



## 4: Reduce, Reuse, Recycle

Reduce, reuse, and recycle is a common phrase that attempts to change the way we think about our environment, climate change, and waste disposal/management. Over the years as populations increase, businesses and corporations grow, and material goods become easily accessible and desirable, our natural environment faces negative repercussions. Our carbon footprints have increased — the amount of carbon dioxide and other carbon compounds emitted due to the consumption of fossil fuels by a particular person, group, etc. has grown out of proportion and resulted in a destruction of Earth. Reducing our carbon footprint is one way to combat climate change and help the natural environment heal and restore itself. Through practices such as reducing your consumption of animal products, limiting the amount of fuel you use (consider biking instead of driving), or cutting back on electricity use, CO<sub>2</sub> emissions could be lowered. Additionally, did you know that the average person throws away their weight in garbage every month? Waste management addresses the ways in which civilizations discard those unwanted materials; however, proper waste management has become increasingly difficult because we are creating waste/garbage faster than we can properly manage it. Setting goals of living a “zero waste” lifestyle, as well as continuing to recycle and reuse/repurpose products instead of throwing them out is another contribution to reducing your carbon footprint and helping to save the planet!

### Reading Recommendations:

#### Children

1. *Arthur Turns Green* by Marc Brown
2. *The Earth Book* by Todd Parr
3. *The Lorax* by Dr. Seuss
4. *Recycle* by Gail Gibbons
5. *What You Can Do With An Old Red Shoe* by Anna Alter
6. *Where Does the Garbage Go* by Paul Showers

Juniors

1. *The Environment: How it Works* by Michael Allaby
2. *The Magic School Bus and the Climate Change* by Joanna Cole
3. *The Greenhouse Effect* by Kathlyn Gay
4. *El Nino* by Caroline Arno
5. *Recycling and Reusing our World's Solid Wastes* by James Hahn
6. *Trash to Treasure* by Pam Scheunemann

Teens

1. *The Revenge of Gaia* by James Lovelock
2. *Earth Matters: An Encyclopedia of Ecology*
3. *Uninhabitable Earth: Life After Warming* by David Wallace-Wells
4. *101 Ways to go Zero Waste* by Kathryn Kellogg
5. *Garbage Land* by Elizabeth Royte
6. *The Green Book* by Elizabeth Rogers

**Activity:**Materials

- garbage (dig into your recycled bottles/cans/containers; find old toys/clothes; and seek out other supplies found around your house that no longer serves its original purpose)

Procedure

This reduce, reuse, recycle activity requires easily accessible materials and demonstrates how you can successfully repurpose those unwanted goods! Your task is to be creative, and recreate a masterpiece out of garbage... think about making a Recycled Robot, Garbage Gnome, Tin Can Container (decorate some recycled cans to make container perfect for holding pencils, markers, flowers, or more...)

1. Start by collecting as many pieces of garbage as you want.
2. Draft a plan for you creation, either sketch out a design or write down some ideas.
3. Start crafting! Use glue, rope, paperclips, or any other materials to hold your pieces together. Think outside of the box, by digging into the garbage bin. Repurpose your waste and reduce your carbon footprint

**Dive Deeper:**

After reading and/or completing the activities, does this topic peak your interest?

Check out these websites to further explore the topic of environmentalism and recycling:

1. Zero Waste Projects —  
<https://happiestcamper.com/40-easy-zero-waste-projects-for-the-home/>
2. Dressing up a Tin Can —  
<https://www.instrupix.com/recycled-tin-can-crafts-projects-and-ideas/>
3. Environment: Waste Production Must Peak This Century —  
<https://www.nature.com/news/environment-waste-production-must-peak-this-century-1.14032>

4. Plastic now pollutes every corner of Earth —  
<https://www.theguardian.com/environment/2016/jan/24/plastic-new-epoch-human-damage>
5. Calculating CO<sub>2</sub> Emissions — <http://www.breathingearth.net>
6. Climate Change for Kids —  
<https://kids.nationalgeographic.com/explore/science/climate-change/>
7. The Importance of Environment to Life —  
<https://academic.oup.com/bioscience/article-abstract/14/7/25/237805?redirectedFrom=PDF>

Check out these videos and films to visually learn more:

1. “How Dare You” Greta Thunberg —  
<https://www.youtube.com/watch?v=TMrtLsQbaok>
2. Climate Change 101 with Bill Nye —  
<https://www.youtube.com/watch?v=EtW2rrLHs08>
3. What YOU Can Do About Climate Change —  
<https://www.youtube.com/watch?v=VTfgNFz1DBM>
4. Story of Stuff — <https://www.youtube.com/watch?v=9GorqroigqM&t=25s>
5. Why I Live a Zero Waste Life with Lauren Singer Ted Talk —  
<https://www.youtube.com/watch?v=pF72px2R3Hg>
6. A Beautiful Planet (2016 Film)
7. Earth's changing climate (2007 Film)
8. Ice Age: The Meltdown (2006 Film)
9. Before the Flood (2016 Film)

To stimulate stimulate the brain and engage in active learning, ask these questions:

Looking to build upon writing skills? Share your responses to these questions in a personal journal or brief paragraph essay.

Looking to build upon verbal communication and discussion based skills? Share your responses around the dinner table at night with family members; each person can contribute to the conversation with their own perspectives.

Looking to visually demonstrate your ideas? Share your responses by drawing and labeling a diagram, creating a storyboard with pictures, construct a 3D model, or acting out a scene.

1. What are ways you can reduce your carbon footprint at home? Do you recycle; use energy efficient appliances; have LED lights; use water saving devices; ride your bike instead of taking the car? Consider the actions and habits you are already doing and consider other habits you could start doing to help save our environment.
2. Could you live a zero waste lifestyle? What are the benefits to living a zero waste lifestyle, and how hard do you think it would be to maintain this lifestyle? Consider watching the Ted Talk by Lauren Singer, or other YouTube videos about zero waste.
3. Do you think our nation, and our world, is doing enough to help reduce, reuse, and recycle? Do you think our policies and laws are helping to save the environment?

4. If you were in charge of saving the world from environmental destruction what would be your first order of action; what would you do to raise awareness and prevent further decline?