

Activity Summary:

Emphasize the importance of the “reuse” and “repurpose” R’s through upcycling of materials into a bird house. Introduce the idea that recycling is often not the best option, and that repurposing items can give materials a longer life prior to recycling or trashing them.

UNIT: Generation Zero

GRADES: K-5th

MATERIALS:

- Cartons
- Glue (glue guns, sticks, and dots)
- Scissors/Box cutters
- Tape
- Cardboard/egg cartons
- Craft materials
- Paint & paint brushes
- String
- A chopstick or stick
- Construction paper

TIME REQUIRED: 60 minutes

OBJECTIVES:

Students will be able to:

- Understand the importance of keeping materials out of the landfill.
- Imagine alternative methods for repurposing waste items.
- Remember which materials can be recycled.

Upcycled Cartons

Set-Up (5 min)

1. Lay out supplies in several different “stations”. Keep the cartons at the starting end so kids begin with the base of their bird house.

Upcycled Cartons (40 min)

1. Explain the importance of reducing and reusing materials prior to recycling.
 1. Talk about the R’s including refuse, reduce, reuse, repair, recycle, and rot – *I am sure many of us have heard of reduce, reuse, recycle. Can anybody think of other R words that might be something we can do with things we are no longer using?* Repair, rot, refuse!
2. Briefly explain landfills and City of Austin’s 2040 waste goal – *The City of Austin wants us to put as little as possible in the landfill by the year 2040. Maybe even zero things. This is called our Zero Waste Goal! Through refusing, reusing, reducing, recycling, rotting, and repairing, do you think we can make that happen?*
3. Teach the recycle materials song –
 1. Now we are going to learn a song to help us remember the special items that go in the recycling bin.
 2. Teach the song: Have all students stand up where they are. Tell students that This song has two parts, I will go first, and you will watch. We will then do it together.
 3. Part one goes (just educator demonstrates) “Paper, plastic, metal glass” (rock back and forth while doing this). You will now do this with me on the count of three.
 4. That was great! Y’all will now watch part 2! Part two goes, “these things don’t go in the trash (swing arms in front of you and at the end jump and strike a pose). You can end the song jumping, striking any pose you want and freezing! You will now do this with me on the count of three.
 5. We are going to do the full song together- part 1, part 2, strike a pose, and freeze! Can y’all handle it? 1,2,3...
4. Explain if it’s plastic, and you can easily crumple it up, you cannot put it in the blue cart. This can break the recycling machines at the recycling center. For 4th and 5th grade, discuss alternatives where soft plastic can be taken to be special recycled (Austin Recycle & Reuse Center, and popular grocery stores).
5. Explain that some items cannot be recycled, including cartons (for example, milk or juice carton), because of the material they are made of. Cartons are often made of several materials including paper, plastic, and/or aluminum. These materials, similar to chip bags, are difficult to separate from each other. This means that they would need to be sent to the landfill with the regular trash. *What is a way we can prevent them from going to the landfill?* Upcycle them!
6. Describe the stations and the materials they can use to create upcycled bird houses.

1. Start with 1 carton per participant. They can then add smaller items to that as they go. Limit how many items they take (for example, 3 googly eyes, 2 pieces of paper, 4 bottle caps, etc.).

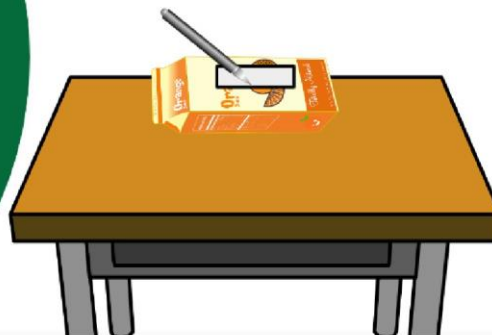
Step 1:

Outline a window shape (any shape you like for entrance!)



