Scent Trails

Objectives:
Students explain how insects locate host and nectar plants through scent. Students identify various herbs and the part of the plant that is used for culinary purposes.

Time: 1 hour

Materials:
- Poster boards or large newsprint
- Assorted essential oils, plant-based perfumes, or tea bags (unlabeled or with labels covered by tape and identified only by number)
- Potted herbs or the parts of the herb plant that is used for culinary purposes
- Markers
- Tape
- Photos or printed pictures of each of the plants from which the materials (oils, perfumes, tea bags) were made as well as photos of the herbs used.
- Answer key matching the numbers for each oil/perfume/tea bag/plant part and its correct name

Procedure:
1. Break students into teams to create 4 stations
   Place the following at each station:
   - Poster board or large piece of newsprint
   - Assorted markers and tape
   - A mix of oils/perfumes and plants/plant parts
   - Unlabeled pictures/photos of each of the plants used to make the oils or perfumes at their station as well as pictures/photos of the plants from which the plant parts located at their station came.

2. Ask the students how they think butterflies and other pollinators locate their host and nectar plants. Explain that pollinators identify plants through sight and scent.

3. Ask students how butterflies smell. Explain that the scent organ is located on butterflies’ feet, so that they identify a plant once they land on the particular leaf or flower.

4. Ask students if they think they could be as good at identifying plants by scent as butterflies are.

5. Explain to students that they will be trying to identify each of the oils/perfumes and plants/plant parts located at their station using their vision and scent.
6. Have students smell each tea bag/oil/perfume and guess what it might be. Have them tape the picture of the plant they believe was used to make the oil/perfume to the poster board/newsprint and write the name of the plant next to the picture.

7. Have students repeat this for the potted herbs or plant parts at their station by matching it with the picture, taping it to the poster board/newsprint and naming it.

8. Have each team present their posters and findings to the larger group.