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TEACHER GUIDE

INSPIRED BY NATURE (BIOMIMICRY) GRADES K-2

COMMON MISCONCEPTIONS

- **Animal parts do not have a specific function.**
Most animal structures are specifically designed to help them survive. Claws help an animal dig to find food, bury things, defend themselves, etc. Legs help an animal run to catch food or run away, so they do not become food.
- **The only animals in the world are the ones at the zoo.**
Young students may not have had exposure to a wide variety of animals. It's common for young children to only be introduced to farm animals and common zoo animals. The variety of animals in our world is incredible.
- **Plant structures do not serve specific purposes.**
It's hard for young students to grasp the fact that plants are alive, just like animals. It's even harder for students to understand that plants do have specific structures that help them survive. Thorns on plants, for example, are a useful structure that protect plants from being eaten. Burrs on a seed help the seed travel by attaching to an animal's fur. Like animals, plants have specific structures that help with their growth, reproduction and survival.

BIOMIMICRY

People can learn a lot from nature. In simpler terms, scientists and engineers pay attention to animals and how they use their specific structures to survive. This helps them come up with solutions to problems. Biomimicry is all around us. From wing suits to drones, new inventions inspired by nature are popping up all the time.

TIPS FOR TEACHERS

Share with your students a wide variety of animals and plants from all over the world. There are a variety of videos and photos to be found with a quick Google search. As you do, be sure to point out structures and discuss what the specific function might be. One idea to implement as you work through your animal unit is to have an "animal of the day" and introduce your students to some uncommon species.