Conserving Natural Resources Teacher Facilitation Notes

In General ...

- Project the slide deck in edit mode-do not show it as a slideshow.
- Hide the speaker notes before projecting. (View/Show Speaker Notes)
- Hide the toolbar. (Click on the up arrow at the right end of the tool bar.)
- Call on students to read the various content shown on slides.
- Duplicate copies of the data sheets for each student.

Materials Needed:

<u>Engage: In the Trash (Per class)</u>					
Large paper bag	Small glass jar	Newspaper			
Small plastic ball	Cotton T-shirt	Aluminum can			
Empty paper food box	Styrofoam cup	Small paper lunch bag			
Ball of aluminum foil	Plastic shopping bag	Magazine			
Explain/Explore: Conservation: Reduce, Reuse, and Recycle					
Environment Picture (optional), 1 per student					
Duplicating paper, 1 sheet per student					
Large cardboard box, 1 per classroom		Wrapping paper (optional)			
Additional Materials:					
Science notebooks, 1 per student		Pencils			
Student Evaluation, 1 per s	tudent				

Engage: In the Trash

- Put the trash items listed under the Materials section in the large paper bag.
- Review what students know about natural resources and how they are used.
- Tell the students that you brought a bag of things with you that you are going to put in the trash. Take each item out of the bag, one at a time. Ask the following questions as you display each item:
 - What is this? What natural resource(s) was used to make this item?
 - Why do you think I put it in the trash?
- After displaying and discussing each item, ask students where they think the items will go after they are put in the trash. (They will probably say the trashmen will pick them up and put them in the big trash truck.)
- Show the video about what happens to most trash after it is picked up the sanitation workers and the garbage truck.
- Ask students if they think any of these items should NOT be in the trash. Ask them to explain why they think that.
- Explain that the rest of this lesson will be about natural resources and how they can be conserved instead of throwing products made from them in the trash.

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Explore/Explain: Conservation: Reduce, Reuse, and Recycle

- OPTIONAL: Make a copy of the environment picture for each student.
- Cut sheets of duplicating paper in half lengthwise so that each student can have 2 pieces.
- Read the natural resources slide and review what the students know about natural resources.
- Introduce the term conservation and ask students to think about how they can protect their environment by conserving natural resources and not wasting them.
- As students study the environment picture, ask the following questions:
 - What are some natural resources you see in this picture?
 - We know that air, water, and sunlight are natural resources. Why are these resources important to people?
 - How might people use natural resources such as plants and animals?
 - From what natural resource in the picture do we get paper? Food? Aluminum cans? Plastic?
 - Look around our classroom. What things can you see that are made from natural resources?
 - Have students read the definition of reduce (use less) and some ways they can reduce their use of natural resources.
 - Guide the students in creating their conservation flip book.
 - After their books are created, have the students open the book to the first section, *Reduce*. Tell them to write on the top section (the back of the cover) one way they can reduce using a natural resource to help conserve it.
 - On the bottom section of the page (above the word *Reduce*), have them draw an illustration showing how they can conserve natural resources by reducing their use. (It can be a picture of what they wrote or something totally different!)
 - Continue in the same manner for *Reuse* and *Recycle*.
 - Have students glue or tape the flip book in their science notebooks.
 - OPTIONAL: Cover the large paper box with wrapping paper. Label it as the "Reuse Receptacle". Point out the box. Tell students that a receptacle is just a container to hold things.
 - Ask students to bring in 1 or 2 reusable items of clothing, books, or toys they no longer want, to put in the box. When the box is full, take it to a charity resale shop. Emphasize the fact that these items will all be reused by someone else who needs or wants them.
 - Play the recycle game. Discuss as desired. Point out the decomposition times for each resource if it was thrown away instead of recycled.

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Elaborate: Conservation Scenarios

- Call on a volunteer to read the first scenario. Discuss as desired.
- Continue in the same manner for the other scenarios.

Evaluate: Conserving Natural Resources

- Let students complete the quiz independently.
- Discuss as desired.

