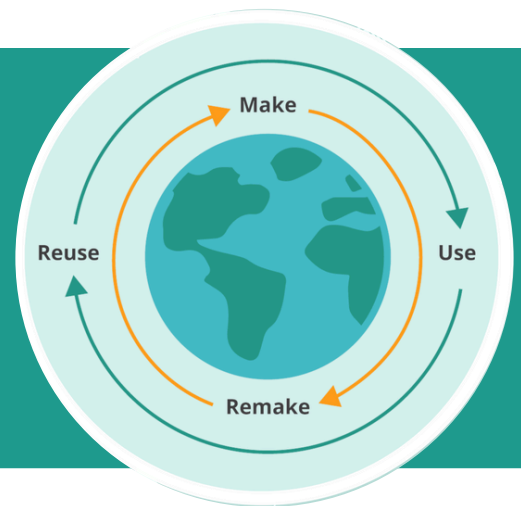


# Plastic Waste to Consumer Goods

#Eco360

Activity

Grade Level: 9-12



## Main Objective

Learners will explore ways in which plastic waste can be repurposed to create consumer goods. Learners will complete a make- remake activity where they will go through a design challenge to make something new out of recycled plastic.

## Learning Outcomes

By the end of this activity, learners will:

- Describe how plastic can be recycled to make consumer goods in a circular economy
- Identify innovative ways in which plastic can be utilized to make consumer goods

## Length of Activity: 1.5 - 2 hours

**Step 1+2:** Intro and discussion to consumer goods

**Step 3+4:** Design a repurposed plastic product

## Materials Required

- Internet-enabled device
- Topic backgrounder
- Eco 360 notebook (we recommend asking learners to maintain a notebook for this program to write down reflections as they go through the program)
- Discarded plastics
- Other craft tools as needed for the make-remake activity (scissors, glue, tape, paper, markers, etc.)

## Curriculum Connections

### Alberta

Social 10-1

- 3.7 - Explore multiple perspectives regarding the relationship among people, the land and globalization (spirituality, stewardship, sustainability, resource development)

Biology 30 Unit D: Population & Community Dynamics

- 30-D2.1sts - Explain why Canadian society supports scientific research and technological development to facilitate a sustainable society, economy and environment

### Ontario

Grade 9 Geography

- C1. The Sustainability of Resources: Analyse impacts of resource policy, resource management, and consumer choices on resource sustainability in Canada
- E1. The Sustainability of Human Systems: Analyse issues relating to the sustainability of human systems in Canada

## Activity

### Step 1: Begin by conducting a thought experiment with your learners

Pose the following question:

1. "What can we make out of discarded plastics that can be used in our daily lives?"
2. Have a discussion in class and note down all the ideas that learners share on the whiteboard or a virtual board for everyone to see.

### Step 2: Categorize Learner Ideas

Put learner ideas into different categories of consumer goods on the whiteboard, such as:

1. Apparel (clothes, shoes, bags, etc.)
2. Kitchen items
3. Bathroom toiletries
4. Grocery items (shopping bags, containers, etc.)
5. Cosmetics
6. Packaging

### Step 3: Design Challenge

After creating these categories, invite learners to further develop their ideas by completing a design challenge of making or remaking a consumer good out of discarded plastics using the resource below. Learners can create anything they can think of that can be used as a consumer good, it doesn't need to be limited to the categories identified! It can be anything!

[https://greenlearning.ca/assets/uploads/pdf/1-Handout-CircularEconomy\\_MakeRemake.pdf](https://greenlearning.ca/assets/uploads/pdf/1-Handout-CircularEconomy_MakeRemake.pdf)

- You can share the following case studies with the learners before they dive in:

[https://greenlearning.ca/assets/uploads/pdf/9CircularEconomy\\_WhatToDoWithPlastics.pdf](https://greenlearning.ca/assets/uploads/pdf/9CircularEconomy_WhatToDoWithPlastics.pdf)

### Step 4: Conclusion

Complete the design in Tinkercad. Be creative and show us what you designed by sharing photos of the end product by emailing to [programs@greenlearning.ca](mailto:programs@greenlearning.ca)

This activity can also be conducted on [Tinkercad](#) - by selecting the "Making at Home" option in the Tinker cad dropdown, learners can choose plastic items they can usually find at home when creating a 3D design of a new product!

