32. Waste rock was rock that couldn't be sold for _____. **World**
33. Miners hoped to hit a vein of _____ when mining through rock within mines. **Ore**
34. Wheelbarrows were used early on in _____ mining when the miners had simpler tools and less materials to carry. **Lead**
35. The windlass would transfer men and cans in and out of the mines. **Ore**
36. Ore needs to be _____ into smaller pieces order to move onto the next steps of processing into a metal. **Pulverized/Crushed**
37. Brass is malleable which means it can be _____ into items easily. Many musical instruments are made from brass! **Shaped/Formed/Molded**
38. Carbide Lamps produce a brighter and longer lasting _____. **Light**
39. Miners would hang their dirty and work clothes up in the doghouse to dry at the end of the day. **Wet**
40. Concentrate is collected from the _____ produced by the flotation machine at a mill. **Froth**
41. Used in the process called _____. One man would pound the drill steel with a sledgehammer while the other turned the drill steel slightly after each hit. **Double Jacking**
42. More advanced than black powder, dynamite was loaded by the _____ into drilled holes to blast a rock face for mining. **Powdermen**
43. Since zinc mining was done deeper, there was often a _____ built within the mine, so the miners didn't have to return to the surface to fix tools. **Work Bench**
44. Instead of _____ an ore to separate it from rock, floatation had a better, more pure result. **Smelting**
45. Galvanizing _____ prevents it from rusting. **Metal**
46. Geologist would tell the mining engineers where to dig a _____. **Mine**
47. Grease lamps usually had hooks on the back so they could be attached to a miner's _____. **Hat**

48. Grizzly bars helped separate the from the waste rock. **Ore**
49. The grizzly man had to watch out for rocks falling onto the _____ to prevent injuries. **Grizzly Bars**
50. Hoists became _____ when they transitioned from human power to steam power to diesel or electric power. **Stronger**
51. After the _____ was separated from the ore, it would be dumped outside the hoist house from a cart on a tram. **Waste Rock**
52. The hoistman was responsible for the safety of the miners entering and exiting the _____. Sometimes he played jokes on new miners by dropping them very fast. **Mine**
53. The hopper was located beneath the in the hoist house. **Grizzly Bars**
54. Crushing the ore is one of the first steps once it arrives at the mill to be processed into a _____. **Metal**
55. Turning zinc ore into zinc _____ was complicated! Ore was first trucked from the mine to the mill. There it

- was crushed into gravel and separated by jigging. **Metal**
56. Turning zinc ore into zinc metal was complicated! Ore was first from the mine to the mill. There it was crushed into gravel and separated by jigging. The concentrate produced from jigging was then concentrated further by roasting or floatation. Then that final concentrate was sent by train to a smelter far away in Illinois. **Trucked/ Transferred/ Transported**
57. Mine shafts became more advanced during zinc mining because they went underground than with lead mining. **Deeper/ Further**
58. Mules were used to pull ore cars on underground railroad _____. **Tracks**
59. During World War II, shoveling became much _____ with the invention of the automatic shovel. **Easier/ Simpler**
60. Later, ore cans were made of metal and were transported on _____ within the mine. **Tracks**
61. In a pneumatic drill, the would help clear out the pieces of rock chipped away while drilling. **Water**

62. The powderman would use a _____ to insert black powder into a hole for blasting. **Powder Spoon**
63. Roof bolts provided more structural support for the _____ and _____ inside the mine. **Roof and Walls**
64. The _____ operated the pneumatic shovel to collect rock and ore. **Mucker**
65. Slickers were common during mining because miners were mining deeper and had to often work in wet conditions. **Zinc**
66. Smithsonite is an _____ in numerous products including those which help treat rashes or prevent sunburn. **Additive/ Ingredient**
67. Sphalerite is the world's most important ore of _____. **Zinc**
68. Tailings piles at old mine sites used to hang around for decades. Since the 1980s, environmental scientists take the time to safely reclaim tailings and other mining _____ to reduce pollution. **Waste/ Remains**
69. Although the torpedo was a way to get into the mine, many miners chose not to use it because it was slower and uncomfortable. **Safer**
70. The Mining & Rollo Jamison Museums' aboveground train was donated to us in 1978. This doesn't transport ore cans anymore, but it does provide rides during a _____ of the museum. **Tour**
71. Trammers would push ore cans by hand or eventually, operate the _____ if the mine was large enough to have one. **Train**
72. Since trimmers were the first ones into a recently _____ area, they were the first to find the pretty samples and would often bring home the best specimens in their lunch boxes. **Blasted**
73. Truckers were prized for being fast and efficient at transporting _____ from the hoist houses to the mills. Pictured is a 1947 Ford, owned by John M. Cherry out of New Diggings and Benton, WI. **Ore**
74. The Cornish pump was brought to this region when the Cornish came to mine lead and zinc. It was commonly used in England for mining _____ on the coasts of Northern Europe. **Tin**
75. To access the valuable zinc ore minerals deeper underground

the water table, miners had to pump
out groundwater. **Below**