



Watts On Your Mind?

Solar energy educational activities for schools

Activity Overview

Grade Level: 3-5

Activity: UE-6

General Description

Students will discuss the importance of different types of conservation.

Learning Outcome

Students will list ways to save energy and will identify activities that waste energy and that save (conserve) energy.

Subjects

Science, social studies, language

Process Skills

Group discussion, vocal communication

Duration

30 minutes

Key Vocabulary

Conservation, recycle, environment

Curriculum Standards

Texas (TEKS):

112.7.b.5.11

Louisiana (LSCS):

PS-E-C7, PS-M-C2

Arkansas (ASCF):

3.1.20, 3.1.25

National (AAAS Project 2016):

The Designed World – 5th

Save or Waste

Materials

- "Save or Waste?" worksheet cut into strips
- Scissors
- Poster paper
- Markers or crayons

Method

1. Scramble the energy-related behavior statements from "Save or Waste?"
2. Distribute the statements among the students.
3. Challenge the students with "wasting behavior" strips to match with the students who have the "saving behavior" strips, and visa versa.
4. Once students have found partners with the correct strips, have each pair read their strips to the rest of the class.
5. Be sure students understand how each corrective measure saves energy.

Background Information

There are many things we can do at home to stop wasting energy. One example is turning off lights before leaving a room. Corrective measures save energy. Conservation extends energy resources, saves money, and protects the environment. These measures are particularly important until scientists and engineers can have renewable energy sources on the scale to meet consumer needs. Recycling is another way to save energy.

Assessments

Students follow directions. Students communicate effectively. Students draw conclusions from information.



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Worksheet

SAVE or WASTE?

IT SAVES ENERGY WHEN YOU...	IT WASTES ENERGY WHEN YOU...
Use a pan the size of the burner on the stove.	Put a little pan on a big burner on the stove.
Cook many items in oven at the same time.	Cook only one item in oven.
Put lid on pan when cooking. It keeps heat in.	Leave lid off pan when cooking.
Keep oven door closed. Use a clock to tell when food is ready.	Peek in oven while food is cooking.
Toast bread in toaster, not in oven.	Toast bread in oven, rather than in a toaster.
Stop cooking when food is tender.	Cook food longer than needed.
Run the washing machine with a full load.	Run the washing machine without many clothes in it.
Wash clothes in cold water when possible.	Wash clothes with more hot water than is needed.
Take a shower, instead of a bath.	Fill bath tub to the top.
Wash and rinse dishes in two pans.	Wash dishes under a running faucet.
Fix the leaking faucet.	Have a leaking faucet.
Iron clothes all at the same time.	Iron clothes one or two items at a time.
Turn off TV or radio when nobody is watching or listening.	The TV or radio plays to an empty room.
Turn off lights that you don't need.	Lights are on in empty room.
Close the curtains in the room you're cooling.	The sun shines into the room you're trying to cool.
Open and close the refrigerator door quickly.	Keep the refrigerator door open longer than needed.
When it is cold, close outside doors quickly.	When it is cold, leave outside doors open longer than needed.
Stuff rags, paper or rug in crack under outside door.	Have a crack under the outside door.
Have good insulation in outside walls and roof.	Have poor insulation in outside walls and roof.
Combine errands so that only one trip in the car is needed.	Take many trips in the car.

Source: Adapted from "Getting Energized", National Renewable Energy Laboratory, Golden, CO