

## Mining Word Search

Find some Michigan mining facts in the sentences at the bottom of this page. Each sentence has a mining word printed in bold capital letters. Find each of these words in the puzzle. The words can be horizontal, vertical, or diagonal (forwards and backwards). Circle each word.



1. Native **COPPER** was first used by Native Americans to make ornaments and some tools.
2. A scientist who studies the earth and its rocks is a geologist. Michigan's first state geologist was Douglass **HOUGHTON**.
3. Some iron ore is magnetic and makes regular compasses unreliable. Surveyors had to use the **SOLAR COMPASS** when they worked in areas with iron ore.
4. William **BURT** invented the solar compass.
5. **ORE** is rock in which minerals such as iron or copper is found.
6. The western Upper Peninsula of Michigan has three main areas where iron is found, called **IRON** ranges.
7. Miners often found ore underground in a long regularly shaped formation called a **VEIN**.
8. Miners dug a vertical hole in the ground as close to the ore as possible. This hole is called a **SHAFT**.
9. Ore was shoveled into the **KIBBLE**, then this heavy bucket was hauled up the shaft and out of the mine.
10. Miners used a **TRAM**, a four-wheeled cart, to haul ore in the mines.
11. Because the rock was so hard, miners used explosives such as **DYNAMITE** to blast the ore into smaller pieces.
12. To break up the rock, miners struck it with a **PICKAX**, a heavy iron or steel tool pointed at one or both ends attached to a wooden handle.