Topic: OVERVIEW

MAIN MESSAGE: By making informed choices and working together, we can create less trash and help save the world a little each day.

VOCABULARY:

1) **New York State Department of Environmental Conservation (NYSDEC) -** The NYSDEC is the part of New York State government that is responsible for the conservation, improvement and protection of natural resources within the state.

2) **Waste -** A material that is thrown away or discarded.

3) **Dump -** A location site for depositing garbage with no special features to protect the environment.

4) **Reduction** - The act of making something smaller or less in size, amount or degree.

5) **Reuse** – To use an item more than once.

6) **Recycling** - The process of turning waste into reusable material.

7) **OCRRA** - Onondaga County Resource Recovery Agency. The organization that oversees what happens to the waste in communities throughout Onondaga County.

8) **Energy Recovery** - The process of turning trash into energy.

9) **Landfill** - A place where trash is buried in a safe way to prevent air and water pollution.

10) **Compact Fluorescent Bulb (CFL) -** A type of light bulb that uses less energy, but is difficult to dispose of safely because it contains mercury.

11) **Waste-to-Energy Facility** - A facility that burns trash to produce steam and electricity.

12) **Environment** - The natural world; the surroundings in which a person, animal or plant lives.

13) **Litter** - Trash that is left lying in an open or public space.

Name: _____ **Date:** _____

Overview: Context Clues

1. Electricity can be created in lots of ways, by burning coal or natural gas for example. By using trash instead we save these natural resources at the same time we are getting rid of trash.

   In this passage *natural resource* refers to _____

   _____

2. Through composting, we can work together to turn leaves, grass, apples cores, half eaten sandwiches, leftovers and yard trimmings into something that helps the environment.

   Composting uses only *organic materials* in its process. From the passage, what are three organic materials that can be used to compost?

   _____

   _____

   _____

3. Paper napkins are disposable products, they are meant to be thrown away after one use.

   From the passage, what do you think *disposable* means?

   _____

   _____

4. To conserve energy you can turn off lights, computer, fan or any electronic device you aren't using.

   From the passage, a synonym for *conserve* might be _____.

Name: _____ **Date:** _____

Overview: OCRRA Equations

Directions: Learn some OCRRA factoids by answering these math questions.

1. OCRRA has been working since 1990 to keep our neighborhoods clean.
   How many years has OCRRA been working? _____

   Equation: _____

2. OCRRA burns waste to create enough energy to power 30,000 homes per year!
   How many homes will it have created electricity for in 5 years? _____

   Equation: _____

3. OCRRA repurposes about 400 tons of waste that it collects from Syracuse University each year.
   How many pounds of waste is this? *Hint: 1 ton is 2,000 pounds.*

   Equation: _____

4. The average person creates about 3 pounds of waste a day. **How much waste does YOUR family create:**

   a. **Daily?** _____
   b. **Weekly?** _____
   c. **Monthly?** (based on 31 days) _____

   Equation: _____

   Equation: _____

   Equation: _____

5. Did you know that five large soda bottles produces enough material to make an entire ski jacket?
   How many soda bottles would we need to make a ski jacket for every student in the class?

   Equation: _____

Overview: OCRRA Equations Answer Key

1. OCRRA has been working since 1990 to keep our neighborhoods clean.
   How many years has OCRRA been working?

   Equation: **2014 – 1990 = 24 years**

2. OCRRA burns waste to create enough energy to power 30,000 homes per year!
   How many homes will it have created electricity for in 5 years?

   Equation: **5 x 30,000 = 150,000 homes**

3. OCRRA repurposes about 400 tons of waste that it collects from Syracuse University each year.
   How many pounds of waste is this? *Hint: One ton is 2,000 pounds.*

   Equation: **400 x 2,000 = 800,000 pounds**

4. The average person creates about 3 pounds of waste a day. **How much waste does YOUR family create: (The answer below illustrates a four person family example)**

   d. **Daily?** **4 x 3 = 12 pounds**
   e. **Weekly?** **7 x 12 = 84 pounds**
   f. **Monthly?** (based on 31 days) **31 x 12 = 372 pounds**

5. Did you know that five large soda bottles produces enough material to make an entire ski jacket?
   How many soda bottles would we need to make a ski jacket for every student in the class?
   Equation: **Number of students x 5 = Number of ski jackets**

Name: _____ **Date:** _____

Overview: Persuasive Essay

Directions: Write a persuasive essay urging our local government to help fund OCRRA's programs. Use the 4-square organizer to guide you. Give three reasons and explain why they are important.

1st Reason

2nd Reason

Topic Sentence:

3rd Reason

Closing

Name: _____ **Date:** _____

Overview: Word Bank

Directions: Fill in the blanks using words from the word bank below.

1. We can _____ waste by using reusable containers.

2. Through _____ we turn items like newspapers, bottles and cans into new products.

3. The process of making trash into electricity at the Waste-to-Energy Facility is called energy _____.

4. Landfills are places where trash is _____.

5. _____ is an acronym that stands for Onondaga County Resource Recovery Agency.

WORD BANK		
Buried	**Reduce**	**Recycling**
OCRRA	**Recovery**	

Overview: Word Bank Answer Key

1. Reduce
2. Recycling
3. Recovery
4. Buried
5. OCRRA

Name: _____ **Date:** _____

Overview: Test

Directions: Answer the following questions after watching the Overview video.

1. Before reusing and recycling, people were worried that over time, town dumps would pose a threat to:
   A. Drinking water
   B. Clean air
   C. Garbage trucks
   D. Both A and B

2. In Onondaga County we recycle about _____% of our waste?

   A. 20%
   B. 40%
   C. 60%
   D. 80%

3. All of these items should be recycled in the blue bin EXCEPT:

   A. Newspaper
   B. Toxic household chemicals
   C. Cans
   D. Plastic bottles

4. OCRRA uses energy from burning trash to create electricity?

   A. True
   B. False

5. Everyone can help keep our community beautiful by remembering the three R's.
   What are they?

   R_____

   R_____

   R_____

Overview: Test Answer Key

1. D. Both A and B
2. C. 60%
3. B. Toxic household chemicals
4. A. True
5. Reduce; Reuse; Recycle