

**Session 5 July 16 Why Waste Food? Page 65  
For Everyone**

Visit these websites:

Save the Food.com  
[www.scdhec.gov/dontwastefoodsc](http://www.scdhec.gov/dontwastefoodsc)

Your Fridge & Food Safety Tip  
[www.scdhec.gov/library/OR-1261.pdf](http://www.scdhec.gov/library/OR-1261.pdf)

EPA's Food Waste Basics  
[www.epa.gov/sustainable-management-food](http://www.epa.gov/sustainable-management-food)

Videos:

Food Waste - A Story of Excess  
[www.youtube.com/watch?v=EwVuzOUJ2A](http://www.youtube.com/watch?v=EwVuzOUJ2A)

Making Food Waste History  
[www.youtube.com/watch?v=ZVkaYxJDqml](http://www.youtube.com/watch?v=ZVkaYxJDqml)

After visiting the websites and watching the videos, what actions are you and your family going to do to reduce the amount of food that your family wastes?

Does it matter where you store food in the refrigerator? Are there foods that should be stored on a counter top or in a dark place.

Write Diane Curlee a letter. Let her know what changes you are planning to make because of this activity. She may share it with others that have provided the materials for this lesson. Her mailing and email addresses are listed below.

By buying less or not wasting food, more food may be available for others that go without food.

There are no Activity Sheets for this session.

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Orangeburg, S.C. 29115  
(803) 534-2409 ext. 3  
FAX (803) 268-1080  
Website: [Orangeburgswcd.com](http://Orangeburgswcd.com)  
E-mail: [dcurlee@orangeburgcounty.org](mailto:dcurlee@orangeburgcounty.org)

**Session 6 July 30 Can You Dig It? Page 15  
(Composting in a Bottle) For Everyone**

How Much of the Trash Bag in Session 1  
was kitchen waste?

Instead of sending it to the landfill,  
why not compost it?

Read the book: *Compost Stew* by Mary McKenna  
Siddals and learn more about her book at  
[www.siddals.com/compost-stew.html](http://www.siddals.com/compost-stew.html)

Composting for Kids Slide Show  
<http://aggie-horticulture.tamu.edu/travis/wp-content/uploads/2013/06/compostingforkids.pdf>

**An adult may need to help with this activity.**

Are you ready for an activity that may cause you to get a little dirty? Below is a list of items that are needed:

Clear 2-Liter Plastic Soda Bottle with lid  
Cup of Grass Clippings and Leaves

(Put water in a measuring cup from the kitchen, pour it into a laundry measuring cup - they should be about the same. Use the laundry cup for measuring the clippings and grass.)

Spray Bottle containing Water  
2 cups of Fruit and Vegetable Waste

(chopped into small pieces)

Cup of Dirt

Cup of shredded newspaper  
(tear the paper into tiny pieces)

Plastic spoons (for the soil, scraps, leaves and grass, etc.)

Tape  
Scissors

Things that should Not be put in Compost -

Eggs, Meat, Cheese, Milk, Yogurt, Cottage  
Cheese, Bones.

Oils - vegetable, cooking or Butter  
Sticks, pine cones, etc. should not be in the  
compost either. They are too big.

This activity is continued on the **Activity Sheet**.

These lessons are to the  
SC State Science  
Standards. These may  
be found at:  
[www.takeactionsc.org](http://www.takeactionsc.org)



Orangeburg County  
Soil and Water Conservation District

North Branch Orangeburg County Library  
North, SC

***Is Trash Just Trash?***

June 18 through July 30, 2020

Introduction: [Recycle Right SC](#)

The Following Activities are from the  
*Take Action for a Cleaner Tomorrow*,  
published by SC DHEC.

The curriculum is Free.

For more information visit:  
[www.takeactionsc.org](http://www.takeactionsc.org).

**Session 1 June 18 Natural Resources Page 29  
For Everyone**

Vocabulary Words

Natural resources

(e.g., water, coal, oil, natural gas, trees)  
are useful materials from the Earth.

Nonrenewable resources

(e.g., oil, natural gas, coal)  
Are those that cannot be readily replaced  
by natural means equal to its consump-  
tion.

Renewable resources

(e.g., trees, plants, water, sun, wind)  
are those that can be used repeatedly be-  
cause they are replaced naturally and  
more quickly.

Go to <https://jr.brainpop.com/science/conservation/naturalresources/>. Watch the  
video on Natural Resources.

Read or have someone read *The Lorax* by Dr.  
Seuss. After reading the story, find the **Activity  
Sheet** and answer the questions about *The Lo-  
rax*.

You may find more fun things on the **Sheet**.

**Vocabulary Words**

**Natural Resources** - are valuable, naturally occurring raw materials like minerals, trees, soil, water and coal. Every day we use natural resources to take showers (water and energy to heat the water), power our cars (petroleum), build homes (trees) and more. As countries develop - that is, become more industrialized - they consume more natural resources. Most developed countries buy and import natural resources from other countries. The United States is one of the top consumers of energy in the world and one of the major consumers of natural resources.

