

Title	Reduce, Reuse and Recycle (before we run out of space at the dump!)
Overview	Students will develop an understanding of the 3 R's (Reduce, Reuse and Recycle).
Subject(s)	Science
Grade Level(s)	Grade 5 Grade 6
Suggested Time	1 Hours
Materials	REDUCE ==> less garbage. REUSE ==> use an item more than once. RECYCLE ==> turn an item into another useful item.
Objectives	Students will be able to: <ol style="list-style-type: none"> 1. understand the need for waste management. 2. understand the meaning of the terms REDUCE, REUSE and RECYCLE. 3. differentiate between the terms REDUCE, REUSE and RECYCLE. 4. document their own ideas for using the 3 R's with respect to a number of simple objects. 5. document their own ideas for recycling tin cans.
Materials	white board Trash bin filled with trash. For example: <ul style="list-style-type: none"> - scrap paper - tin cans - toilet paper rolls - empty kleenex boxes - empty milk cartons - empty pop bottles - tinfoil - newspaper
On-Line Resources	Printables for this Lesson Plan: <ul style="list-style-type: none"> - Make Believe News Story to read or illustrate. - Reduce, Reuse and Recycle worksheet - Tin Can Recycling worksheet Websites for Research: <p>A LOT of ideas for Recycling (They call it 'reusing' but it's actually recycling since they're making something different out of it. Regardless, I've never seen so MANY</p>

	ideas before!)
Off-Line Resources	<p>BOOKS TO READ:</p> <p>The Wump World This story is too young for the Grade 5 and 6 age group, but is a great choice for the kids to read to their 'younger buddies' if you have a mentoring program at your school. It gives the Grade 5 and 6 students the chance to share their knowledge about the 3 R's with younger classes. (Plus it's a great story)</p> <p>Fun With Recycling: 50 Great Things for... Age appropriate arts and crafts type ideas.</p> <p>Sir Johnny's Recycling Adventure Great story + hands on activities. Age appropriate.</p> <p>Rubbish!: The Archaeology of Garbage Adult book. Good read for teachers prior to the unit. I enjoyed the emphasis on how garbage has been an issue for civilizations throughout history.</p>
Preparation	<p>Fill trash bin to overflowing with trash items and place it in the usual spot. Set out books on recycling, the environment, etc in the reading center.</p> <p>Prepare a make believe newspaper article from the year 2025 along the lines (printable version):</p> <p>MAYOR ANNOUNCES THAT THE CITY HAS RUN OUT OF ROOM FOR GARBAGE. TRASH BINS OVERFLOWING!</p> <p>In a news conference yesterday, the Mayor announced that the garbage dumps have started to overflow. Despite the mayor's efforts to find a suitable location for a new dump, the garbage crisis has not been resolved. An emergency meeting has been called for this evening to discuss final plans for dumping the city's garbage.</p> <p>During the news conference, the mayor said, "Er, our best plan so far is to eliminate school playgrounds. If we dumped the garbage in the space currently occupied by all school monkey bars and fields we should be able to resolve the problem for another year or two. And hey, the kids will still have their gyms to play in... " Parents and students began protesting the proposed action but stopped when they realized that the next best plan was to dump garbage in everyone's backyards.</p>
Motivation	<p>Ask the children if they know what happens to garbage after they put it in the garbage can. Write their thoughts on the white board. Explain to the children that garbage goes to a garbage dump (landfill) and that once one landfill gets full room for another one must be found.</p> <p>Ask the children to imagine what it would be like if the city ran out of room for garbage. Comments aren't necessary at this point... just have them imagine it in their heads. Read them the make believe news story from the year 2025.</p> <p>Ask the children what they can do today to keep the news story from coming true?</p>

	<p>Write their ideas on the board. Introduce the concept of the 3 r's (REDUCE, RECYCLE AND REUSE). Classify their ideas as Reduce, Recycle or Reuse.</p> <p>-----</p> <p>REDUCE ==> make less garbage. For example, instead of buying juice boxes for lunch, buy a large container of juice and use a washable single serving container to take it to school.</p> <p>REUSE ==> use an item more than once. For example, when you get a plastic bag from the grocery store put it in your car and use it again the next time you go shopping.</p> <p>RECYCLE ==> turn an item into another useful item. For example, scrap paper from the classroom might be turned into newspaper or paper bags when sent to the recycling plant.</p>
Activity	<p>Divide the children into groups of 2 to 4 students. Have each group take a few items out of the garbage can and move to their own area. Have them jot down some points on how they might use the 3 R's on the items they've chosen. Have them write down their ideas and which of the 3 R's they're using. Reduce, Reuse and Recycle worksheet</p> <p>Return to the large group. Have the children share one of their ideas. Write them down on the board.</p> <p>Place a tin can (or a few of them) in a central location in the class. Have the children individually come up with an idea for RECYCLING the tin can. On paper or on the computer, have the children write the directions for recycling the can. They can add diagrams/artwork if they like. Tin Can Recycling worksheet</p>
Conclusion	<p>Bind the children's recycling ideas into a book entitled "25 Ways to Recycle a Tin Can" (or whatever number of students you have) by xxxx Class. You can donate your class book to the resource center or sell it at a school auction to raise money.</p>
Short Extension	<p>Write a short story about what it might be like in the year 2025 if the city runs out of room for garbage? How would you feel? What would you suggest the mayor do to solve the problem?</p> <p>OR</p> <p>Illustrate the make believe news story. What would a photo of the city in the year 2025 look like if we weren't careful about managing our garbage? Make Believe News Story with space at the bottom for illustration</p>
Home Work Extension	<p>Discuss with your parents if/how your family uses the 3 R's. Write down ways you can help your family do a little bit more.</p>
Next Day Extension	<p>ARTS/CRAFTS: PENCIL HOLDER</p> <p>Provide the children with a tin can, tacky glue and a number of trash materials to create a pencil holder. Some suggestions:</p> <ul style="list-style-type: none"> - broken elastic bands - scraps of wool - used/torn gift wrap, ribbon, bows (too torn to reuse) - used, clean tinfoil that's too small to reuse

- scraps of colored paper
- dots from the hole punch
- pieces of styrofoam (meat trays, egg cartons, etc)

If you want to make an example pencil holder, I like to cut everything up into tiny pieces and glue it on collage style (you can make very nice designs this way), but let the kids be creative.

DURING THE PROJECT: you can read a book about recycling to the children
OR

you can talk to them about the 3 R's in more detail. Did you know that environmentalists were concerned that recycling might be a bad thing? Environmentalists worried that the idea people could recycle would make them forget to reduce and reuse. This could lead to our resources being used up faster than they would be if we only had 2 R's. It's important that we try to reduce and reuse FIRST and recycle only if we can't do the other two. That's why the 3 R's come in the order REDUCE, REUSE, RECYCLE. They're listed in the order we should try to do them.