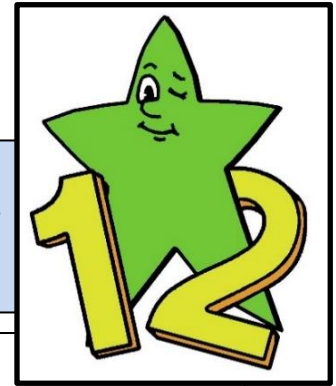


Repurposing in the Classroom



eco-cycle

Snapshot

There are many ways to repurpose discarded items into teaching tools and classroom supplies. Doing so encourages students to develop a conservation mindset.

<https://bit.ly/eco-cycle-zero-waste-schools-guide>

Objective: Students will be able to discuss and show examples of reusing and repurposing items in the classroom and how those actions benefit the environment.

Age Groups: K-12th grade

Setting: Classroom

Project Duration: Ongoing

Materials:

- Varies by reuse idea
- Chart paper
- Markers

Why This Project Matters:

There is a reason that REUSE comes *before* RECYCLE in the order of the 3 R's (Reduce, Reuse, Recycle): because it is an even *better* way to help the environment!

Reusing items:

- reduces waste. Waste is generated throughout the life cycle of a new product including the extraction of raw materials, the manufacturing process, packaging, distribution, consumption, and disposal.
- saves natural resources (trees, metal ores, minerals, oil, coal).
- keeps materials out of the waste stream, reducing the need for landfills and incinerators and reducing the amount of litter in the environment.
- eliminates the air and water pollution created when making brand-new items or when recycling old items into new.
- results in less hazardous waste.
- helps safeguard wildlife habitats.
- reduces costs.
- preserves the “embodied energy” that was originally used to manufacture an item.

Project Summary:

Teachers may choose from the ideas listed below to set up a classroom where reuse is a priority. Reusing items in the classroom is easy, economical, and provides a good model of Zero Waste practices in action.

Implementation:

1. Have students brainstorm ways that items are currently being reused or repurposed in the classroom. Make a list, post it on a bulletin board, and highlight any reused items that cannot otherwise be composted or recycled.



2. Continue brainstorming ways that items *could be* reused in the classroom. Use the list below for ideas if needed.
3. Decide which reuse ideas you would like to implement. Make a list of natural resources saved by reusing each of these items (e.g., reusing the backside of paper saves trees) and post the list somewhere in the classroom. Discuss other environmental benefits (reduces waste, uses less energy than making new products, etc.).

Ideas for reusing and repurposing in the classroom:

- Establish a tray for collecting one-sided paper (paper with one side printed and the other blank) to be reused as writing/drawing paper for students or as printer paper for teachers.
- Collect scrap paper (including half-sheets) for notes, sketching, practicing math problems, spelling tests, etc.
- Create a bin for collection of colored paper and construction paper scraps to reuse during art projects.
- Collect used plastic zip-top baggies to contain teaching materials for students (baggies should not have contained food prior to reuse).
- Save plastic shopping bags for sending delicate projects home with students, or for litter clean-ups around the school campus.
- Collect small plastic yogurt/applesauce tubs to plant seeds, organize manipulatives, contain paper clips, hold coins during currency units, collect reward tickets, etc.
- Cut chip bags open, wipe clean, then cut into strips and tape into rings to make 'paper' chains for counting days of school or classroom décor (instead of using new construction paper).
- Have students save and decorate tissue boxes for Valentine's Day card collection, or for organizing small desk items, such as erasers and pencils. (Recycle after use.)
- Separate decorative front covers of greeting cards and turn them into gift tags, table tents, name cards, or post cards to pen-pals. (Recycle after use.)
- Use unwanted mugs, tennis ball cans, and paperboard cans (from nuts, hot cocoa, etc.) to contain pencils, markers, scissors, and rulers. These could also be used to collect teaching tools that have small pieces, such as puzzles, building blocks, and manipulatives. If desired, paint or decoupage the outside of the container.

