

## BAT POLLINATION RELAY RACE

In this activity the students will pretend to be long-nosed bats in the Sonoran desert pollinating saguaro cactus flowers at night. The bats want to eat the nectar in the flowers, and by so doing they accidentally pollinate the flowers. You will want to do a little research on the topic ahead of time. Information is easily found online (even on youtube or other video services) by using key words. Try to find a photo of a bat covered in pollen.

### Materials you will need:

- paper cups
- copy paper or colored paper
- cocoa powder, spoon
- small item (beads or beans would work well)

### How to prepare:

- 1) Assemble the paper cup flowers
- 2) Put 1-2 spoonfuls of cocoa powder into the bottom of the cup of each flower, trying to avoid getting any cocoa powder anywhere on the flower petals or parts.
- 3) Add as many beads or beans to the cocoa powder of each flower as there will be kids on one team.

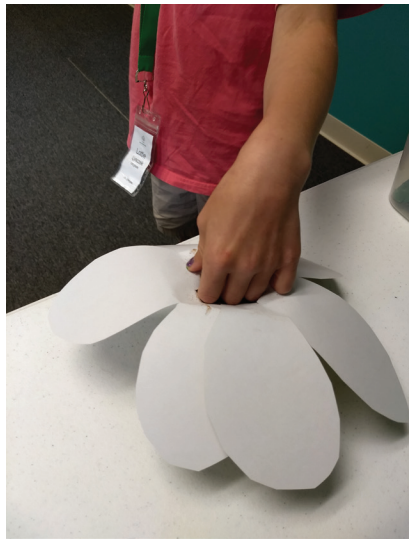
### How to play:

The cocoa powder represents pollen and the small item is some nectar. Pollinators are mostly interested in drinking nectar and get pollen on them as a side effect. The goal of the relay race will be for each student to retrieve some “nectar “ from their team’s flower.

- 1) Players are divided into two teams and form two lines so that they can compete as a relay. Each team has a flower waiting for them on the other end of the room.
- 2) When the race starts, the student runs up to the flower, reaches in with their hand and tries to pick up one small item from in the cocoa powder, pull it out, and then run back and tag the next person.
- 3) The race continues until everyone has had a chance to find the small item.
- 4) After the race is over have players examine their hands. Is there a little brown powder on them? Bats get pollen all over their head and body as they look for nectar. Then they transfer it (accidentally) to the next flower.



Although beads are not a good model of nectar, they work well for the relay. The point is that the bats are not interested in the pollen (powder) but are trying to retrieve something else (in our case, the beads).



Players should use one hand to pull out a bead. They can try to avoid the powder-- some will get on their fingers anyway. Though the amount might be little enough that they won't notice.



We did this relay with a K-1 group and a grades 2-3 group. We reviewed pollination science ahead of time (our flower model is on the table in the photo).