

Product Mash-Up Challenge

Introduction

If product design were a coin, the two sides of the coin would be “[form](#)” and “[function](#)”. Both attributes define the identity of a product in the mind of the user. Both play a key role in the product’s success or failure. Have you ever stopped to think about how some [products](#) come to exist as you see them on the store shelf? The answer to that question for a great many items is by combining the traits of existing objects- their forms, their functions, and sometimes both to create something distinctive and unique.

The Product Mash Up Challenge gives you the opportunity to try combining product traits in new and creative ways to create new product ideas. Then, to take the challenge further, you will build or sketch your idea, and create an [advertisement](#) for it. Practice creativity, critical thinking, collaboration, and communication in this fun 21st century skill based challenge.

The Challenge

STEP ONE: Inventing

- Randomly select two items from the list included at the end of this challenge.
- Brainstorm product ideas that use elements of both randomly selected items.
- Sketch out your ideas.
- Create as many ideas as you can think of. (At least ten!)
- Evaluate the ideas by asking yourself the following questions:
 1. Which ideas are the most useful?
(It’s best when things solve a problem or perform a useful function.)
 2. Which ideas would be attractive to the most people?
(The more people who will want it, the better.)
 3. Which ideas would be most feasible?
(Feasibility is good. It means the technology for it to work already exists.)
- Choose the best idea to become your product.
- Once you choose an idea, you may want to develop it further. Do additional sketches to refine the idea into a product concept.

STEP TWO: Making

There are a couple options for making your idea.

Option A: Create drawings of your product.

- Draw your product from several angles: the front, the top, and the side.
- Use call-outs to show features.

(Call-outs are arrows with labels that point to specific parts of a drawing.)

Option B: Build a model of your product.

Using whatever materials you have at your disposal, build a model of your product.

REMEMBER THAT A MODEL DOES NOT ACTUALLY HAVE TO WORK!

A model can be made with very simple materials.

Product Mash-Up Challenge

Here's just a few of the many options you may try:

- Paper or cardboard
- Fun dough or modeling clay
- White glue, wood glue, or hot glue
- Aluminum foil
- Tape: clear, masking, duct, or other

STEP THREE: Storytelling

Create promotional materials to tell the story of your product.

There's a couple options for creating promotional materials.

Option A: Create a full page advertisement.

The ad should have the following elements:

- An image of the product
(An image of the product in use is best!)
- The name of the product
- A statement of what it does
- A statement of why people would want to buy it

Option B: Create an advertisement video.

If you have the ability to record a video, you may pitch the product just like an ad you'd see on TV.

- A video ad should include everything listed above in option A.
- If there is a model, it should be shown clearly.
- If possible, act out using the model for its intended purpose.

(This can be acted out even if the model does not actually do anything.)

Finally, send photos of your work along with the video (if you made one) to your teacher. Include written explanations as necessary.

Lesson Learned

In this challenge students combine either the function or the form (or both) of two concepts. Many innovations essentially involve combining more than one function in a single object. (Clock-radio, Wifi Thermostat, etc...) At the same time, because of our mind's ability to make associations, a very small portion of an object or a bare outline of its shape is sufficient to make people think of the object. This means designers can change an existing item's identity just by changing how it looks to create something unique and new.

These lessons are learned while guiding the student through the creative process of identifying a problem, brainstorming multiple solutions, visualizing those solutions, and communicating them through text with graphics, live video or both.

trampoline

refrigerator

fire
extinguisher

record
player

hammock

spray
can

car

notebook
(paper)

food
processor

flashlight

bed

skateboard

bicycle

saxophone

coffee
machine

car jack

planter

binoculars

fax
machine

drum set

microwave
oven

toolbox

pool float/
raft

lawn
mower

clock/
alarm clock

guitar

shower

drill

sprinkler
system

glasses

lamp

music
keyboard

bathtub

drone

garden
hose

coffee
table

blender

computer
keyboard

truck

video
camera

hot
tub

couch

television

computer
mouse

sound
system

step stool/
ladder

barbecue
grill

easy
chair