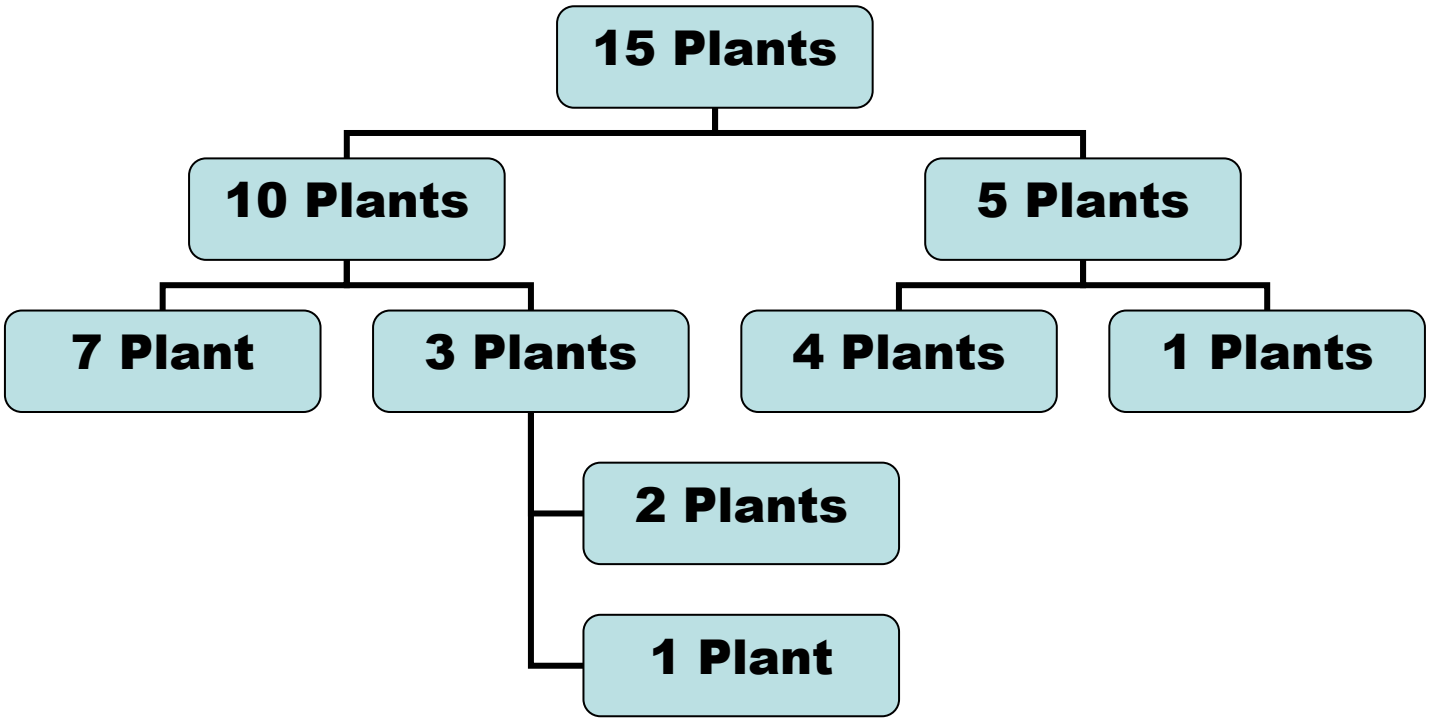
Field Biology - Creating A Dichotomous Key

Using the 15 plants that you collected from the plant scavenger hunt, you are going to create a dichotomous plant key. A dichotomous key uses a series of questions to successively divide a group of items into two groups and continues to ask questions that divides the groups until a particular item is identified. It is a lot like the game "20 Questions."

Working with a partner, you will create a dichotomous key for the 15 plants that you collected. Start by creating a diagram that shows how you will break your plants into successive groups (as below). Indicate on the diagram what questions you will ask to divide your groups.



Next, turn your diagram into a formal dichotomous key. Your key should satisfy the following requirements:

1. Each plant should be identified by a unique series of questions.
2. Each plant should be identified by its correct common and scientific name. Scientific names are always written in italics, with the first word capitalized and the second word lower case (for example, *Elymus glaucus*).
3. Questions may be used more than once, in different sections of the key – but they will be used to separate different groups of plants.
4. Each question should be identified by a number and the two answers to each question should direct the reader to either a specific plant species or to another question.
5. Your questions should be geared towards the types of visual observations someone might make from a plant specimen in the classroom.

Here are some examples of plant keys on-line:

http://www.hort.uconn.edu/plants/keys/trees/treekey01.html
http://www.zoo.utoronto.ca/able/volumes/vol-12/7-timme/7-timme.htm
http://www.botany. hawaii.edu/reefalgae/Redskey201.htm