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<https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/plantsanimals/pollinate/>

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## Teacher Notes for Station Set Ups

### Station #1: Sipping Nectar

Materials: Straws cut to 3-inch lengths, tissue paper (4inch squares), pipe cleaners, dry tempera paint (at least two colors)

Teachers will need to prepare the flowers ahead of time.



### To create the flowers:

- Take 4-5 squares of tissue paper and bring them together as if making a bell-shaped flower (see image).
- Wrap pipe cleaner around the base of the flower and partly up the sides to provide some stability.
- Sprinkle dry tempera paint in the flower to represent the pollen. You will create a second flower with the second color of tempera paint.



The straws represent the beak of the birds that would dip into the flower. Demonstrate how to carefully dip the tip of the straw which represents the beak into the flower. Repeat the process with a second flower. While hummingbirds are sipping the nectar, the pollen grains are sticky but not liquid.

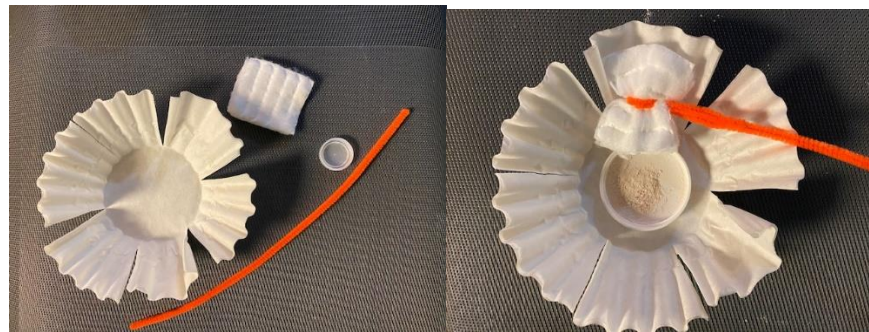
## #2: Landing on a Platform

Materials: Pipe cleaners, cotton squares (from beauty area in store), dry tempera paints (at least two colors), coffee filters, tag board, bottle cap for each flower,

Teachers will need to prepare the flowers ahead of time and students can prepare their own butterflies or teachers can prepare ahead.

### To create the flowers:

- Take the coffee filter and cut the edges so that it will lie flat on the table. Once flat, tape it to tag board to make it a little for sturdy.
- In the center of the filter, place a bottle cap and either tape down or glue it down. This would represent the center of the flower. Fill the bottle cap with tempera paint.
- This would represent a single flower. Repeat this process so that you have two flowers with different color tempera paint for each group of students.



### To create the butterflies:

- Give students two cotton squares and a single pipe cleaner. Ask the students to squish the center of the cotton squares and wrap the pipe cleaner around it so that it resembles a butterfly.
- By keeping the pipe cleaner long, students will be better able to imitate the lightly landing on the flower by the butterfly.



As students move their butterfly and land on one flower, they will pick up some of the pollen and as they move to the next flower, they will notice that some of the pollen will fall off as they move and then again as they land on the next flower. They will also pickup new pollen from that flower. They will be able to see this with the different colors.

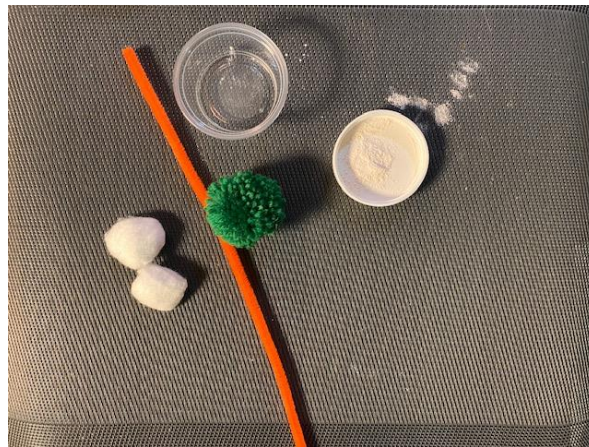
### Station #3: Pollen Collecting

Materials: Pipe cleaners, cotton balls, dry tempera paints (at least two colors), large pompoms (2-3 inches), small sauce cups

Teachers will need to prepare the flowers ahead of time and students can prepare their own bee or teachers can prepare ahead.

