

Power Couple: The Shocking True Story of Water and Electricity

Student Guide

Directions: Read over these questions so that you can be ready to answer them after viewing the movie. You may want to take notes while viewing.

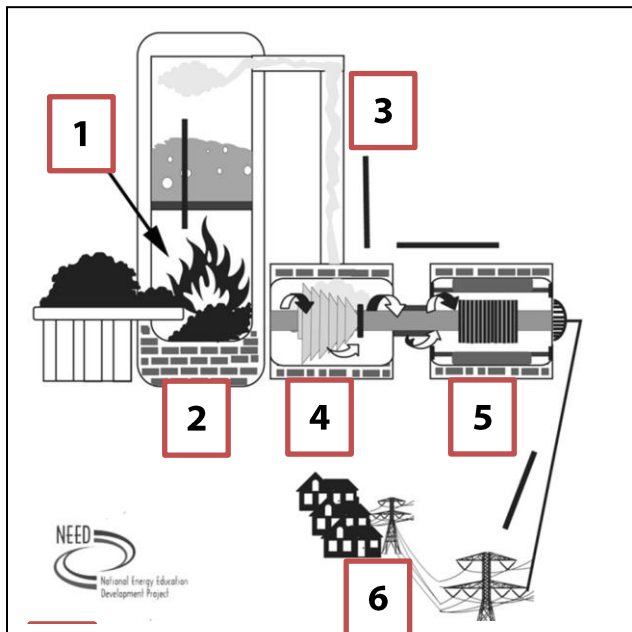
- In Albuquerque your drinking water comes from two sources, the underground aquifer and the river. How do we use electricity to deliver drinking water from these sources to people in Albuquerque? Use the words in the word bank – some will be used to deliver both aquifer water and river water.

WORD BANK	<ul style="list-style-type: none"> • Pumps (to bring water up hundreds of feet) • Pumps (to move water around town) • Water-Cleaning Machinery • Disinfection Machinery • Computers (to keep track of the water)
------------------	---

Source – Underground Aquifer	Source - River
<ol style="list-style-type: none"> 1. Pumps to bring water up 2. Pumps to move water around 3. Disinfection (The water is already clean!) 4. Computers 	<ol style="list-style-type: none"> 1. Pumps to move water around 2. Water-cleaning machinery 3. Disinfection 4. Computers

- Does it take electricity to clean sewage water? (Circle the correct answer) **Yes / No**

- Matching: Put the number of the step in the circle where the step occurs on the diagram.



Steps to make electricity:

1. A **source** such as coal, uranium, or gas is used to make heat.
2. **Boiler** – Water is boiled.
3. **Super-heated steam** is created.
4. **Turbine** – The steam spins a turbine which is like a water wheel, but uses steam instead of water to spin.
5. **Generator** – A copper coil spins inside a circular magnet to make electricity.
6. **Transmission lines** – Wires carry electricity to the town.

Note: Wind and photovoltaic solar do not use water this way to make electricity.

- On the back of this paper, write five ways you can save both water and electricity. Hint - whenever you save electricity you save water, and whenever you save water you save electricity.

5-minute showers, xeriscape, water-timers, fix leaks, turn off lights, unplug electronics, become educated about how electricity is measured and used