

Date: \_\_\_\_\_

Name: \_\_\_\_\_

## Biomimicry Community Search

This activity was created by Katy

Biomimicry is when humans use designs and ideas from nature to solve problems.

### → EXAMPLES

**DUCK FEET:** Ducks have webbed feet to be able to move more water when they swim. Based on the webbed feet of a duck, humans designed diving fins, or flippers, that can be attached to our feet to help us swim better. That's biomimicry!

**SPIDER WEBS:** Think about how the shape of a net resembles the shape of a spider's web and serves a similar purpose. Spiders build webs to catch prey for food, and humans use fishing nets to catch fish for food.

**VELCRO:** Velcro uses the same technology as burrs. Burrs come from some plants, and help them spread their seeds. A burr has tiny hooks covering its outer surface, which lets it stick to people and animals to carry the plant seeds further away from the original plant. Velcro is human designed with very similar small hooks to attach multiple materials together.

In this activity, you will try to find examples of biomimicry in your home and community! On the next page, can you complete the first two examples that have been started for you by identifying the human technology in example #1 and the natural inspiration in example #2? Then can you fill out example #3 and #4 based on other examples you find around you?

#### Human Technology:

Swimming flippers

Fishing net

Velcro

Esiw the robot

Shock absorbing technology

Digging train tunnels

#### Natural Inspiration:

Webbed duck feet

Spider web

Burrs

Human beings

Woodpeckers

Earthworms

#### What is similar about both?

\_\_\_\_\_

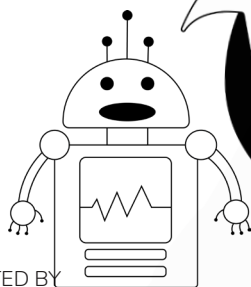
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I am a robot, not a living thing, but I can talk and share information similarly to how you can communicate with other humans. My face and body is designed to look a bit like a human (with eyes, mouth, arms, etc.) and I am programmed to learn kind of like how a human does. Many "humanoid" robots like me are inspired by the natural design of human beings. So I am another example of biomimicry!

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### EXAMPLE #1

**Location found:**

**Name of human technology:**

**Function / purpose:** *To allow something to fly and travel through the air without falling*

**Natural inspiration:** *Bird wings that help birds fly*

### EXAMPLE #2

**Location found:**

**Name of human technology:** *Solar panels*

**Function / purpose:** *To collect light from the sun and convert the light into energy that can be used for different purposes such as electricity and light*

**Natural inspiration:**

### EXAMPLE #3

**Location found:**

**Name of human technology:**

**Function / purpose:**

**Natural inspiration:**

### EXAMPLE #4

**Location found:**

**Name of human technology:**

**Function / purpose:**

**Natural inspiration:**