#### **Engineering Never Ends!**

| If you were going to keep making your prototype better, what modifications would you make next and why? |
|---|
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|   |
| What other ideas do you have to reuse things that would otherwise wind up in the landfill?              |
|   |
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# Trash to Treasure Waste Stream Interrupted

| Engineer: |  |  |  |  |
|-----------|--|--|--|--|
|           |  |  |  |  |
|           |  |  |  |  |

Additional Engineering Team Member(s)



Designed by Anna Heyer, Sherrie Dennis, and DaNel Hogan

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#### Who has a problem?

People who contribute a lot of waste to landfills

### What is the problem?

People throw lots of stuff into landfills. Can we **reuse** a waste stream for some other useful purpose that will keep it out of the landfill?



## **Engineering Design Challenge:**

Using one or more waste streams, design a new use for materials, which would otherwise wind up in the landfill.

## **Engineering Design Story**

| Who came up with the original idea?                                    |  |  |  |  |  |
|--|--|--|--|--|--|
| How did you work as a team to develop the idea for you prototype plan? |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Describe something your engineering team tried that did                |  |  |  |  |  |
| not work. What was your solution?                                      |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| What other idea from your engineering team's Idea Post                 |  |  |  |  |  |
| brainstorming would you like to prototype and why?                     |  |  |  |  |  |
|  |  |  |  |  |  |
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|  |  |  |  |  |  |

## Marketing

## Waste Stream Brainstorm

| Name of Product         |  |
|-------------------------|--|
| Slogan                  |  |
|                         |  |
| Company or Product Logo |  |
|                         |  |
|                         |  |
|                         |  |
|                         |  |
|                         |  |
|                         |  |
|                         |  |
| Key Features            |  |
|                         |  |
|                         |  |
|                         |  |
|                         |  |

| Criteria (requirements for success)                   |
|---|
| ☐ Uses one or more pieces of waste material.          |
| ☐ Waste material was modified to serve a new purpose. |
| ☐ The new design is useful and serves a               |
| purpose that will make people not want                |
| to throw it away.                                     |
|   |
|   |
|   |
|   |
|   |
| Constraints (limitations)                             |
| ☐ Uses only material from the waste                   |
| stream and materials list.                            |
| ☐ The material used is not a health risk.             |
| ☐ Nothing new was purchased to complete               |
| the new design.                                       |
|   |
|   |
| Time Limit (due date):                                |

Left blank for optional engineering design process iterations and/or peer or customer review.

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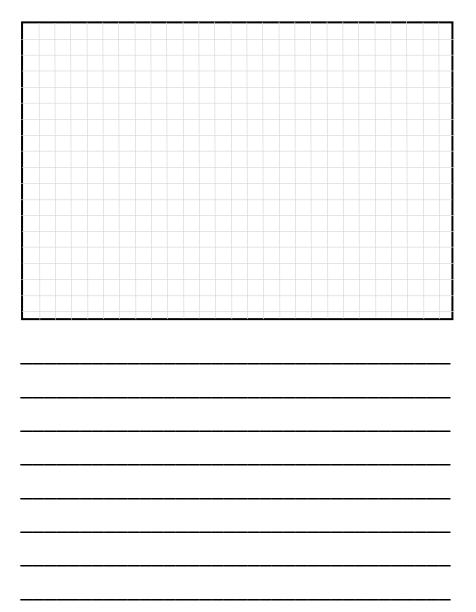
## Brainstorming Idea Post

Place Idea Posts here with your favorite idea on top.

Place Idea Posts here with your second favorite idea on top.

### **Prototype Plan**

Draw and describe what your engineering team is going to make using the waste stream you selected. Be sure to label your drawing.



#### **Actual Prototype**

Draw or paste a picture of your actual prototype below. Be sure to label your drawing/photo. Describe modifications you made to your prototype plan.

