Product Designer Badge

This Badge Blueprint is sponsored by Express Scripts. During the 2016-2017 membership year, girls can earn a special patch after completing this Badge Blueprint. Simply fill out the short survey on the following page and turn it in at the Girl Scout Shop. Completing this survey is required to receive the special patch.

Purpose: This badge teaches Juniors how to think like a product designer.

Keeping track of your super ideas is a great thing innovators do. During these activities, use a lab notebook to record your activities and ideas in each step—diagrams, notes, sketches, etc.

Step 1: Observe what makes a great product.

We rely on so many products to enhance our everyday lives. Make a list of the types of products you use on a daily basis. Select a product from your list. Next, sketch the product and label the parts of the product. Make a list of five things you like about the product and five things you want to change about it.

Step 2: Be an innovation detective.

Observing how a product is used is a really helpful way to learn more about whether a product works or not. Select a product you want to observe in use (it could be the same one from Step 1, or something used during your troop meeting, like a water bottle). Watch someone use the product and jot down at least five things the person did when using the product.

Step 3: Figure out what’s working and what’s not.

Innovators study every step of how a person uses a product to understand any problems with it. Let’s do some activity mapping to evaluate how people use products. Select a product you want to observe in use. In your notebook, describe what is done before the person uses the product. For example, if someone is drinking from a water bottle, what do they do before taking the sip? Explain what is involved in the activity as they use the product. What is involved after they finish with the product? Explain how you would know if the product used was satisfactory? What steps did they have trouble with?

Step 4: Innovate to find solutions.

Choose a product from Steps 1, 2 or 3 that you feel needs to be improved the most. Pick one problem with the product to focus on. Use the “SCAMPER” technique to determine how to improve its design. (Continued on next page.)
Step 5: Mess up so you can try again!

Coming up with an idea is only the beginning, and it’s okay if you haven’t worked out all of the issues right away. The best products take time to refine and test before they are sold.

Pick your best idea from Step 4, and find out why it may not work perfectly. You can do this by building a prototype, or model, of your design. Use materials like cardboard, paper, foam sheets or clay. Once it’s built, ask others for feedback. Use that feedback to make adjustments for a better product. It’s okay if it doesn’t seem like it will work at all. Never get discouraged if the feedback isn’t good. Mistakes are invaluable in learning how to improve something.

Congratulations! You have now earned the Product Designer Badge!

Remember, girls gain confidence and leadership skills through girl-led activities. Whenever possible, let the girls take charge when completing activities. Adult help is necessary for guidance, support and safety.

Remember!

Have your girls complete the survey on the next page.
Turn in completed surveys to the Girl Scout Shop to receive free patches!
STEM • Junior

Badge Blueprint

Each Girl Scout who completed the Product Designer Badge requirements should fill out this survey. Completed surveys can be turned in to the Girl Scout Shop to receive a free patch.

For each statement, circle “agree” or “disagree.”

I think science activities like the ones on this badge are fun. Agree Disagree
I had an idea to fix a problem with a product during these activities. Agree Disagree
I learned something new by looking at a product in a different way. Agree Disagree
I think it would be interesting to have a job like a product designer when I’m older. Agree Disagree
I would like to work on another badge like this one. Agree Disagree
I think other Girl Scouts would like working on this badge. Agree Disagree