



# WORKING IN A COAL MINE

This activity uses chocolate chip cookies and toothpicks to depict the environmental impact and economic motivations of coal mining. Coal is one of the main ingredients necessary for the production of iron and steel. Coal was at one time in abundant supply in the Birmingham region.

Three hundred million years ago, present day Birmingham was part of a vast peat swamp, a perfect coal-forming environment known as the Warrior Basin. Coal seams are buried within layers of limestone and shale. It has to be extracted through mining. Surface mining and underground mining are two methods of removing coal.

Coal mines can be found throughout Alabama, mostly in the Appalachian region of the state. Many coal mines were operated by Tennessee Coal, Iron, and Railroad Company. Workers in the mines came from many backgrounds; there were immigrants from Europe (mostly from Wales and Scotland, where coal mining was prevalent), and both black and white Southerners. Convicts made up a large portion of the labor force at one time.

Immigrants and rural Southerners were drawn to coal mining, naturally, for the pay. Miners were paid by how much coal they mined, not by how many hours they worked. In 1914, a coal miner made 29 cents a ton, and earned about \$900 a year. Little attention was paid to the environmental impact of mining. This activity changes the earlier rules of mining by asking students to balance the goal of mining as much valuable material as possible with the goal of preserving the environment.

## Activity

Locate nearby coal mining centers on a map – Warrior, Newcastle, and Brookside, to name a few. Ask students to imagine that a cookie is a coal mine in one of those places, and that as coal miners their goal is to use a toothpick to remove as many chocolate chips as possible. The pay is \$500 for each whole chip. Student coal miners are docked \$100 for each broken piece of cookie larger than a pencil eraser.

### What You'll Need...

Chocolate chip cookies  
Toothpicks