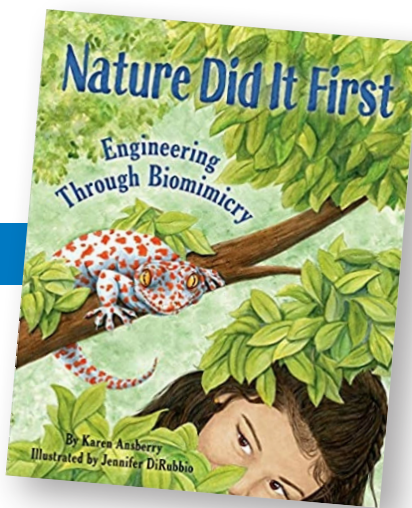


# Nature Did It First

## Engineering Through Biomimicry



### A RIF GUIDE FOR FAMILIES

**Themes:** Inventions, Nature, Problem Solving

**Grade Level:** Kindergarten to 5th grade

**Book Brief:** Got a problem? More than likely, nature has already solved it! Look outside and you will see a world full of amazing engineering designs.

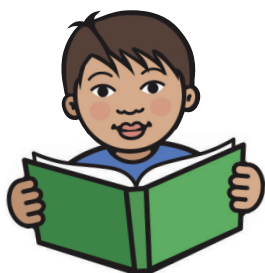
**Author:**

Karen Ansberry

**Illustrator:**

Jennifer DiRubbio

### TIME TO READ!



**Before reading, build background:** Can your child think of any things that engineers do? Think about the book's title, what do you think "nature did it first" means?

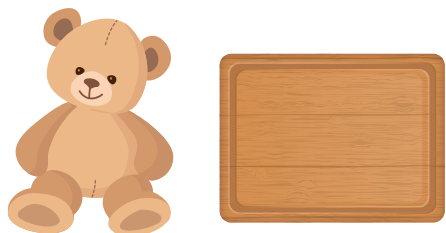
**While reading:** Each invention starts with a poem about a plant or animal. Try to make a prediction about what invention the plant or animal inspired before turning the page. Was your prediction correct?

**After reading, ask questions:**

- Who was George de Mestral? What did he discover? What did he invent?
- How does echolocation help bats?
- What invention did the gecko inspire? Can you think of any other problems that could be solved by mimicking a gecko?
- What are some problems in your life that you could solve by inventing something new?

### RELATED ACTIVITIES

**ECHOLOCATION GAME** Use two props a flat item (such as a notebook or cutting board) and a stuffed animal. In a quiet room, have your child close their eyes or blindfold them.



Hold your flat object about 10 inches in front of your child's face. Tell your child you are holding the flat object as they make the sound "shhhh." Repeat this using the stuffed animal. Now comes the game! Hold one of the objects in front of your child and have them repeat the sound "shhh." Which object were you holding?

**TECHNOLOGY LINK** Visit <https://asknature.org> to explore more of nature's designs.

### ADDITIONAL RESOURCES



**OTHER BOOKS ABOUT BIOMIMICRY**

- **Mimic Makers: Biomimicry Inventors Inspired by Nature** by Kristen Nordstrom (2021)
- **Beastly Bionics: Rad Robots, Brilliant Biomimicry, and Incredible Inventions Inspired by Nature** by (National Geographic Kids) Jennifer Swanson (2020)