



## Hey what's that smell?

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[www.conservationtales.com/sloths](http://www.conservationtales.com/sloths)

### Teacher's Guide

**Grade Level:** Grades 3-12

**Timeline:** 40 mins.

**Materials:**

- 6 different scents
- Recommended
  - Pure lemon extract
  - Pure Orange extract
  - Pure Almond extract
  - Rosemary
  - Oregano
  - Banana extract
- Containers to hold smells (film canisters)
- Cotton balls
- Teacher's answer key

**Driving Question:** *How does the loss of one sense impact the other senses?*

**Objectives:**

- I can identify patterns within different scents.
- I can analyze how an animals senses impact its likelihood of survival.

#### Background Information

Sloths are often recognized for their slow nature. Did you know that sloths have a great sense of smell! Sloths do not have good eyesight, so they rely on their sense of smell for most things. Sloths use their sense of smell to guide them to find food, other sloths, and detect nearby predators. In this activity students will put their sense of smell to the test! Without looking at the food, students test to see if they could identify food without seeing it, like sloths do in the wild!

#### NGSS Alignment

This activity addresses the following standards from the Next Generation Science Standards:

**Disciplinary Core Ideas:**

LS4.B: Natural Selection

**Science & Engineering Practices:**

Constructing Explanations and Designing Solutions

**Cross-Cutting Concepts:**

Patterns

What's that smell?

## Teacher's Guide (Cont'd)

### Prior to Activity

If your students read *Conservation Tales: sloths* prior to doing this activity, they will have read about sloths using rope highways. They can smell if other sloths have been on those ropes recently!

We also recommend you discuss the importance of your senses. Students will be more successful with this task if they have practiced their observation skills.

To prepare the scent containers take an empty film canister and place a cotton ball inside. Then put a few drops of extract or put spice blend underneath the cotton ball.

### Introducing the Activity

To introduce the lesson, begin by talking about sloths and their sense of smell. Then explain to students that some animals have one of their senses more powerful than others. The background information on the previous page gives some information you can share with students. You may also choose to view our website with more information on sloths' dependence on smell. [www.conservationtales.com/sloths](http://www.conservationtales.com/sloths)

### Groups

This activity lends itself to working in groups of 2-3 students.

### Smell Matching Activity

The task for students is to pair 6 smells to their food item. When they are finished, groups should be able to tell you which smell goes to which food item. There is an optional "What's that smell record sheet" you have groups fill out and turn in to check their work. You may also choose to go around to each group to check their work. The latter makes it easier for students to have a 2<sup>nd</sup> or 3<sup>rd</sup> try to get the correct matches.

Some of the scents are easier to match than others. In some cases, the smells may be very similar. This accurately simulates difficulty sloths may have determining what food they can eat because of their poor eyesight.

As you circulate among the groups, you can guide their observations and discussion by asking if they notice any scents.

### Answer Key

When students have completed their matches, the following key will help you check their answers. If they have any incorrect matches, encourage them to try again.

| Smell number | Smell ID |
|--------------|----------|
| Scent A      | Oregano  |
| Scent B      | Rosemary |
| Scent C      | Bananas  |
| Scent D      | Orange   |
| Scent E      | Almond   |
| Scent F      | Lemon    |