Level 2

Module 3

**Activity 1**

Select the correct vocabulary word(s) for each of Module 3 coal terms from the numbered definitions. Place the number in the proper space in the Magic Square Box. If the total of the numbers is the same across, down, and diagonally, you have found the magic number! Complete this activity after reading Module 3. This activity lends itself well as a quiz.

A. Coal F. Freedom Mine K. Mine-mouth Power Plant

B. British Thermal Unit, BTU G. Reclamation L. Precipitators

C. Bottom Ash H. Fly Ash M. Surface Mining

D. Distribution Lines I. Transmission Lines N. Tipple

E. Electric Grid J. Scrubbers O. Overburden

P. Transformer

**NOTE: TO MAKE THIS PUZZLE WORK, NUMBERS 1 AND 14 ARE NOT USED.**

1. A device that changes the voltage of the power.
2. The largest lignite mine in the US.
3. Lines that carry lower-voltage electricity from a local substation to nearby homes.
4. The large ash material that is removed from the bottom of the furnace.
5. An electricity generation facility located adjacent to a coal mine.
6. A network of transmission lines strung on giant towers.
7. A dark brown or black solid fossil fuel that was formed by the partial decomposition of land vegetation.
8. Device that uses a spray of water and a chemical to remove sulfur-based emissions.
9. Rock and soil that overlay the veins of coal.
10. High-voltage lines that carry electricity long distances.
11. The scraping off of the top layers of soil and rock before scooping out the coal.
12. The process of reclaiming (repairing) land after the coal has been removed.

15. It was originally the place where coal mine cars were tipped and emptied.

16. Consists of particles that are removed from the exhaust.

17. A measure of heat (thermal) energy needed to cool or heat one pound of water by 1 degree Fahrenheit (F).

18. Device that uses positive and negative particles to trap flue gas.

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**Magic Number = \_\_\_\_\_\_\_\_**