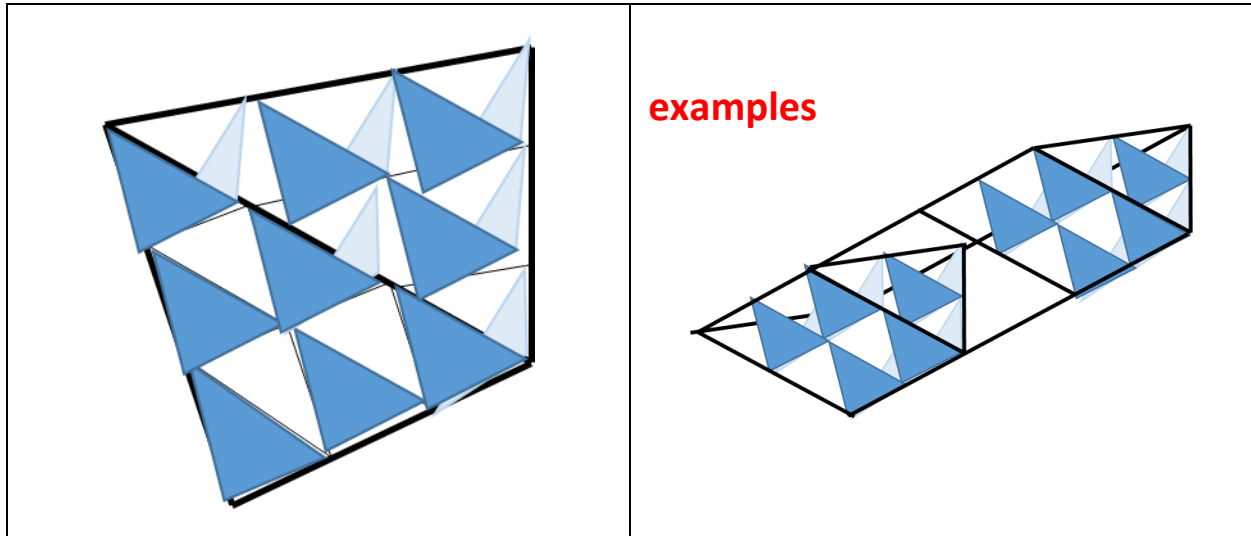


Engineering Design with Application to Unpowered Flight Worksheet

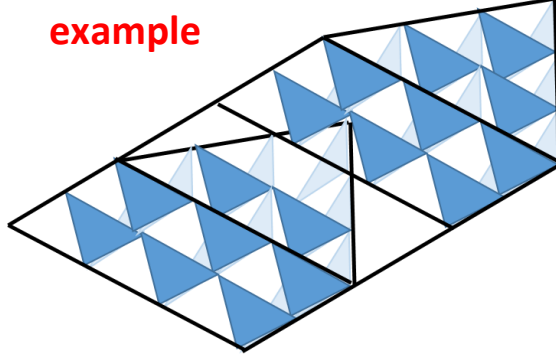
1. Create a checklist of needs and constraints, which are the project’s requirements and limitations:

- Needs to be able to fly in the wind.
- Each tetrahedron must use six plastic drinking straws.
- Tetrahedrons may only be connected at the corners.
- Each tetrahedron must be covered on two sides.

2. In the spaces below, draw different tetrahedron kite designs. If more space is needed, use the back of this sheet, or a blank piece of paper stapled to this sheet. Draw arrows to show the forces from wind and gravity.



3. In the spaces below, draw your redesigned tetrahedron kite design and describe how and why you changed the initial design.

<p>re-design</p> <p>example</p> 	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left; padding: 5px;">List of changes made and reasons why:</th> </tr> <tr> <td style="padding: 5px; color: red;">The second kite (above) was our initial design and it flew really well. We expect that adding another row of tetrahedrons will still allow it to fly while also increasing the number of tetrahedrons used.</td> </tr> <tr> <td style="height: 20px;"> </td> </tr> <tr> <td style="height: 20px;"> </td> </tr> <tr> <td style="height: 20px;"> </td> </tr> </table>	List of changes made and reasons why:	The second kite (above) was our initial design and it flew really well. We expect that adding another row of tetrahedrons will still allow it to fly while also increasing the number of tetrahedrons used.			
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