Extensions:

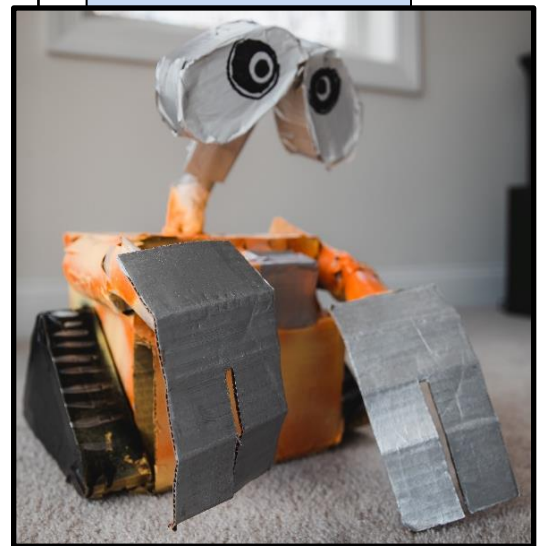
- Have students showcase their class's reuse ideas at an all-school event, such as a back-to-school night, school-wide festival, or assembly.
- Create a display for a prominent hallway or display case exhibiting reuse ideas that also includes facts about reuse and the environment.



- Use orphaned socks (ones that lost their match) for white board erasers.
- Use an old sheet, tablecloth, or fabric remnant as bulletin board backgrounds (they are more fade-resistant than butcher paper).
- Use newspaper to line classroom compost buckets (this keeps the inside of the bucket cleaner for longer and can be composted along with food scraps, tissues, and paper towels).
- Use newspaper instead of butcher paper to cover tabletops when doing messy art projects. (Recycle or compost when finished.)
- Use brown paper grocery bags, calendar pages, magazines, and maps as gift wrap. (Recycle after use.)
- Use chip bags for collecting small trash items in desks. Or cut them open, wipe them clean and use as gift wrap.
- Save plastic or metal gum and mint containers to send baby teeth home when lost at school.
- Use pages from old textbooks, damaged library books, and magazines for collage projects.
- Save large cereal boxes and laundry detergent boxes. Cut off the top and diagonally along the sides to make a library book/folder holder for student desktops. (Recycle after use.)
- Make notebooks/journals from one-sided scrap paper, paperboard boxes (for covers), and pieces of yarn or metal rings (for binding) using a paper cutter and a hole-punching tool.
- Ask a local carpet store for unwanted carpet tiles for use when students sit on classroom floors and auditorium floors during assemblies. Cut up old yoga or exercise mats for the same purpose.
- Instead of purchasing popsicle sticks to make name sticks, collect and wash straws from juice boxes and pouches. Attach photos or drawings of students to each straw. Bottle caps and jar lids can also be used with a photo or drawing of the student placed inside (these can also be turned into magnets).
- Instead of purchasing marbles, use bottle caps in a jar for measuring and rewarding positive classroom behavior.
- Use a milk jug as a watering can for classroom plants and animals' water dishes.
- Invest in a set of party reusables– cups, plates, flatware, and cloth napkins. Students may be able to bring in donations, preferably extras from home or purchased at thrift stores.



- Instead of disposable wipes or paper towels, have rags and sponges on hand for classroom cleaning.
- Hold a “Radical Reuse” session:
 1. Have students collect clean, non-recyclable packaging and supplies from home or school such as: wrappers, zip-top plastic bags, foam trays, straws, juice pouches, chips bags, freezer boxes, plastic 6-pack rings, frozen juice containers, to-go containers, yogurt peel-off lids, empty sticker/label/stamp sheets, dried up markers, abandoned marker caps, etc.
 2. Store these in a special container in the classroom.
 3. Explain to students that these are not recyclable or compostable and would be considered trash, but they are going to be kept out of the landfill by reusing them.
 4. Use these materials to have students create a themed project based on the curriculum being studied. For example:
 - Create an animal (real or fictional) that can live in the rainforest. What adaptations would it need?
 - Design an alpine landscape. What geological features would it have?
 - Construct a new insect. How many legs and body segments must it have?
 - Assemble geometric shapes from items.
 - Represent mathematical concepts like parallel lines.
 - Use straws or marker caps to teach addition and subtraction.
 - Paste images on the undersides of yogurt lids to create the game of *Memory*.
 - Use straws to make a set of *Pick-Up Sticks*.
 - Create mosaics or collages for book report covers from words and photos cut from packaging containers (chip bags and wrappers).
 - Design a machine or robot with moving parts.
 - Use small items to create dioramas or art sculptures.
 - Find ways to make musical instruments from these objects.



Assessment:

Have students write letters to pen-pals or administrators within the school explaining how their class reuses items in the classroom. Each letter should include three or more examples of reuse and explain at least one way that reuse helps the environment.

Related Activities:

- Trimming Holiday Waste – Chapter 7
- Getting Artsy with Reuse – Chapter 8
- Creative Crayon Recycling – Chapter 20