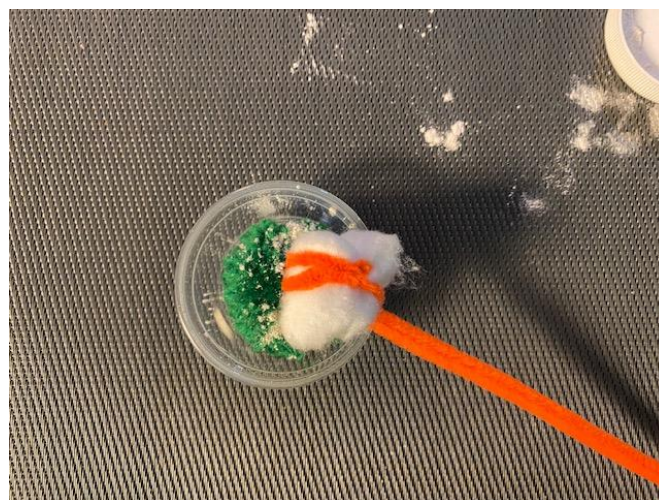
#### To create the flowers:

- Take the small sauce cup and place the pompom in it to represent the flower.
- Lightly sprinkle the pompom with dry tempera paint to represent the pollen.
- This would represent a single flower. Repeat this process so that you have two flowers with different color tempera paint for each group of students.



#### To create the bees:

- Give students two cotton balls and a single pipe cleaner. Ask the students to wrap the pipe cleaner around the center of the cotton balls representing a bee.
- By keeping the pipe cleaner long, students will be better able to imitate the lightly landing on the flower.





## Station #1: Sipping nectar



You are a hummingbird who is visiting flowers for food.

Pretend the straw is the beak of a hummingbird and carefully dip it into the center of the flower to sip some nectar.

What do you notice when you remove the straw from the flower? Record what you observe on your student sheet.

Repeat the process by moving to a different flower and sipping the nectar.

## Station #2: Landing on a Platform



You are a butterfly who is visiting flowers.

Make observations about the different flowers. Write or draw what you notice.

Pick up your butterfly model and land on one of the flowers and then leave the flower like a butterfly would.

What do you notice when you leave the flower? Record what you observe on your student sheet.

Repeat the process by moving to a different flower and having your butterfly land on it.

## Station #3: Pollen Collecting



You are a bee who is collecting pollen from flowers.

Make observations about the different flowers. Write or draw what you notice.

Pick up your bee model and land on one of the flowers. Have the bee crawl around the flower by moving your model to different spots. Then have the bee take flight and leave the flower.

What do you notice when you leave the flower? Record what you observe on your student sheet.

Repeat the process by moving to a different flower and landing on it.

## Flowers Talk

Draw the flower that you selected.

What type of animal might like this flower?



What makes you think the animal you selected would be attracted to the flower?

Create a poster that helps to inform other humans about what you learned.





