

# BIOMIMICRY

## YOUTH DESIGN CHALLENGE

### Sample Answers for Biologize Function and Context

**Directions:**

To begin looking for design inspiration in the natural world, we need to ask the right kind of questions. "Biologize" is a fun name for the process of translating a design problem into questions that can be used to search for biological models. Use this template to express your "How might we..." design as one or more "How does nature..." research questions.

<b>Design Question:</b> Record your "How might we...?" design question here: <i>SAMPLE ANSWERS</i>	
<i>How might we make biking safer on busy, wet roads?</i>	
<b>Functions:</b> What are the basic things your design needs to do? List simple action statements.	<b>Variables:</b> What are the contexts and conditions in which your design must function? Use simple terms.
<ul style="list-style-type: none"><li>• <i>Protect from impact</i></li><li>• <i>Create traction</i></li><li>• <i>Prevent slipping</i></li><li>• <i>Enhance visibility</i></li></ul>	<ul style="list-style-type: none"><li>• <i>Moving quickly</i></li><li>• <i>Wet surfaces</i></li><li>• <i>Busy/chaotic environment</i></li></ul>
<b>Biologized Questions:</b> Restate your "How might we...?" question as one or more "How does nature..." questions that uses the functions and variables you listed above. <i>Hint: If your "How does nature..." question sounds absurd, go back and simplify your functions and variables.</i>	
<b>How does nature...</b>  <i>...create traction on wet surfaces?</i> <i>...enhance visibility in busy/chaotic environments?</i> <i>...protect from water/wetness?</i>	