



Jelly Bean Taste Test

Amount of time Demo takes: 1 minute

Try this at home!

Lesson's Big Idea

- Students will taste jelly beans to test their sense of taste
- The taste sense is used to distinguish the 5 main tastes: sweet, salty, sour, savory (umami) and bitter.
- The sense of smell helps distinguish these tastes. With just your tongue, the jelly bean tastes "sweet," but with your nose and tongue, the jelly bean tastes like cherry (or other flavor)

Materials

- Jellybeans (three different flavors)
- Ketchup cups
- Food gloves
- White Board or Pad of Paper
- White Board Markers

SAFETY!

- Be aware of food allergies (Red dyes)
- Wear gloves while handling jelly beans.

Setup Instructions

1. Put two of the same jelly beans per ketchup cup. Have three cups ready with different flavors.
2. Have several made up in advance because students like candy!

Background Information

- Every time you take a bite of food, receptors in your mouth called taste buds pick up the taste of the food you are eating.
- Your nose is equipped with millions of receptors for odor molecules. Your nose connects to your mouth at the back of your throat.
- Olfaction - the sense of smell
- Gustation - the sense of taste

Instructional Procedure

1. Ask the student to plug their nose then hand them a jelly bean. Ask them to eat the jelly bean and guess the flavor.
2. Give the student the second jelly bean. Ask him or her to chew it and guess the flavor. Record their answer.
3. Repeat this for the other flavors of Jelly Beans (up to 2 others).
4. Give them the correct answers to the flavors.
5. You can ask the student participating to close their eyes to make this challenge even harder so they can't guess the flavor based on the color.
6. Give the students the correct answers at the end of the taste test.

Tips & Tricks

- Prepare cups in advance if a busy event and you have free time!
- If there are too many people feel free to just pick 2-4 students who get to test their taste buds!

Assessment Questions

- Did plugging your nose make it difficult to distinguish a jelly bean's flavor?

Careers & Real-World Applications

- Cook - Work with foods and different flavors to create meals that people will enjoy.
- Chemist - Work in a lab to create some of these candies, foods and flavors.

Clean Up

- Discard any used ketchup containers at the end of the day.
- Secure all jelly beans.

References

- <http://www.scientificamerican.com/article/bring-science-home-jelly-bean-taste-smell/>

Related Next Generation Science Standards

- K-5

- 4-LS1 From Molecules to Organisms: Structures and Processes
- 6-8
 - MS-LS1 From Molecules to Organisms: Structures and Processes