



DESERT INDOORS®

Environmental Education Activities for Students at Home

Module: *Create Your Pollinator*

Topic: Desert Habitats

Objective/Learning Goal: Children will be able to use scientific knowledge to explain adaptations of plant species within the California Desert.

Glossary:

- **Adapted** - A change or the process of change by which an organism or species becomes better suited to its environment.
- **Pollen** - Fine powder dust that contains the sperm from the male part of a plant.
- **Pollinator** - An animal or insect that moves pollen from one flower to another.

Materials: Cotton ball, paper, pens, colored pencils, pencils, markers, Band-aid, other crafting materials.

Indoor Activity:

Build Background Knowledge - Ask children what they already know about the relationship between plants and *pollinators*. What are Pollinators? What do they do and why are they important?

- What are basic requirements that plants and pollinators need to live and survive?
→ Light, air, water, nutrients, time, moderate temperatures, and space.

Which pollinator will be attracted to a plant is called "*Pollinator Syndrome*." It describes the characteristic or trait that will appeal to a pollinator, a combination of smell, color, *pollen* location and type, flower structure, and nectar amount. A of these will affect what type of pollinator will be attracted to the flower.

Examples: Hummingbirds have *adapted* and specializes in gathering nectar from long funnel shaped flowers that usually are bright red, like penstemons; Native bees are

attracted to the mild sweet smell, brighter color, and shallow shape of flowers, like lupine; the Hawkmoth is attracted to the nighttime smell of the Sacred Datura flowers.

At Home - Using crafting materials, create your own pollinator! Then, share your pollinator: What does your pollinator look like? What plant would your pollinator visit? Would it be diurnal or nocturnal? Would it like sweet smells? Children can use their scientific knowledge and any available crafting materials to create a pollinator of their own design.

Type of Mojave Pollinator						
Trait	Bat	Bee	Butterfly	Bird	Moth	Beetle
Color	White, green, purple	white, yellow, blue, purple	red and purple	red, orange	pale purples, red, pink, white, pale yellow or green	green
Flower Shape	Bowl shaped, closed during the day	shallow or flat, has platform for landing	tubular with landing pad	tubular funnel shaped	tubular without landing pad	large bowl shape
Nectar	Abundant and hidden	present	abundant deeply hidden within tube	abundant deeply hidden within funnel	abundant and hidden	present
Odor/Smell	emitted at night, musky	mild smell, usually agreeable	mild smell, usually agreeable	mild to no smell	emitted at night, sweet	no smell to unpleasant
Pollen	plentiful	minimal and sticky	minimal	minimal	minimal	plentiful

See polinator.org for more information on the other types of pollinators and how to become pollinator aware.

Common Flower Parts



We would love to hear how your science project went and to have you share your findings as scientists?