Name: **KEY**

Evaluation

- 1. Why is it important to conserve natural resources?
 - **A** They form from the remains of ancient plants and animals.
 - **B** These resources may be used up in the future.
 - **C** They can easily be thrown away in the trash.
 - **D** Plants are easier to find in nature than animals.
- 2. To reduce means to use less of something. What is one thing you might use less of to help conserve our natural resources?

Answers will vary; accept all reasonable answers.

3. To reuse means to use something more than one time. What is one thing you might reuse to help conserve our natural resources?

Answers will vary; accept all reasonable answers.

4. To recycle means to turn used things into new materials.. What is one thing you might recycle to help conserve our natural resources?

Answers will vary; accept all reasonable answers.

- 5. Which of the following could a student do to help conserve natural resources? Mark all answers that apply.
 - A Turn off the water while he is brushing his teeth
 - **B** Throw away her paper lunch bag after eating her lunch
 - **C** Recycle paper and aluminum cans
 - D Take a long, hot bath every night before going to bed
 - **E** Use rechargeable batteries
 - F Clean out her closet and put the old clothes in the trash

Name: KEY

Evaluation

Write the term from the term bank in the blank for each definition.

6.	<u>recycling</u> The process of collecting materials and turning them into new products			
7.	natural resource	A material found in nature that people find useful		
8.	reuse	reuse To use something more than one time		
9.	conservation	The practice of using resources wisely		
10.	reduce	To use less of something made from natural resources		
		<u>Term Bank</u>		
	conservation	natural resource	recycling	
	reduce	reuse		

Below each activity show below are two choices for how to complete the activity. Circle the choice that would be the best way to conserve natural resources for each activity.

11. Cleaning desks and tables



Use sponges to wash desks and tables

- **B** Use paper towels to wash desks and tables
- 12. Finding the answers to math problems
 - F Using a battery-powered calculator



Using a solar-powered calculator

- 13. Container for disposing of used paper
 - Trash can

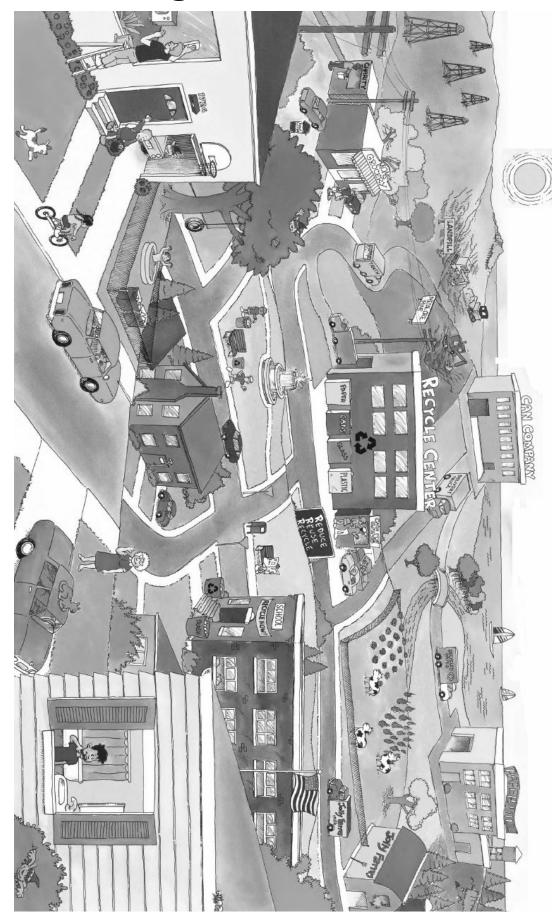


14. Sharpening your pencil

Hand crank

G Electric

Neighborhood Poster



Name:

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7.	A material found in nature that people find useful				
8.	To use something more than one time				
9.	The practice of using resources wisely				
10.	To use less of something made from natural resources				
		<u>Term Bank</u>			
	conservation	natural resource	recycling		
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- 12. Finding the answers to math problems
 - F Using a battery-powered calculator
 - G Using a solar-powered calculator
- 13. Container for disposing of used paper
 - A Trash can
 - **B** Recycle bin
- 14. Sharpening your pencil
 - **F** Hand crank
 - **G** Electric