PCS edventures!™
Experts in Hands-On STEM Education

# Making a Cleaner World:
## Reuse vs. Recycle

You're likely familiar with the phrase "Reduce, Reuse, Recycle." But have you ever dug into the differences between reusing a product and recycling it? Why does "Reuse" come first?

In this discussion, you and your learners will uncover the differences and brainstorm some creative ways to get more use out of everyday items. Dive in to learn how to make a cleaner world!

PCS

## HANDS-ON STEM EDUCATION

For over 30 years, PCS Edventures has inspired students to develop a passion for Science, Technology, Engineering and Mathematics (STEM), focusing our efforts on making learning and discovery a fun and interactive process for grades K-12.

- CLASSROOM
- AFTER-SCHOOL
- HOME LEARNING

## STEAM Connections

Science: Earth, Physical & Life; Technology: Communication & Collaboration

## Overview

Discuss the differences between reusing and recycling items to help extend their uses and prevent unnecessary pollution.

## Key Terms

**Reduce:** limiting the use or consumption of items to limit personal pollution production.

**Reuse:** finding new uses for an object without treating it.

**Recycle:** to return an item to its raw materials so it can be used again.

## Background Information

We've all heard the phrase "Reduce, Reuse and Recycle," but what does it actually mean to engage in these three pollution prevention protocols? The most straightforward of the three, "Reduce," means to find ways to limit pollution production. One of the most effective ways to reduce waste is to not create it in the first place.

Yet, "Reuse" and "Recycle" can cause some confusion. By recycling, isn't waste being reused? Yes, but recycling should be the final step in anyone's pollution prevention plan. Recycling is sometimes a long and complicated refinement process that may even create its own pollution. Therefore, finding ways to reuse items should always come first. Reusing has a low environmental impact because it doesn't require making another product. Additionally, it saves money, energy and natural resources, all while eliminating pollution.

During the following discussion, challenge your learners to think about new and creative ways to reuse some of the common items in your learning environment.

## Whole Group Discussion

Model a responsive classroom by starting your morning meeting, discussion time or special lesson with this activity:

- **What are the three Rs of pollution prevention?** (Reduce, reuse and recycle.)
- What do the three Rs mean?

Answers will vary. Encourage learners to share reduce, reuse and recycle examples. Then flow into a conversation on the differences between Reusing and Recycling.

Reducing waste is the easiest thing we can do. There's no pollution to worry about if we don't create it in the first place! But what about when you want to use the other two R's?

- **Let's say you have a pair of pants that don't fit anymore. You don't want them to wind up at a landfill, so what should you do?** (Reuse or Recycle.)
- **How could you reuse those pants?** (Donate, make a quilt, turn them into a bag, etc.)
- **We know that recycling means returning something back to its raw materials to be used for another purpose. Do you think you could recycle those jeans?** (While challenging, this question helps learners draw a distinction between reusing and recycling.)

There are specific programs in some cities that accept textiles, but jeans are not an item you can just throw into the recycling bin. In fact, there are many things we use every day that can't be recycled. We don't want to throw those items away, which means we should try to reuse everything we can!

- **Reuse isn't about breaking down and repurposing the materials that make up an item — it's about repurposing the item itself. What are some ways to reuse the items in this room?** (Encourage learners to get creative, and pick out and highlight answers like buying and selling used goods, repairing broken items rather than throwing them out, donating used items and reimagining new uses for anything that won't decompose, like glass jars, plastic containers or water bottles.)

While recycling is a great way to keep waste out of landfills, reusing items is the easiest and best way to keep Mother Earth happy. When we recycle, we're breaking something down into its core materials. Those materials get made into something else, but, in some cases, the recycling process itself creates pollution as factories work to break objects down. Recycling is always a better option than throwing something out, but before you toss something into the recycling bin, ask yourself: "Can I reuse this?"

## Check for Understanding

- What is the difference between recycling and reusing?
- Why should you try to reuse something before recycling it?

## Extensions:

Since it was first developed, the Three Rs have actually expanded to the Six R's of sustainability: Rethink, Refuse, Reduce, Reuse, Repair and Recycle. If learners are up for it, introduce the new concepts, making sure to model their total impact and how some choices are made before a product is ever purchased. Check out the 6 Rs Of Sustainability podcast by Sustainability Success to learn more about each R.

Looking for more resources? Visit: www.epa.gov/recycle/reduce-reuse-recycle-resources-students-and-educators

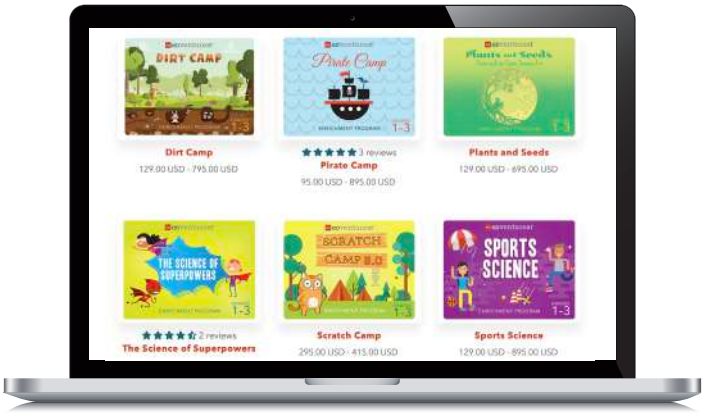
*This Discussion Script is modeled from PCS Edventures' turn-key STEAM Programs, housing everything you need to hop right into a lesson. Looking for more environmental engagement? Check out:*




**References:**

6 Rs Of Sustainability: EASY Steps for a Sustainable Lifestyle. (September 6, 2022). Sustainability Success. Retrieved September 9, 2022 from https://sustainability-success.com/6-rs-of-sustainability-lifestyle-9-3-rs/

Reduce, Reuse, Recycle Resources for Students and Educators. (August 10, 2022). EPA. Retrieved September 9, 2022 from https://www.epa.gov/recycle/reduce-reuse-recycle-resources-students-and-educators




For more information, visit edventures.com/collections
or contact a STEM Program Specialist at (800) 429-3110

PCS edventures!™
Experts in Hands-On STEM Education

Brick LAB

ENRICHMENT PROGRAMS

DISCOVER SERIES

DRONES