

# BIOMIMICRY INNOVATION TOOLKIT

Thank you for using the Biomimicry Innovation Toolkit. The Biomimicry Innovation Toolkit is designed to help you facilitate a creative exploration into design solutions for the circular economy. This toolkit focuses on packaging solutions and can be used by individually or with a team. It's a fantastic way to introduce the potential of biomimicry and help stimulate circular design (and inherently sustainable) innovations. In just a few hours, participants will experience just how inspirational nature strategies can be. Through this easy-to-use, stimulating process, you'll gain insight into how to generate an endless array of creative solutions to support (or drive!) your circular design goals.

The Toolkit is comprised of the Biomimicry Brainstorming-in-a-Box card deck with the specialized topic cards, worksheets, and supporting materials as described below.

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## BIOMIMICRY BRAINSTORMING-IN-A-BOX DECK & WORKSHEETS

### Biomimicry Brainstorming-in-a-Box Deck

The Biomimicry Brainstorming-in-a-Box deck includes 48 cards that will spur creative thinking during the exploration of the biology to design process. The deck includes quick guide instructions, Nature's Technologies Summaries around packaging, Riffler (variable) cards designed to help out-of-the-box thinking, along with inspirational concept and case study cards. A summary of how to use the cards is included in the deck.

### Concept Board Worksheet

The concept board worksheet is a great way to capture the concepts generated from each round of ideation. The fields on the sheet remind participants to include a name for their concept, the organism of inspiration, variations to consider, the sustainability win, who came up with the idea, most relevant projects, and most importantly, to sketch.


CONCEPT BOARD: INITIALS <input type="text"/>		ORGANISM <input type="text"/>	RIFFLER ROUND <input type="text"/>
NAME OF IDEA <input type="text"/>		Sketch hint: Don't forget to annotate!	
Variations: <input type="text"/>		Sustainability Win: <input type="text"/>	
PROJECT <input type="text"/>	DATE <input type="text"/>	BIOMIMICRY 3.8	

## Brainstorm Map

The Brainstorm map is a way to keep track of each round to support the team participants in their Brainstorm process. On the sheet, record which cards were selected for each round. As participants brainstorm, they can reference the map to help stimulate concept generation. The map is very helpful in fostering creativity and keeping participants out of familiar ruts or easy answers.

BRAINSTORM MAP

Topic Sub-Realm	Application Level	Application Scale	Concept Type	Life's Principle	ROUND #
Materiality <input type="checkbox"/> Distribution <input type="checkbox"/> Safety & Security <input type="checkbox"/> Pre-consumer <input type="checkbox"/> Post-consumer <input type="checkbox"/> Recycling <input type="checkbox"/>	Form <input type="checkbox"/> Process <input type="checkbox"/> System <input type="checkbox"/>	Micro <input type="checkbox"/> Meso <input type="checkbox"/> Macro <input type="checkbox"/>	Literal <input type="checkbox"/> Metaphorical <input type="checkbox"/>	Evolve to Survive <input type="checkbox"/> Adapt to Changing Conditions <input type="checkbox"/> Be Locally Attuned and Responsive <input type="checkbox"/> Use Life-friendly Chemistry <input type="checkbox"/> Be Resource Efficient <input type="checkbox"/> Integrate Development with Growth <input type="checkbox"/>	
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PROJECT \_\_\_\_\_ DATE \_\_\_\_\_ 

## SUPPORTING MATERIALS

Please review the below resources as you prepare to begin using the Biomimicry Brainstorming-in-a-Box card deck to discover all that's possible with the ideation process. The accompanying digital download package provides background details and instructions to ensure you get the most out of the toolkit.

### Detailed Facilitator Instructions

Facilitator instructions include a full description of how to use the deck to facilitate with a team, along with different variations, depending on the setting (classroom or professional) and application of the deck.

### Instructional Video

The instructional video is designed to be watched by all participants to help set up the activity. This short video is an introduction to biomimicry and sets the viewers up for the brainstorm by describing what to expect, the biology to design process, and the potential outcomes from the activity.



# **BIOMIMICRY 3.8**

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