

Jelly Belly Taxonomy

Introduction

Scientists use classification keys to find names for living things. In this activity you will use a key to find names for jelly beans. A key starts with numbered choices. As you decide on the characteristics of the jelly beans, you move through the key. Remember to always start with number one and then go where it directs you. The great thing about this activity is you get to eat the jelly beans and see if you have correctly named them!

Procedure (DO NOT EAT JELLY BEANS YET!!!)

1. You will work in groups to identify and taste the jelly beans. Take turns tasting the jelly beans.
2. Before you start, predict how many of the 12 jelly beans you will identify correctly using the key. Write this number here _____.
3. Pick one bean to start with. In the data table, *write down your observations of your jelly bean*. *Observations should include precise coloring, as well as size, and shape.*
4. Look at the dichotomous key provided. Start with number 1 and decide which of the statements applies to your jelly bean. Go to the number that it tells you to. *Be sure to keep track of the numbers that you go to and write them in the data table.*
5. When you get the flavor name of the jelly bean from the key. Write this name in your data table. NOW EAT the jelly bean and decide if the flavor name from the key matches the flavor you thought it was just by looking.
6. Repeat this process for all your jelly beans.
7. **If your jelly bean is not found in the key, MODIFY THE KEY BY ADDING YOUR FLAVOR OF JELLY BEAN TO IT.**

Data Table

Description & observations	Sequence of numbers you followed from the key	Flavor from the key	Flavor you thought it was by tasting
1.			
2.			
3.			
4.			
5.			

Description & observations	Sequence of numbers you followed from the key	Flavor from the key	Flavor you thought it was by tasting
6.			
7.			
8.			
9.			
10.			
11.			
12.			

Analysis and conclusion:

1. How many jelly bean flavors did you identify correctly? ____ How was this different from your prediction?

2. In at least one paragraph, explain your experience using the jelly bean taxonomy key to identify the jelly beans. What made your work easy or difficult?