**Renewable Resources** - are resources that can be replaced. Examples are trees, food and energy sources like solar power (sun), hydropower (water), wind and biomass (plant materials and animal waste that can be used as a source of fuel). The concept of renewable resources is sometimes blurred. Groundwater in deserts, for example, may take years to be replaced while it may take only a few days to replace groundwater in tropical rain forests.

**Nonrenewable Resources** - cannot be replaced. Examples include fossil fuels such as oil, coal and ore deposits of metals. **Resource recovery** is the wise use and management of natural resources to make them last longer.

**Resource recovery** - is the process of obtaining matter or energy from materials that have been discarded. **Energy conservation** is the practice of using less energy, both by using more energy-efficient products and by changing wasteful habits.

**Sustainable development** is an environmental strategy designed to protect natural resources. The goal of sustainable development is to meet the needs of the present without compromising the ability of future generations to meet their own needs.

**Recycling saves natural resources** like minerals, water and timber. By decreasing the need to extract and process virgin materials, recycling helps reduce or eliminate pollution associated with the first two stages of a product's development: 1) material extraction and 2) processing. **Recycling** also **saves energy**. Studies have shown that less energy is needed to manufacture products from recovered materials than virgin materials.

Watch the Flocabulary video **Natural Resources**. It is available at [www.flocabulary.com/unit/natural-resources/video/](http://www.flocabulary.com/unit/natural-resources/video/).

See the **Activity Sheet** for Session 2 for more fun things to discover about the Natural Resources in our Trash.

**Videos:**

**It's Okay to Be Smart: The Surprising  
Places We Waste Energy**

[www.youtube.com/watch?v=QsAgaD7leuA](http://www.youtube.com/watch?v=QsAgaD7leuA)

**What Really happens to the plastic  
when you throw it away?**

[www.youtube.com/watch?v+\\_6xINyWppB8](http://www.youtube.com/watch?v+_6xINyWppB8)

What is **embedded energy**?

The **direct and indirect energy costs** within an object. The energy that is used to manufacture a product is the **direct cost**. The energy used to obtain the raw materials (e.g., transportation, distribution) contributes to **indirect energy costs**.

**Energy Examples:** light, heat, mechanical, chemical, nuclear, electrical.

**Direct Energy** The energy it takes to manufacture a product or provide a service.

**Indirect Energy** The energy used to make and move products that is Not Directly involved in the production process.

**Embedded Energy** The amount of Direct + the Indirect Energy in the product.

**What is a British Thermal Unit (BTU)?**

A BTU is the amount of heat energy that is required to raise the temperature of 1 pound of water by 1 degree Fahrenheit at sea level.

**How to calculate percentage:**

STEP 1: (Energy Costs for New Materials) - (Energy Costs for Old Materials) = (Energy Saved)

STEP 2: {(Energy Saved) ÷ (Energy cost for New materials)} x 100 = (Percent of Energy Saved)

EXAMPLE: To make copper from ore requires 280 million BTU per ton. To make copper from scrap requires just 10 million Btu per ton

This is a savings of 270 million BTU per ton (280 -10 = 270) and  $270 \div 280 \times 100 = 96$  percent (%) savings.

See the **Activity Sheets** for Session 3 for more fun things to discover about Energy in Our Waste.

**For Everyone**

Remember in the first session we went through the trash looking for Natural Resources? This session is about Reducing What Goes to the Landfill!

The Three R's = Reduce, Reuse, Recycle  
You may want to go back and watch **Recycle Right SC** visit [www.takeactionsc.org](http://www.takeactionsc.org) again.

**Videos:**

**How Much Trash Do You Make in a Week?**

[www.youtube.com/watch?v+8suiEKvZq5s](http://www.youtube.com/watch?v+8suiEKvZq5s)

**ACTIVITY**

Weigh the trash bag before you begin this activity. Using a bathroom scale, make sure it reads zero. Step on the scale. Record how much you weigh. Pick up the bag and weigh again. Now, take away your weight from the weight of you and the bag. This is the weight of the bag. It should be 5 - 10 pounds.

**(Bag + you) - (you) = bag's weight**

You will need 5 Clean Plastic or Paper Bags.

Make these Labels, one for Each Bag:

(1) **REDUCE**; (2) **REUSE**; (3) **RECYCLE**;  
(4) **COMPOST**; AND (5) **LANDFILL**.

Cut out the labels and tape one to each bag.

Place the contents of the Trash Bag into each bag.

After you have divided the contents of the Trash Bag into the 5 bags, weigh each of the bags as you did at the beginning of the activity.

You do not have to weigh yourself again. Just you and each bag.

Subtract **your weight** from the **bag and yourself** for each bag.

**(Bag + you) - (you) = bag's weight**

Now check your work by adding the 5 bags together. How close is the total to the Trash Bag at the beginning of the activity? Some of the bags may not weigh much. Which bags had the most weight? (heavy) Which bags had less weight? (light) Were you surprised with the results?

See the **Activity Sheets** for Session 4 for a Match Game.