



## **Re-Purpose Project**

This project is designed for use with the following episode:

- **e<sup>2</sup> design season three — Super Use**

Objective: To create a functional item using only materials that were originally meant for another purpose.

TIMING: 3-5 class periods (not including episode discussion)

THE ASSIGNMENT:

- 1) Follow the teacher's guide for discussion of **e<sup>2</sup> design season three** episode "Super Use."
- 2) Using a collection of materials that would normally be thrown away or used for another purpose, each student or group of students must:
  - a. Build a scale model to illustrate a principle of science, technology, engineering, or mathematics (i.e. – a suspension bridge, a model of the solar system, a visual representation of the Pythagorean Theorem.)  
OR
  - b. Create an item that has a different function from the original function of the items used to create it (i.e. a simple machine, a picture frame, a piece of art.)
- 3) Present the creation to the class in one of the following ways (Teacher's choice or students' choice).
  - a. Have a mini-science fair so that half of the class presents in booths around the perimeter of the classroom while the other students circulate the room taking notes and asking questions. Observing students can vote for winners in a variety of categories (e.g. most creative design, most functional item, most informative presentation) or the teacher can decide. The next day, the roles are reversed and presenters observe and vice versa. (2 class periods)  
OR
  - b. Have individual student or group presentations where students in the audience are permitted to ask questions after each presentation. Again students can vote for winners in a variety of categories or the teacher can decide. (1-2 class periods)



## GUIDELINES FOR THE PRESENTATIONS

Each group should incorporate the following into their visual presentation:

- i. List of materials used
- ii. Original purpose of those materials
- iii. Description of the new item (its new function or the STEM principle that it illustrates)
- iv. What they learned about reuse, recycling, and the value of materials.

## POSSIBLE INCLUSION IN RE-DESIGN FAIR

Because the subject matter is similar, if the upper grade level students are having a Re-Design Fair, these presentations could be incorporated into that fair to allow other grade levels to participate.