## Harty Potter and the Dichotomous Key

"He [Harry] finally tore his eyes away from the druidess Cliodna, who was scratching her nose, to open a bag of Bertie Bott's Every Flavor Beans. 'You want to be careful with those,' Ron warned Harry. 'When they say every flavor, they mean every flavor-you know, you get all the ordinary ones like chocolate and peppermint and marmalade, but then you can get spinach and liver and tripe. George reckons he had a booger-flavored one once.' Ron picked up a green bean, looked at it carefully, and bit into a corner. 'Bleargh-see? Sprouts.' They had a good time eating the Every Flavor Beans. Harry got toast, coconut, baked bean, strawberry, curry, grass, coffee, sardine, and was even brave enough to nibble the end off a funny gray one Ron wouldn't touch, which turned out to be pepper." (pp. 103-104)

- Harry Potter and the Sorcerer's Stone (Rowling 1998)


## Background:

In classifying both living and nonliving things, scientists have tried to provide an order to life so that we can better understand the world in which we live. All living organisms are organized (classified) according to genetic relationships. Currently the classification system contains eight levels: Domain, Kingdom, Phylum, Class, Order, Family, Genus, and Species.

Shared patterns and physical characteristics among related organisms can be organized and denoted in a classification tool called a dichotomous key. The key - used to identify organisms - is based on the premise an organism either possesses an observed physical characteristic or does not possess the characteristic.

## Procedure:

1. Obtain a sample of Bertie Bott's Every Flavor Beans
2. Use the Dichotomous Key to determine the flavor of each of your beans.
3. Record which beans you identified in the provided table.
4. If you discover a new "species" of bean, follow the format of the key and construct an addition so that the new "species" fits within the construct of the dichotomous key. Write your addition write on the key.
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## Obseluations:

| List of Flavors of Beltie Bott's Euely Flaup Beans |  |  |
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## Figure 1.

## Bertie Bott's Every Flavor Beans dichotomous key.

1a. Bean is green
1b. Bean is NOT green
2a. Bean is light white/cream green w/brown spots
2b. Bean is NOT light white/ cream green w/brown spots

3a. Bean is lime green without spots
3b. Bean is lime green or darker and may have spots or not

4a. Bean is light lime green
4b. Bean is medium lime green
5a. Bean is dark green w/red swirls
$5 b$. Bean is lime green $w /$ spots
6a. Bean is gray
6b. Bean is NOT gray
7a. Bean is dark white
7b. Bean is NOT dark white
8a. Bean is blue
8b. Bean is NOT blue
9a. Bean is dark purple
9b. Bean is NOT dark purple
10a. Bean is brown or light brown and may have spots
10b. Bean is NOT brown
go to line 2
go to line 6
Booger
go to 3
go to 4
go to 5
Grass
Green Apple
Watermelon
Spinach
Black Pepper
go to 7
Sardine
go to 8
Blueberry
go to 9
go to 11
go to 12

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## Conclusion:

1. What did you use to determine what flavor of bean you had?
2. What did you do to determine if you were correct?
3. In the living world, what things do we classify?
4. In the nonliving world, what things do we classify?
5. Why would we want to classify things?

Lab modified from NSTA October 2003 article

