Lesson 2: Plastic Creation

Grade Level: Middle School to High School

Estimated Completion Time: 3weeks

Overview

Student will examine "PETBottles sophisticated Art" by Masumi Honda, to learn how to turn used-plastic bottles into materials for art. Students will practice skills to use small wood-burner to design the pet-bottle arts. Students will make pet-bottle sculpture of their choice and make one big pet-bottle tree(or big object of their choice) as group project to install in community area to involve community into this matter to reduce plastic waste. Students will learn how to manipulate plastic bottles and examine how to utilize the material for future lesson, which is to make clothes from re-cycled item for the final fashion show. The objects students made in this lesson will be used as decoration of the stage and showroom for the final fashion show. Learn to use plastic in meaningful ways also reduces waste, helps the environments.

*Using wood-burners have risk of small injury(burning), it is good to get permission from parents beforehand for students to participate activity using wood-burners. If it is not allowed, please do this activity without wood-burners, or replace this lesson with Paper Creation (Lesson 3).

Enduring Ideas/Essential Questions

To explore the different usage of each materials, find best potential of the materials even they were called "trash" before. Some questions to ask to students, "What are the possible ways to use this material?" "Can we use materials in different ways if we cut, connect, mince, or mix with some other materials?" Students will examine and practice using materials in different ways, by doing so, they can feel in their hand what they can actually do, and gather the ideas to make their own object(and for future lesson) using variety of skills and different perspective.

National or State Learning Standards

(HS Proficient): Students will VA: Cr1.2.Ia: Shape an artistic investigation of an aspect of present-day life using a contemporary practice of art or design. VA:Cr3.1.Ia: Apply relevant criteria from traditional and contemporary cultural contexts to examine, reflect on, and plan revisions for works of art and design in progress. VA: Re.7.1.Ia:Hypothesize ways in which art influences perception and understanding of human experiences.VA: Re9.1.Ia: Establish relevant criteria in order to evaluate a work of art or collection of works.

Lesson Objectives

In this lesson, students will: (1) observe and examine "PETBottles sophisticated Art" to learn different ways to use pet-bottles, (2) to be aware of what plastic waste does to ocean and convey the messages to community to work together to reduce plastic wastes. (3) Create own object from used plastic bottles and create one big plastic tree(or object of student's choice) to install in community area to involve community into this matter to reduce plastic waste.

Tools and Materials

Small wood-burners for each student. Used plastic bottles. (they should be collected from community (or school) using the collection box made in first lesson). Some facts (posters or PPT, etc) of what plastic wastes cause for ocean. Scissors and glue.

Introduction

Using "what does waste do to ocean" handout, discuss with students where plastic waste goes, how long does it take to be decomposed. Discuss what plastic wastes does to ocean animals, and destination of micro plastics. Is it safe to eat plastics? Provide some facts that we know as

of now and discuss unknown problem that might causes in the future. What can we do? What are the possible ways to re-cycle/up-cycle plastic wastes? Explain how to use small wood-burners and safety protocol.

What does wastes do to ocean?

Each year, billions of pounds of trash and other pollutants enter the ocean.

1. What does the wastes do to Ocean?
2. Where does pollution come from?
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3. How much trash goes in the ocean each year?
4. What are micro-plastics?
4. What are inicro-plastics:
5. What plastics does to ocean animals?
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6. What happens when ocean animals eat plastics?
7. How long does it take for plastics to be decomposed?
9. What are we leaving it to our poyt generation?
8. What are we leaving it to our next generation?

Procedure

- (1) Divide students in few groups and discuss the design of plastic tree (or big object of their choice).
- (2) Have each group draw some design of the tree/object.
- (3) Show the design to other groups and explain the concept, purpose of the tree/object, give ideas to each other, and pick one design for each group.
- (4) Set collection box from previous lesson to collect desired materials for group project.
- (5) Brainstorm design of your own small creation (draw design optionally)
- (6) Practice using wood-burners and make plastic creation of your own.
- (7) After finishing your own small creation, join group project to create big object.

This object and your small creation will be used as decoration for fashion show stage in later lesson and set it in community place to brighten up the community and draw viewer's attention into this matter in positive way.





