Carbondale: The Biography of a Coal Town **Mining Anthracite**

Worksheet 1: Photograph Detective

Directions: Old photographs can tell us much about the past if we learn to decipher the clues!

1. List the Facts:

Note everything you see in the photo:

2. Use the Clues to determine what you know:

Who: _____ Clue: _____

What: _____ Clue: _____

Where: _____ Clue: _____

When: _____ Clue: _____

Why: _____ Clue: _____

How: _____ Clue: _____

3. Put the Clues Together to Form the Story:

Think about what might have happened before and after the photo was taken.

4. Investigate the story:

How and where could you find out more about this particular photo?

What questions would you like to have answered?

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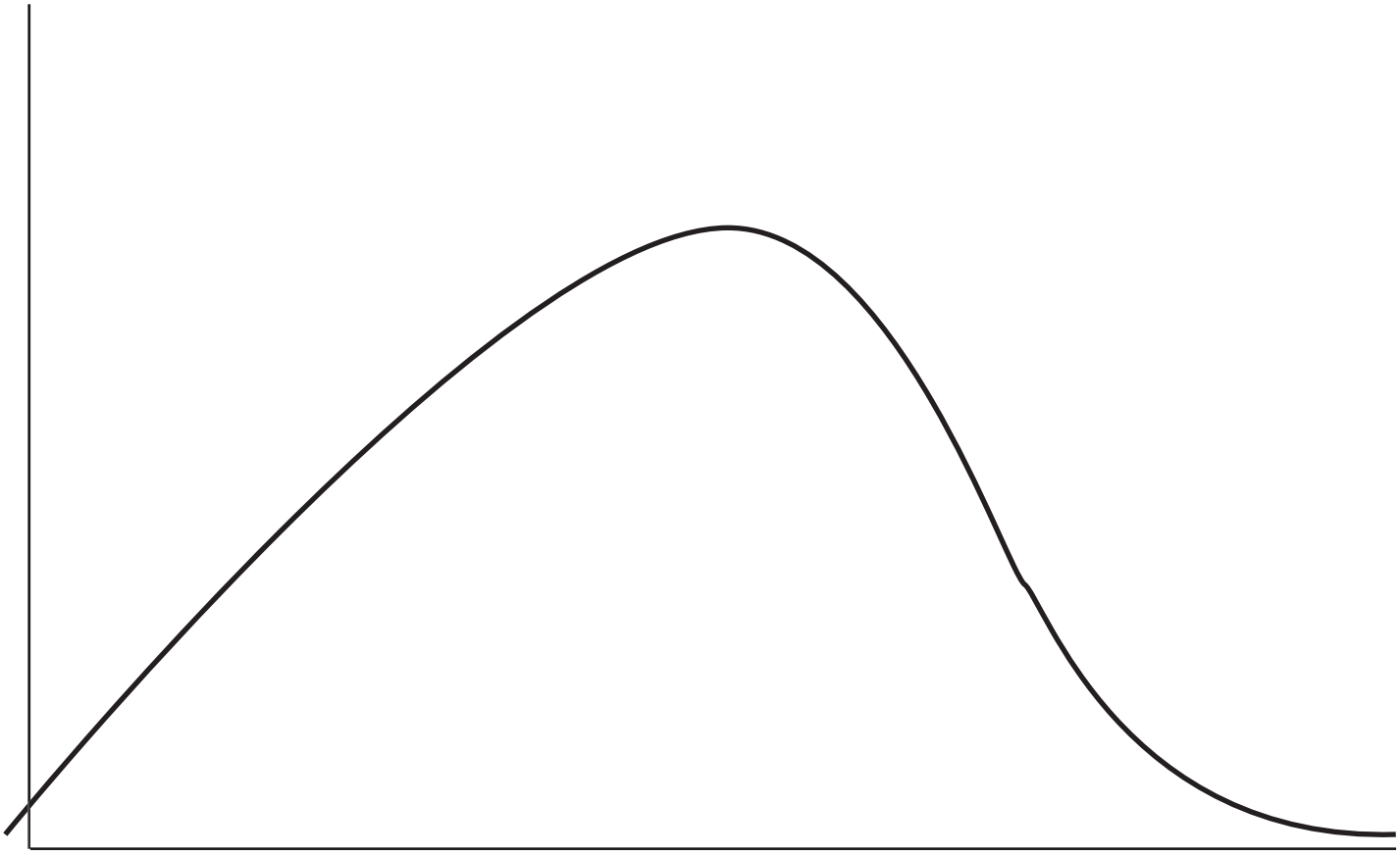
Worksheet 2: Timeline Template



Worksheet 3: Categorizing Chart

Beginnings	Peak	Decline

Worksheet 4: Brief History of the Rise, Peak and Decline of Anthracite in PA

There are two types of coal mined in Pennsylvania: bituminous (softer coal) and anthracite (hard coal). Almost all of the nation's anthracite coal is found in eastern Pennsylvania. It is dangerous and difficult to mine.

In the late 1700s anthracite was discovered in various spots in eastern Pennsylvania. The first big coal find was in 1791 by Philip Ginter. He shared the discovery with some of his friends. His friends knew that this was an important and valuable discovery, so they formed the first coal company, the Lehigh Coal Mine Company.

They thought everyone would want this coal. However, there were many reasons why people were not yet ready to use this coal. Some people were afraid of the unhealthy effects of burning it in their homes. Also, it was very difficult to ignite. The stoves in people's homes were not made for burning anthracite. Another problem was transportation. Delivering coal on the few roads that existed or on the rough rivers was difficult and expensive.

Then, in 1808, a breakthrough occurred. Judge Jesse Fell invented an L-shaped grate made for burning anthracite for home heating. Because the coal burned longer and cleaner, people wanted the grate and the coal, but transporting the coal was still a problem. At first, coal arks carried the coal down the rocky rivers. For years, coal was in so much demand that entrepreneurs invested in more elaborate canal systems. By 1840, Lehigh Coal and Navigation Company was shipping more than 280,000 tons of coal along the many canal routes.

Even though the canals made it easier to transport coal by water, the coal still needed to be transported on the terrible roads when it was moved from the canal boats. The invention of coal cars on wooden rails bypassed the rough roads, and railroad transportation of coal began. By 1842, the last stretch of rail connecting Pottsville and Philadelphia was completed. This was a major event that added to the anthracite boom. Mechanical inventions continued to lead to major improvements of railroads.

Each new discovery and invention led to more growth in the anthracite industry. As the industry grew homes and urban development grew, creating boom towns like Mauch Chunk, Pottsville, and Carbondale. Immigration from other countries to these areas increased because people wanted to participate in this growing industry. The growth continued through 1917, when a peak of 100 million tons of coal was mined.

However, other industries in America were growing because of more technology. Oil, gas, coke, and electricity could be used for home heating. The growing use of these products led to the decline of the use of anthracite. The decline of the industry was rapid. By 1930, production of coal dropped to 69 million tons. Many mines closed and breakers shut down. By 1940 coal production was less than 50 million tons and continued to drop quickly. In 1970 production dropped to 9.2 million tons. Today there are only about 2,000 anthracite miners that mainly work at above-ground stripping operations at culm banks. You can find many abandoned breakers around the anthracite region. These abandoned breakers are a symbol of the quick decline and the end of the anthracite era in Pennsylvania.

Worksheet 5: Growth and Decline of Coal Production over Time

Date	Estimated Tons of Coal
1814	0
1840	280,000
1870	20,000,000
1889	40,000,000
1917	100,000,000
1930	69,000,000
1950	30,000,000
1970	9,200,000
1995	8,700,000