# Product Mash-Up Challenge



## The Make-A-Matic Mash Up

"I'm so glad you kids are here!" G said beaming as he greeted his two young guests. "Walt, Sue, your friends are here!" G called out behind him before turning back to the pile of parts on his work bench.

"What'cha working on, G?" asked Shae as she examined some of the pieces.

"I call it the MAKE-O-MATIC" explained G. "You enter two things into the computer and it creates a small <u>model</u> of one item that shares characteristics of both original things. So, for example, I enter banana and phone, and I get a "banana-phone."

"The programming for that must be amazing!" said Hassan with his eyes gleaming.

"Here, take a look for yourself." G said, handing Hassan his tablet. "I'm going to see where Walt and Sue have gone." and with that G left the room to look for his grandchildren.

"This instant prototyping rig is so cool, but the stuff it makes is tiny." said Shea, "I bet I can make it bigger!"

"And I think I know how to make this program MUCH more powerful." Hassan added. "G will be so surprised!"

The two friends worked feverishly until Walt, Sue, and G Inventson came down the hall. "Sorry it took so long!" G called out. "Walt mistook a time freeze device for an alarm clock! He froze us all in stasis."

"It has a snooze button! If it wasn't an alarm clock then why did you put a snooze button on it?!" demanded Walt.

"I like to take naps" G said sheepishly, but was cut off by the sounds of chaos in the workshop.

"Don't just stand there! HELP!!!!" screamed Hassan while struggling to hold onto the back of a "pirate-dinosaur" that was currently crossing cutlasses with Shae.



# The Challenge

#### **STEP ONE: Inventing**

- Pick any two items from the last sheet of this challenge.
- Think of different ways to combine aspects from your two items to make one product. **EXAMPLE:** If your items were "banana" and "phone" You may think of:
  - $\circ$   $\,$  A phone that looks like a banana.
  - $\circ~$  A phone case that looks like a banana, and must be peeled to open.
  - A special yellow phone that can only be used to order bananas to be delivered to your home.
- Sketch out your ideas.
- Create as many ideas as you can think of. (At least 3!)
- Choose your favorite idea to become your product.

#### STEP TWO: Making

There are two ways to make your idea. Choose one:

**Option A:** Create drawings of your product.

- Draw your product.
- Show how it would be used.
- Use call-outs to show features.
  (Call-outs are arrows with labels that point to parts of a drawing.)

Option B: Build a model of your product.

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

#### REMEMBER THAT A MODEL DOES NOT ACTUALLY HAVE TO WORK!

A model can be made out of almost anything.

Here's some suggestions:

- Paper or cardboard
- Fun dough or modeling clay
- White glue, wood glue, or hot glue
- Aluminum foil
- Clear tape, masking tape, or duct tape

## STEP THREE: Storytelling

Advertise your product!

There's two ways you can make an ad. Choose one.

**Option A:** Draw a full page advertisement.

(If you know how, you can do this with a computer too!)

The ad should have the following elements:

- A picture of the product
- 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 can make a commercial just like one you'd see on TV. The ad should have the following elements:

- Show the product. (Show a model or a picture)
- Say the name of the product.
- Say what it does.
- If possible, act out using the model as if it were the real thing.
  (This can be acted out even if the model does not actually do anything.)
- Be excited about how GREAT your product is!

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	step stool/	barbecue	easy chair