**Wearables of the Future Design Worksheet**

1. Draw your prototype wearable in the box below. Use as much of the space as possible:
2. What is the real-life length and width of your wearable? How large would your wearable be if you were going to wear it? (If the shape is not rectangular, for simplicity, take these measurements at the widest and longest points.)

Length: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Width: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What scale factor is necessary to convert your drawing to the real-life size?
2. Compared to your drawing, how much more (or less) will the area of your life-size wearable be?
(As necessary, simplify the shape to a rectangle using the dimensions obtained in question 2. For a challenge with non-simple designs, divide the design into simple shapes and make area calculations for each shape, then add the areas to obtain the total area for the design.)

**Grading Rubric**

Team name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Team wearable product name/recap: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Team members: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **Grading Criteria** | **Self-Eval** | **Teacher-Eval** |
| Team created a unique, thoughtful wearable idea that helps solve some real-world problem **(max 10)** |  |  |
| Team documented detailed research and new ideas on the “*Brainstorming and Research Guide*” **(max 20)** |  |  |
| Team accurately completed the “*Design Worksheet*” with thorough explanations and math calculations **(max 35)** |  |  |
| Team used a software app (such as Paint®) to design a prototype of its wearable item, collect feedback and make revisions, and electronically send to teacher **(max 15)** |  |  |
| Team made a professional class presentation in which each member talked. Included a final drawing, recap of the concept, benefits, features and risks. **(max 10)** |  |  |
| The team worked well together, with every team member participating, for example, shared ideas, did a good portion of the work, stayed focused. **(max 10)** |  |  |
| **Total (max 100)** |  |  |

Notes: