

# Design by Nature



**BIO**= Life

**MIMIC**= a near copy

Use your creativity to solve a problem!

## YOU BE THE ENGINEER

The Sonoran Desert can be hotter than 110°F (43C°) and receives fewer than 15" of rainfall per year. Based on the animals and plants you learned about today that avoid heat and conserve water, draw a desert home for YOU! Be creative!



What other words have the BIO prefix?

Bio \_\_\_\_\_  
Bio \_\_\_\_\_

### Examples of animal mimics



Monarch

Viceroy



Coral Snake



King Snake

Show us your BIG IDEA! Email or scan a pic to: [education@desertmuseum.org](mailto:education@desertmuseum.org)



@desertmuseum

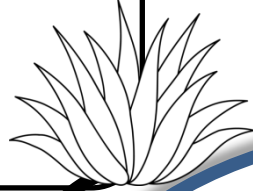


Want more Biomimicry? Go to:  
[www.asknature.org](http://www.asknature.org)

#### 4) Agave Garden

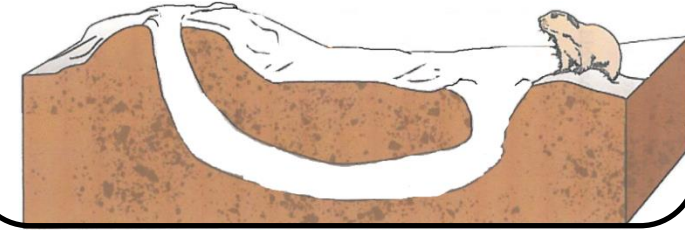
Rain Capture: Observe an agave. Describe 2 ways agaves capture and store water.

- 1.
- 2.



#### 3) Prairie Dogs

Air flow: Prairie dog mounds help circulate air. Draw arrows to show which way you think air moves in the burrow.



#### 5) Tortoise



Tortoises have been on Earth for 50 million years. What's one secret to their survival?

**Find an animal at the Museum**

Which animal did you choose?

\_\_\_\_\_

I would use the animal's \_\_\_\_\_ as an inspiration to invent:

#### 2) Earth Sciences Center

Caves keep things cool! How does this help to design a house?

#### 6) Warden Aquarium

Olympic swimmers now wear suits modeled after the shape of shark skin. The grooved scales help cut through water quickly. How could you use the shark skin design? Draw it!

#### 1) Reptiles and Invertebrates

Observe a reptile's skin. How does it help this animal survive in the desert?

How could we apply this to help humans?

**START**

Entrance  
Welcome! ¡Bienvenidos!

Follow your map!