

# Do You Sense What I Sense?

**Subject:** Math

**Duration:** 60 minutes

**Location:** Park setting

**Key Vocabulary:** Climate, diversity, microclimate, weather

**Related Activities:** Touch Boxes

**Florida Sunshine State Standards:** MA.4.A.6.6, MA.5.G.5.2



**Objectives:** The student will be able to: a) analyze the influence of microclimates on various habitats, b) compare and contrast temperature (microclimates) by sense of touch, and by using thermometer readings, and c) predict temperature range within a given area.

**Method:** Students will estimate the temperature of various habitats using their sense of touch, and then compare their hypothesis with actual thermometer readings in those habitats.

**Background:** Diversity refers to variety or differences. Biological diversity refers to a variety of life forms. South Florida has a biological diversity which makes it unique. The Everglades/South Florida has a combination of plant and animal species representing tropical and temperate zones. There is also a great deal of diversity in habitats and in climates within those habitats. South Florida's habitats display interesting climate diversity and are worth discussing with your students. Refer to the "Natural History" section for more information about the different park habitats.

## Materials

- Thermometers
- Pencils
- Paper
- Copies of the Habitat Survey

## Suggested Procedure

1. Describe the various habitats in the Everglades/South Florida environment to your students, and point out that microclimates may vary between each habitat. Refer to the natural history section of the Appendix.
2. Compare/contrast climate and the elements of weather with your students.
3. Locate an area where there are two or more habitats located within walking distance. A popular area on park grounds representing a fresh water slough habitat and a hammock habitat is located at Royal Palm, not far from the main park entrance.
4. As you reach each of these habitats, ask students to use their sense of touch and/or feel (as to temperature), and classify each area as cold, temperate, or hot. Ask students if they can feel the transition as they go from an open field into a forest of trees.
5. Distribute paper and pencils, and instruct students to record their thoughts.
6. Instruct students to guess the temperature of each habitat, and record their estimates.

7. Distribute thermometers to pairs of students. Take the actual temperature of each habitat with the thermometers and compare results.

## Evaluation

Begin a discussion relating to diversity in habitats and the climate within a habitat. How does this diversity affect organisms in their region? How must they adapt to the microclimate in their habitat?

## Extension

Distribute the Habitat Survey to each student or group of students. Ask students to select their favorite plant or animal. Take students to a location where they may again be exposed to two or more Everglades habitats within walking distance. Instruct students to complete this survey for two or more Everglades habitats. By completing this survey, students will again recognize habitat diversity. For those teachers who are unable to visit the park, you may select two habitats near your school.



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## Habitat Survey

What is your favorite plant or wild animal? \_\_\_\_\_

What habitat are you presently standing in? \_\_\_\_\_

How much sunlight is available? \_\_\_\_\_

How much moisture is available? \_\_\_\_\_

### Species diversity:

List two plants that live here: \_\_\_\_\_

List two animals that live here: \_\_\_\_\_

Does your favorite plant or animal live in this habitat? \_\_\_\_\_

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