Step 2:

Use a craft knife to cut through the carton of the outline to create a door



Step 3:

Measure the distance from the bottom using a ruler and mark with an X where you want stick for bird stick perch to go through (front and back)



Step 4:



Cut through the carton to make a hole for the stick using a craft knife. Slice the X mark on both sides to insert the stick through



Make a hole on the top of the carton where the string will go through. Use a craft knife. Pull string through!



Get creative!

Paint your birdhouse
Add stickers

Step 6:

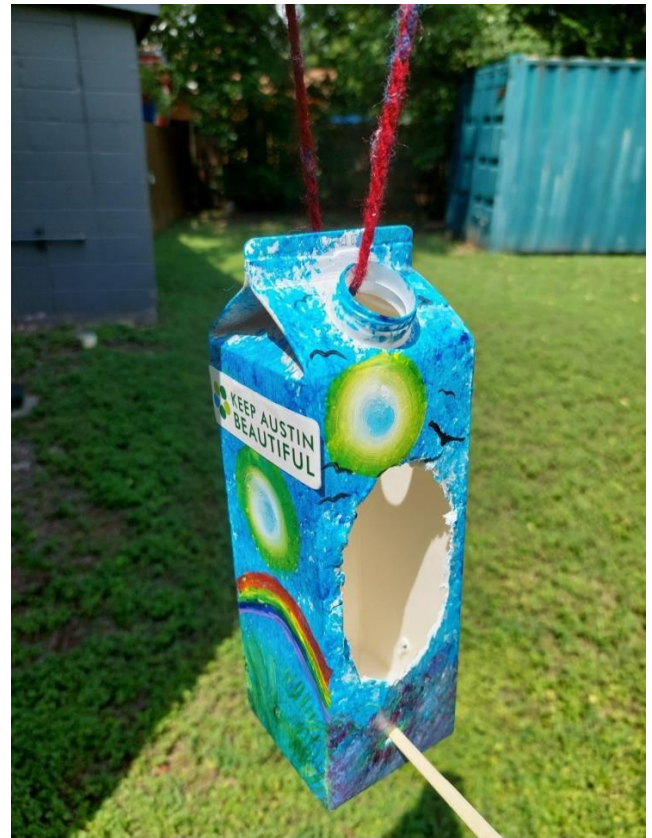


7. Supervise as the students put together their bird houses and help as needed. An adult should always oversee the use of hot glue station and use box cutters to create openings.

Conclusion and Clean Up (15 min)

1. Give students a 5-minute warning prior to clean up time. Ask students to put all supplies back where they found them. Direct them to throw away small scraps of paper, tape, or anything that can't be reused or recycled.
2. Conclude by asking if anybody would like to share their creation with the class, emphasizing the materials they were able to repurpose and give a new life to.
3. Review the idea that the other "R"'s are equally, if not more, important than recycling and that we should always find ways to reuse or repurpose materials prior to recycling or trashing them.

Example:



TEKS K-5th

Science, Kindergarten, Adopted 2021 – (6)

Source Note: *The provisions of this §112.2 adopted to be effective April 26, 2022, 47 TexReg 2136.*

Science, Grade 1, Adopted 2021 – (6A)

Source Note: *The provisions of this §112.3 adopted to be effective April 26, 2022, 47 TexReg 2136.*

Science, Grade 2, Adopted 2021 – (11B)

Source Note: *The provisions of this §112.4 adopted to be effective April 26, 2022, 47 TexReg 2136*

Science, Grade 3, Adopted 2021 – (11B-C)

Source Note: *The provisions of this §112.5 adopted to be effective April 26, 2022, 47 TexReg 2136*

Science, Grade 4, Adopted 2021 – (11B)

Source Note: *The provisions of this §112.6 adopted to be effective April 26, 2022, 47 TexReg 2136.*

Science, Grade 5, Adopted 2021 – (11)

Source Note: *The provisions of this §112.7 adopted to be effective April 26, 2022, 47 TexReg 2136.*