An At Home Face Shield Solution
## Construction Details

<table>
<thead>
<tr>
<th>Materials:</th>
<th>Cost:</th>
<th>Provider:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear Page Cover</td>
<td>$5.56/25 Pieces</td>
<td>Staples</td>
</tr>
<tr>
<td>Cardboard</td>
<td>$1.78 (30”x40”)</td>
<td>Blick Art Materials</td>
</tr>
<tr>
<td>11” Zipties</td>
<td>$8.89/100 Pieces</td>
<td>Amazon</td>
</tr>
</tbody>
</table>

**Tools:** Scissors/Xacto Knife, Cutting Mat, Tape, Straight Edge, Stapler (Optional), and a Sharpie or Pen

**Build Time:** 15-20min
1. Gather all necessary materials for the build. We are going to build a cardboard frame first.

2. Begin by taping the paper cover to the cardboard.

3. Be sure to fold down on this flap while taping. This will help us create an accurate frame.

4. Now use a sharpie or pen to mark the border of the page cover.

5. Then use a ruler to mark line one inch towards the center from each of the exterior frame edges.

6. Cut the exterior of the frame and place it inside the page cover to test the fit. Clean up the edges as needed.
7. Take the frame out of the page cover and cut out the interior lines. Then return it to the cover.

8. You may now choose to staple the frame and cover together if you wish.

9. Now prepare your zipties.

10. Connect three zipties in a circular pattern as shown.

11. This will be the portion that rests on the crown of your head.

12. Slowly tighten the zipties until they reach a comfortable fit.
13. Trim the extra plastic.

14. Attach two more zipties on opposite ends of the circle with their tails outward.

15. Place the zipties back on your head.

16. Hold the tails of the zipties together on the top of your head until they are comfortable and tight.

17. Connect the two tails with an extra ziptie.

18. Trim the extra plastic.
19. Cut a small slit vertically near the top corner on both sides of the frame.

20. Put the tails of two more zipties through these slits.

21. Take the ziptie cap you created and fasten it to the frame with the new zipties like so.

*Extra Tips:
1. Bend the cardboard frame in a circular way to give the mask an arc.
2. Adjust the positioning of the zipties in Step 20 - 21 to give the mask the distance you want away from your face.
This is a design created by Meredith Billman, Blaine Hafen, Izzy Brown, and Calvin Dolatowski.