Upcycle Hats

Objective:
Students will create a hat decorated with marine debris. Students will understand other uses for items that would otherwise be thrown out.

Concept:
Marine debris harmful solid waste in the ocean, is a byproduct of personal choices, and can be prevented through a change in those choices. Marine debris and other items thrown in the trash can be upcycled, and used for something new.

Materials:
- Wide masking tape
- Plastic Wrap or shower caps
- Newspapers
- Hot Glue or tacky glue
- Paint (optional)
- Marine debris pieces
- Scissors

Introduction:
Begin discussing with the students the idea of upcycling, creating new things out of old things that would otherwise be thrown away. If you would like a further discussion of why upcycling is important watch this 20 minute video, “The Story of Stuff” by Ann, which discusses the life of a product from extraction to landfill: https://www.youtube.com/watch?v=9GorqroigqM&noredirect=1.

Activities and Procedures:

Have the students divide into groups of three.

They will work together in these groups to create a hat for each person in their group. To create a hat:

First, cover the student’s hair and forehead with plastic wrap (almost like a shower cap.)

Second, wrap a band of masking tape, sticky side out, around the student’s forehead. Try to place the tape where the band of a baseball cap would sit on the student’s head.

Third, use 3-4 sheets of double page newspaper (not single pages like ads or inserts) for each student’s hat. Place the center of the newspaper on the center of the student’s head. Then carefully flatten down the newspaper until the bottom paper is stuck to the masking tape around the student’s head, and the other newspapers are tight around the student’s head.

Fourth, wrap another line of masking tape around the outside of the newspapers. Try to line up the tape to be even with the tape under the newspapers. While the newspapers are still on the student’s head, carefully fold up the extra flaps of newspaper to create the brim of the hat. Take the hat off the student’s head.

After all the students have helped the others
in their groups and all have created a hat, have them shape the brim of their hats.

The students can trim the brims into the shape they desire. Have the students leave the brims about 2 inches longer than they desire.

Next, have the students roll the brims of their hats and glue the rolled portion down. This will create a solid brim, and prevent the newspapers becoming separated and the brim too floppy.

Now it is time to decorate the hats! If you would like the students to paint the hats do so now to allow the paint time to dry. Be sure the paint is not applied to heavily to the hats, or the newspaper may collapse or melt.

Next, have the students create the band of the hat, which will be the major portion of the hat which is decorated.

Have the students fold a piece of newspaper into a 2-3 inch tall band (this will be glued to the hat where the masking tape is on the outside). Be sure the bands are long enough to fit around the student’s hat.

Then have the students select pieces of marine debris to glue to the band for decoration. Encourage the students to use both recognizable pieces (such as a bottle cap) and unrecognizable small bits.

Also encourage students to cut the marine debris in creative ways before gluing them to their hat bands. For example a plastic water bottle can be cut to look like a flower, or into spirals that hand off the brim of the hat.

Have the students glue their pieces of marine debris onto the hat bands. If using tacky glue, before gluing the bands onto the hats, have the students write in their science notebooks to allow the glue to dry.

Wrap-up:

Have the students write in their science notebook about ideas for other upcycling uses for things people normally throw away, or marine debris found on the beach. If the students need some examples show them some picture of houses and walls built from plastic water bottles around the world. Here is a good source for pictures: http://www.inspirationgreen.com/plastic-bottle-homes.html

Extensions & Lesson Connections:

As an extension, have students create other wearable items or musical instruments from the larger pieces of marine debris.

You can have students where their hats in an "Art Exhibition" or "Celebrate the Sea Party" as described later in Unit 6.

Evaluation:

Observe student engagement and participation in their groups to create their hats. Review their hats, looking for creativity in the style of hat and debris used. Also review the student's science notebooks for ideas on creating other items with marine debris or other people’s trash.