APES Upcycling/Repurposing Project

**Introduction:**

Repurposing, also known as adaptive reuse or upcycling, is the use of products and materials for purposes other than originally intended. Examples include worn out tires fashioned into furniture, candy wrappers turned into handbags, and cardboard canisters used as lampshades. This project invites you to create your own unique repurposed design(s).

Objectives:

* How are materials repurposed?
* How does repurposing help the environment?
* How much waste production was prevented by the upcycled product?

**Procedure:**

1. Research upcycling/repurposing projects. Brainstorm materials you have at home that would have otherwise been waste items that you could use to make something practical with.
2. Build/create your idea using only recyclable materials (i.e- do NOT go out and buy materials. If you don’t have any recyclable items at home, then go get someone else’s trash)
3. Compare your upcycled product to that which you would have had to buy as a virgin product. **Calculate** the amount of waste you prevented being produced from the **production** of the virgin product. You will need to research the materials required to make that product and how much waste is produced per kilogram of that material.
4. Also describe the avoided pollution (specifically) produced from either the recycling or disposal of the materials you used (consider what would happen to the items once they were thrown away)

**Some guidelines**

* Your product should be primarily WASTE items. If you use non-waste items they should only for minor construction needs (examples: glue, tape, etc.)
* Your project should be practical. Something that can actually be put to practical use
* **Procedures 3 and 4 should be typed write ups and should be in-depth analyses of the impacts associated with waste prevention and production**

**Project Worth 1 Major Grade**

**Product (1 grade)**

**A:** very practical and very efficient; uses primarily waste products

**B:** somewhat practical and efficient; uses primarily waste products

**C:** lacking practicality, but is efficient, or vice versa; uses primarily waste products

**D:** Lacking practicality and efficiency; uses some waste products

**F:** not upcycled from waste products

 **Reflective write-up (1 grade)** will be graded on content accuracy and maturity of analysis (AKA- college level discussion)