Alaskans for Palmer Hay Flats

Sensory field trip at Palmer Hay Flats

Before You Go:

Visit Websites: Ant communication: https://www.crscience.org/lessonplans/NGSS/4_SmellMeIfYouCan_1617.pdf?fbclid=IwAR35Wz6_E8Fi72EJGk1rWtFJLy3-RAbJtUkBES6dyJMe2Y7Ri_hgcBf_W8Y

Watch video: Echolocation Game
https://youtube.com/watch?v=B3DgUzQA_Vs&si=EnSIkaIECMiOmarE

Print "Scavenger Hunt at Reflections Lake" for each student

Gather materials and set them up ahead of time. Bring a snack, there are benches 3/4ths of the way around the trail.

At Reflections Lake:

During this field trip, students will be participating in a sensory hike around Reflection Lake with several stops for activities and learning. Before you start hiking, talk about the 5 senses we have (Sight, Hearing, Smell, Taste, Touch and Balance) and how they help us navigate life and examine the world around us. What are the main senses we use when hiking?

Gather your materials:

- Bandanas and Ear plugs, enough for each student
- Journals and Pens/pencils for each student
- Deck of colored cards, enough sets of each color for each set of students.
- Cotton balls with different scents/extracts/essential oils, with sets of 2 or more of each scent, enough for one scent for each student, in a canister(baby food jar, small plastic storage container, ect).
- Binoculars to share
- Scavenger Hunt printout for each student
- Optional: Camera/video recorder to document your field trip

Sensory field Trip

Sense of Smell Activity Today we are going to pretend to be ants! An ant family is called a colony [Define]. Using colored cards, you will identify the other ants in your colony by sight. The rule of the game is that you cannot talk. You can only use your eyes to figure it out! Pass out one color card to each student. When I say the word of the day, "pheromone", look for your community members. Time the students to see how long it takes for all of them to find their family.

Instruct students that they will each be getting a canister in a moment. Each of the canisters has a cotton ball that has a specific scent. When I say the magic word for today "pheromone", you will try to find the other people who belong to your ant family. But the rule of the game is that you cannot talk. You can only use your nose to figure it out! Let's make a

hypothesis – do you think you will be able to find your colony members more quickly or more slowly than the previous activity? Why or why not? Pass out one canister without the lid and with a cotton ball soaked in extract to each student. Say the magic word and make sure that students are following the rules of the game. [No talking!] Time the students to see how long it takes for them to all find their colony. Connect the activity to the big picture - Invite students to reflect on the difficulty of the activity. Was this easy? Harder than the color card activity? Why or why not? Emphasize the overall takeaway of the lesson: Insects communicate primarily through chemicals called pheromones. They receive chemical signals through their antennae, process the signal in their brains, and react in different ways depending on the type of chemical.

Sense of Sight Climb the observation tower when you reach it. Take binoculars for a bird's eye perspective.

Learning to Look, Learning to See Students spread out and pick a tree or spot to sit and observe for a few minutes (2-5 minutes depending on the class and what the teacher sees fit). Students use their senses (Sight, hearing, smell, touch) to observe and record their findings in their journals.

Game: Hide and Seek One student will be blindfolded, another student will have ear plugs in. Those 2 students, one using hearing, the other using sight, will work together to hunt their prey (other person hiding, softly rubbing sticks together or tapping on tree). This will help simulate the senses that nocturnal wildlife relies on at night. Play this game several times so that each student has a turn at each role.

Sense of Hearing Game: Bat and moths This active game teaches kids how bats use echolocation to catch flying insects in the dark. Discuss: Bats do not use their sense of sight to locate food. Ask the children what senses they think bats use. Discuss the concept of echolocation and tell them that they will play a game where they will pretend that they are bats looking for food. Draw a circle on the ground with a stick. One child will be the bat and the other will be a moth. Give the bat and moths a blindfold to wear. The bat relies on its hearing to find the moth. The moth also has adapted to hear the high-pitched sounds emitted during echolocation, so they will also rely on their hearing to escape. Explain the rules of the game: The bat claps once to represent the echolocation sound being emitted. The moth must clap twice to show the sound has bounce off the moth. The bat must track down the moth by walking around within the circle trying to touch the moth. The moth must try and evade capture but stay within the circle. The adults and other children keep the bat and moth contained by holding their arms out to prevent escaping the circle. The round is over once the moth is touched by the bat.

Distribute Scavenger Hunt printout After about 10 minutes, gather together to compare findings.

After your Field Trip:

Share your learning with others. Post photos on public media, tell your friends and relatives what you saw, what you felt, what you heard, and what you could smell. Show them your notes and sketches. Make a plan for your next field trip to the Palmer Hay Flats.