(Small fish made of pet-bottle) (Pet-bottle tree.from https://earthly.app/blog/the-pearl-protectors)

Distribution and Clean-Up

Any plastics left from the project, have students put them in plastic re-cycle bin to be re-cycled in community. Have student put away tools that they used.

Closure

Place students' art in place where final fashion show will be held, as decoration of stage and show room. At the end of the class, ask students "What did pet-bottle become with your creativity?" "What's the new purpose you gave to the item?" "What did you learn about the

material you used?" and have them hold their item and tell classmates what they think of their new creation (self-assessment) and share ideas they used it to create their artwork, and how they are thinking about to using the skill learned for future lesson(to make clothes out of recycled items for fashion show)

Assessment Rubric

Rubric for the Pet-Bottle Creation

To receive C "satisfactory," a student must:

- Understand different usage of pet-bottles.
- Shows understanding of what plastic waste causes for ocean.
- Create original work of art (pet-bottle sculpture)

<u>To receive B "proficient," a student must meet all of the criteria for a satisfactory" and:</u>

- Join and spontaneously help each other to explore ideas.
- Participate to create group object.
- Create original work of art (both pet-bottle sculpture & group project)
- Be able to explain potentials of "plastics".

To receive A "outstanding," a student must meet all of the criteria for a "proficient" and:

- The artwork send message to viewers, catches viewer's attention to the meaning of the artwork.
- Shows original creativity in the artwork and shows various way of how he/she used materials.
- Be able to explain the importance of working with community.

Formative/Summative Assessment:

Beginning of project, ask students the goal of this plastic creation, what their aim is. During the making process, ask students if their product is going close to their goals. After the products are finished, have them talk about their own plastic creation and their group project.

Artists or Works of Art Studied

Honma, M. (n.d). ペットボトル ソフィストケイティド アート [Pet bottles sophisticated art] Japan: September 9,2020, from http://masumi-homma.com/

Plastic bottle christmastree : Celebrating green Christmas (n,d) *igreenspot*. Retrieved from https://www.igreenspot.com/plastic-bottle-christmas-tree-celebrating-green-christmas/

PET bottles in recycled Christmas décor(2017, December 24). *Sunday Observer*. http://www.sundayobserver.lk/2017/12/24/forum/pet-bottles-recycled-christmas-d%C3%A9cor

References

Ocean pollution (n.d). National Oceanic and Atmospheric Administration U.S. Department of Commerce

https://www.noaa.gov/education/resource-collections/ocean-coasts/ocean-pollution

Committed to protecting marine ecosystem through community work.(n,d) *Earthly*. Retrieved from https://earthly.app/blog/the-pearl-protectors

Yamada, Y. (2015, March 1). トイレットペーパーボリサイクルアート・山田ゆか [Toilet paper roll recycle art – yamadayuca.] Japan: Yamadauca Blog. https://www.yamadauca.com/2015/03/5373.html

'Trashion' designer Marina DeBris turns ocean rubbish into high-end outfits in pictures. (2016, September 13) *The Guardian*. Retrieved September 24, 2020, from https://www.theguardian.com/artanddesign/gallery/2016/sep/13/trashion-designer-marina-debris-turns-ocean-rubbish-into-high-end-outfits-in-pictures

Curriculum Resources:

Plastic bottle christmastree : Celebrating green Christmas (n,d) *igreenspot*. Retrieved from https://www.igreenspot.com/plastic-bottle-christmas-tree-celebrating-green-christmas/

PET bottles in recycled Christmas décor(2017, December 24). *Sunday Observer*. http://www.sundayobserver.lk/2017/12/24/forum/pet-bottles-recycled-christmas-d%C3%A9cor

Senta. (2014, August 21) 発掘!アーティスト. テーマは「エコ」再利用できるペットボトルアート[discover artist: theme "eco" pet bottles art] Japan: SONY weekly magazine. http://myvaio.sony.jp/sonyselect/special/140821/

Need to find: (1) small wood-burners for each student. (2) collect used bottles from the collection box that students made in earlier lesson. (3) Examples of pet-bottle creation (picture or PPT) (4)Some facts of what plastic wastes cause for ocean. (3) place to set the big object(preferably community space)