

Using Electricity

ACTIVITY 8

Objective:

To use creative movement and dance to teach about electricity and its origin from coal.

Vocabulary:

transmission lines, transformer, BTU, converted

Materials:

- *Using Electricity* song
- Copies of the *Coal to Electricity* chant for each student

Check For Understanding:

Have the students write a brief paragraph with their group that tells how coal is used to produce electricity.

Extensions:

- Students could draw a large mural depicting the production of electricity beginning with mining coal.
- Each small group could draw a picture to use with their particular stanza.

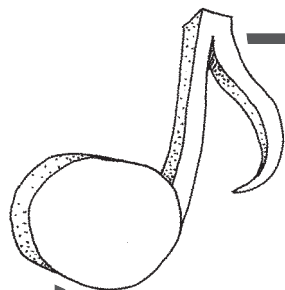
Introduction:

More often than not, the energy we use daily is in the form of electricity. What surprises many people is that the majority of this electricity—49% of the nation's total—comes from one of our oldest but most reliable fuel resources: coal.

Electric utility companies are, by far, the primary users of coal. The coal is pulverized and burned to produce steam, which then drives electric generators. Each ton of coal used by the electric generator produces about 2,000 kilowatt hours of electricity. In household terms, each pound of coal produces enough electricity to light ten 100-watt light bulbs for one hour. As the main coal consumer, electric utility companies account for 90 percent of domestic coal consumption.

Procedures:

1. Play the *Using Electricity* song for the students. Have them discuss the process for making electricity using coal. Point out the importance of coal to this process in the United States. Play the song again and have the students sing along.
2. Tell the students that they are going to translate this process into action words and movement. Pass out the chant to the students.
3. Then either present the chant with movements for each stanza predetermined by you or assign different stanzas to pairs or small groups of students. Have them come up with a movement for their particular stanza. Encourage them to tell their part of the story with their movement. You may also want to include rhythm instruments for each group to use to create specific sounds where appropriate.
4. Allow the students five to ten minutes to plan and practice their section of the chant. Then bring them back together.
5. Create a performance of the song and chant. Have students sing the song first, act out the chant, and conclude with another singing of the song.



Using Electricity

COAL TO ELECTRICITY CHANT

The miners mine
The coal from the ground
The miners mine
The coal from the ground

They load it into
A railroad car
They load it into
A railroad car

Chugga, chugga, choo choo
To the power plant
Chugga, chugga, choo choo
To the power plant

You burn the coal
And get steam, steam!
You burn the coal
And get steam, steam!

Steam causes spinning
And the turbine turns
Steam causes spinning
And the turbine turns

Turbine drives the generator
And it makes current
Turbine drives the generator
And it makes current

Electric current
Travels so fast!
Electric current
Travels so fast!

Wires, wires
Go to my house
Wires, wires
Go to my house

Turning, turning
On the TV
Turning, turning
On the TV

Momma's cookin'
It's lookin' real good!
Momma's cookin'
It's lookin' real good!

Daddy's surfin'
On the internet
Daddy's surfin'
On the internet

The light turns on
And we all see
The light turns on
And we all see

