

## Part A. Biomimicry and Insulation

**Data Table 1. Uninsulated Hand (Control)**

Name	Time (s)

**Data Table 2. Insulated Hand (Experimental)**

Name	Mass (g) of Vegetable Shortening	Time (s)
	50 g	
	75 g	
	100 g	

## Part B. Biomimicry Design Challenge

**Brainstorming Biomimicry Examples.** The following chart is to inspire and guide you as you immerse yourself into the world of biomimicry! Fill in the section for Brainstorm Human Applications with your group and then discuss actual applications with your instructor.

Problem (human challenge)	Organism	Organism's Solution	Brainstorm Human Application(s)	Human Application(s)
Repel bacteria and microorganisms	Galapagos shark	Dermal denticles		Reduce buildup that causes fuel efficiency issues on ships. Prevent secondary infections in healthcare.
Collect water from fog	Stenocara beetle	Bumps on wing covers, waxy shell		
Reduce drag	Humpback whale	Scalloped edges on flippers		
Repel dust and dirt	Lotus flower	Microscopic nail-like protuberances		