Dichotomous Keys

- A dichotomous key is a tool that allows the user to determine the identity of items in the natural world based on the items characteristics.

- "Dichotomous" means "divided into two parts" Greek origin.

- Dichotomous keys always give two distinct choices in each step, often they are opposites.

Black/white; good/evil; pointed/rounded.
How to use a dichotomous key?
How to use a Dichotomous Key?

Here are creatures we don’t know!

Let's choose one
How to use a Dichotomous Key?

Choose only one creature at a time.
How to use a Dichotomous Key?

Read steps 1a and 1b

1 a. The creature has two eyes.
1 b. The creature has one eye.

Decide which statement is true

1b is true
How to use a Dichotomous Key?

Then follow the directions after that step.

1. The creature has two eyes.  
   a. Go to step 2.  
   b. Go to step 5.  

   The creature has one eye.  

Go to step 5!
At choice 5, you make another dichotomous choice

5a. The creature has one or more antennae.
5b. The creature has no antennae.

5a is true

Go to step 6.
Its name is “A.”

Go to step 6!
How to use a Dichotomous Key?

**Keep going until you come to a step that gives you the creature’s name.**

6 a. The creature has one antennae
   b. The creature has two antennae.

Go to Step 7.

Its name is “C.”
How to use a Dichotomous Key?

Choose a new creature and start at step 1a and 1b again. Continue until you find the creature’s name.

Where do you start Again?
Then, find the names of all the creatures
1. a. wings covered by an exoskeleton – go to step 2
   b. wings freely observed – Go to step 3

2. a. body has a round shape ........ladybug, a red beetle with black spots
   b. body has an elongated shape ........grasshopper, a green insect that hops

3. a. wings point out from the side of the body ........dragonfly, an insect that is 10-15 cm long and lives in marshes
   b. wings point to the posterior of the body ........housefly, a flying insect with red eyes and an annoying buzz
# Dichotomous key

**Another Example of a dichotomous key...**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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| 1 | With flower.  
   | Without flower  
   |   Angiosperms  
   | Go to 2  
| 2 | Seedless.  
   | Seed bearing  
   |   Go to 3  
   | Gymnosperms  
| 3 | Plant body do not differentiated into root, stem and leaves.  
   | Plant body differentiated into root, stem and leaves  
   |   Go to 4  
   | Go to 5  
| 4 | Without photosynthetic pigment.  
   | With chlorophyll or other photosynthetic pigment  
   |   Algae  
   | Fungi  
| 5 | No vascular tissues.  
   | With vascular tissues  
   |   Mosses  
   | Fern  

Another Example of a dichotomous key...