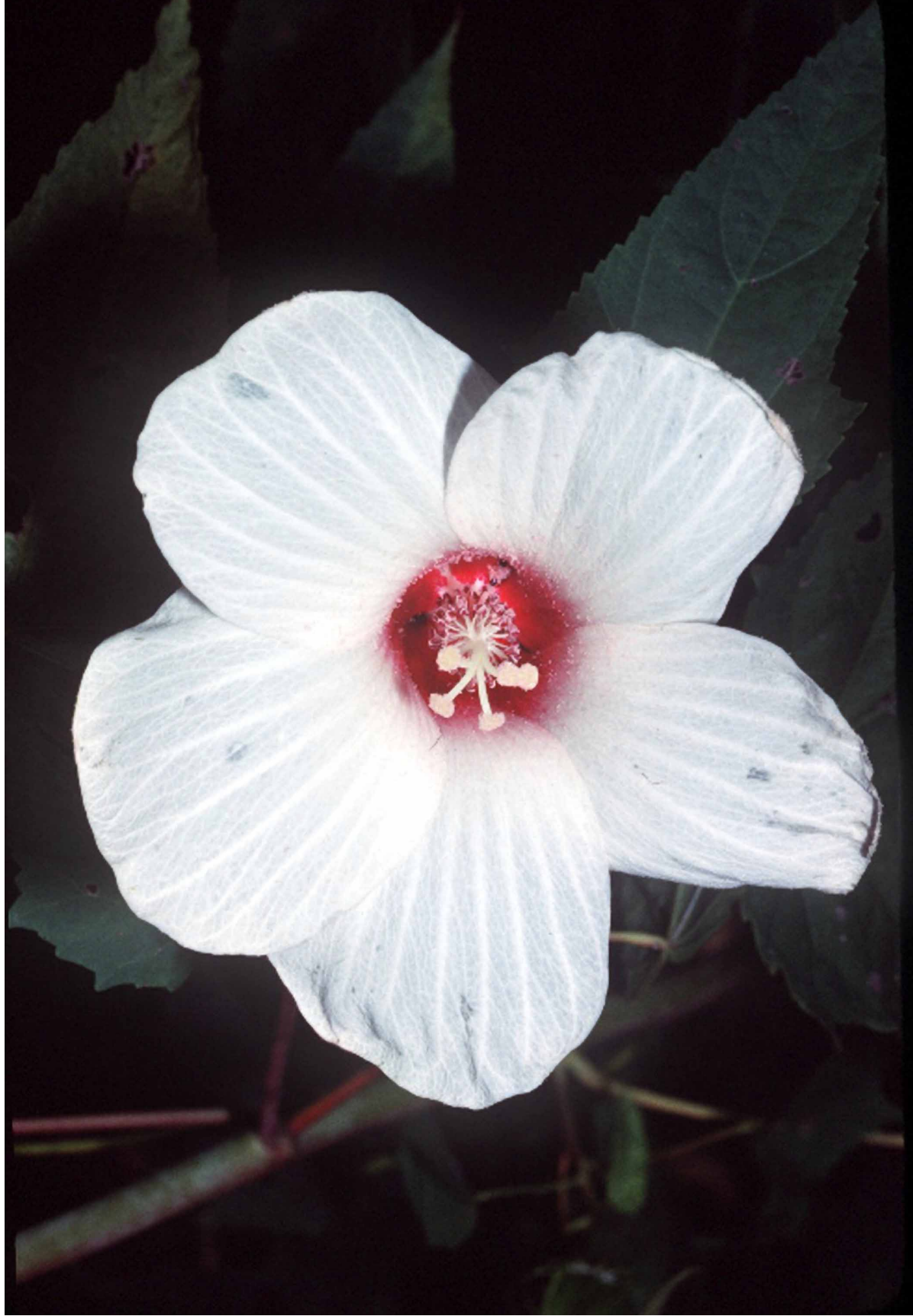
Clubhair Mariposa Lily

©Gary A. Monroe



Common Sunflower

©Thomas Barnes



Halberd-leaf Rosemallow

Robert Mohlenbrock





Marsh Blue Violet

©Thomas Barnes



Red Columbine

©Thomas Barnes



Small Whorled Pogonia

Robert Mohlenbrock



White Fringeless Orchid

©Thomas Barnes

## I'm a Pollinator



### Sipping Nectar

What happened when the straw was used to sip nectar from the paper flower?

If the straw was a beak, what did you notice when you finished sipping nectar from one flower?

What happened to the pollen on your beak when you visited another flower?



## Landing on a Platform

What happened as you moved your butterfly around the flower?

What did you notice when you left that flower? Did all of the pollen stay on your butterfly?

What happened to some of the pollen when you landed on a different flower?



## Pollen Collecting

When your bee landed on the flower, what happened as you moved around the flower and found different spots to land?

What did you notice when your bee landed on a different flower?

What happens to most of the pollen that a bee gathers when it lands on the flower?