

# Powered Up About Electricity!

Follow along with this flow chart to learn how coal is turned into electricity.

1. Miners dig for coal in surface or underground mines.



2. Trains or barges carry hundreds of millions of tons of coal to power plants.



3. Coal is combusted in a power plant. The heat turns water into steam.



4. Pressure from the steam turns the propeller blades of a turbine.



5. The turbine is connected to a generator by a spinning rod. This rod turns magnets inside the generator's wire coils.



Out of these wires comes ... electricity!

Directions: Answer the following questions based on what you see in the flow chart.

1

How is coal moved from the mines to the power plants?

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2

Why is it necessary to combust the coal?

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3

Name at least three devices involved in generating electricity after coal is combusted:

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4

The combustion of coal creates what substance that turns a turbine's propellers?

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5

Inside the generator, electricity is created inside coils of wire. How would you expect electricity to be delivered to homes?

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