

Coal Identification Activity - Secondary

[Return To Secondary Lesson Plans](#)

Title: Coal Identification Activity

Level: Secondary

Day/Time:

KERA Goals: 1.10, 2.1, 2.2 , 2.6, 5.5

Objective:

The student should be able to rank, identify and compare the types of coal.

Materials:

Coal specimens

Hardness kit (optional)

Bunsen burner or alcohol lamp

Activity:

1. Carefully examine the coal specimens and complete the identification chart:

Evidence of Plant Origin	Hardness	Luster	Cleavage	Other Characteristics

2. Give evidence that demonstrates peat is the youngest form of coal.

3. Why would anthracite be the highest rank of coal?

4. Using tongs, hold a piece of each type of coal in a flame. Note its speed of ignition, remove from flame and observe how it burns. Complete this chart:

Coal	Speed of Ignition	Flame Color	Speed of Burning	Odor
Peat				
Lignite				
Bituminous				
Anthracite				

5. Does burning show that peat is the lowest ranking of coal?

6. Does the manner of burning bituminous coal show that it still has volatile (gas) material in

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it?

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