Teacher's Guide

to

WAKE UP, FREDDY

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WAKE UP, FREDDY (ISBN: 1-56029-568-6)
Video, teacher's guide, and related videos available from:

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Wake Up, Freddy
A Guide for Teachers

Introduction

In our daily lives, we all use energy, water, and resources, tapping the limited supplies which exist on our planet. "Wake Up, Freddy " challenges students to learn about where the water and energy they use come from, to understand how the waste they create is treated, and to recognize that the simple act of flipping on a light, buying a loaf of bread, or flushing the toilet has broad implications for the planet's resources when multiplied by millions of people.

This wordless film can be used in conjunction with lessons about electricity, water, waste treatment, resources, recycling, and conservation and is suitable for grades two through seven.

Synopsis

Freddy's morning routine is fairly typical of millions of people in North America and other industrialized nations. He wakes up to the sound of his blaring alarm, takes a shower, eats breakfast, and then heads off to work. But without the aid of any narration the viewer is given the unique opportunity of tracing the path electricity takes from the power stations, across the power lines, under the streets, and all the way through his house to the alarm. We also trace water coursing from the reservoir to the shower head; we see the bread for his toast being prepared in a bakery; and we watch the treatment and disposal of his waste water and trash.

Before viewing

• Let the students know that they will be watching a film about electricity, water, and resources. It may be helpful to explain that, in the first sequence, we are tracing the path electricity takes as it makes its way to Freddy's alarm clock..

- Ask students if they have ever thought about where electricity or water come from. Do they try to conserve water or energy? If they do, why is that beneficial?

- Ask students if they know where their water comes from and where it is treated or where their trash is landfilled or incinerated.

- Work with the students to define "resource." Ask students what their morning routine is. What resources do they use each morning?

Questions to ask after viewing

ELECTRICITY

- What sources of energy are used to produce electricity? (Coal, oil, nuclear, wind, solar, or water for hydro-electric power)

- What is a renewable, as opposed to a non-renewable, resource? Which sources of energy used to produce electricity are renewable?

- What is used in your area? How far does electricity travel to get to your house or school?

- Why is it important to save energy?

WATER

- Where does water come from, in general? (The water cycle constantly circulates the water we have on Earth)

- Do you know where your household's water comes from? (probably a well, which takes water from underground, or a public water system, which usually takes water from a river or underground aquifer, and stores it in a reservoir.)

- What are some of the different ways that people use water? (Remember to include both direct uses and indirect uses, such as watering crops for food.)

- How was water treated after use, in the film?

- Do you know where your treated water goes? Does it go into a stream or river? Does anyone live downstream?

- Why is it important to use less water? (Treating water is costly, resource consuming, and not completely effective. It is better to not get the water dirty in the first place. Plus, many aquifers are being drawn down faster than they can replenish themselves.)

FOOD
- Where did the flour for Freddy's bread come from?

- What resources were used to transport the bread? (Gas, oil)

TRASH
- Where did Freddy's trash go?

- Do you know where your trash goes? Does anyone live near a landfill or incinerator?

- What are some of the problems associated with disposing of trash? Why is it important to produce less garbage?

- How can we cut down the amount of trash we create? (Reduce, reuse, and recycle)

Suggested Activities

- As a class, write a script to narrate the film. Describe each step of resource production and treatment as it is shown on film. It may be useful to have books and information on hand for the students to use. See the "Resources" section of this guide for a few suggestions.

- Make a toilet water saver by cutting the top from a gallon or half gallon milk jug, filling it with water and placing it in the toilet tank. This reduces the amount of water used with each flush.

- Draw a diagram of the water cycle, including the steps involving human use, purification and treatment.

• Look on a map to find the areas that produce most of the country's grains, fruits, vegetables, etc. How does food get to your area?

• Tour the classroom, school building or school grounds and look for examples of energy, water, and resources being used.

• Ask the students to locate, at their houses, the elecricity meter, and, if they have one, the water meter. Ask them to monitor their household's water and electricity use for a week. If possible, monitor again for a second week, after trying to cut back in water and electricity usage, and give certificates to the most improved.

• Make a class visit to a waste water treatment facility or a power plant.

• Find out how much water is used to take a shower, flush the toilet, water the lawn, or wash your clothes.

What you can do

Basic activities of our everyday lives have a huge role in determining the amount of natural resources we waste or conserve. Little decisions can have a big impact on reducing resource use. Ask the students to work with their parents to make their households more efficient.

USE LESS ELECTRICITY

- Turn off lights and appliances when not in use
- Use more efficient appliances for your home.
- Replace incandescent lightbulbs with compact fluorescents.

CONSERVE WATER

- Turn off water when not in use (when brushing teeth, etc.).
- Take shorter showers.
- Use appliances such as dishwashers only when full.
- Don't let the faucet drip, and fix leaks.

PRODUCE LESS TRASH

- •Recycle as much as possible
- •Compost yard waste and kitchen scraps
- •Buy only products in recyclable packaging

CONSERVE RESOURCES

- •Buy foods produced locally
- •Make sure that your house is insulated well to avoid losing heat in the winter

Resources

Earth Book for Kids: Activities to Help Heal the Environment by Linda Schwartz (The Learning Works, 1990)

Underground by David Macaulay (Sandpiper, 1976) *shows the underground workings of a city*

Fifty Simple Things Kids Can Do to Save the Earth by the EarthWorks Group (EarthWorks Press, 1989)

Cartons, Cans, and Orange Peels- Where Does Your Garbage Go? by Joanna Foster (Houghton Mifflin, 1991)

Going Green: A Kids' Handbook to Saving the Planet by John Elkington and Julia Halles (Viking, 1990)

Save the Earth: An Action Handbook for Children by Betty Miles (Knopf, 1991)

Your local electrical company and water treatment facility will probably be happy to provide information about what they do. In addition, the solid waste division of your local government can tell you more about waste disposal in your area.

Related Bullfrog Videos

TOAST
One of the most effective energy films ever made, this film illustrates our underlying dependence on fossil fuels, and takes as its example the production and distribution of a commonplace item, bread.

GO
An introductory film about how we rely on energy to make things go, where we get energy from, why we must conserve it, and how children can help.

RECYCLING IS FUN!
Three friends explore the three R's of recycling- reduce, reuse, and recycle. To educate themselves, they visit a landfill, a recycling center, and their local supermarket to find out what they can do to help with our solid waste crisis.

JOURNEY OF THE BLOB
A boy makes a decision about how to dispose of a green glob he has concocted. What will happen if he dumps it into a stream? Where does water come from, and where does it go?

THE WHITE HOLE
This amusing animated film is a wonderful commentary on our throwaway society. Kids playing in the park discover a black hole into which anything will disappear. Unable to explain it, the experts nevertheless decide to use it to dispose of waste. Everything is fine until a white hole appears and begins to spit everything back out.

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