**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Dichotomous Keys**

**What are Dichotomous Keys?**

It is a \_\_\_\_\_\_\_\_\_\_\_\_\_ for determining the identity of a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (like the name of a butterfly, a plant, or a lichen by going through a series of \_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_ that leads the user to the correct name of the organism.

A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ is a listing of characteristics, such as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, organized in such a way that an organism can be identified or classified.

Think of a dichotomous key as a type of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Dichotomous means "\_\_\_\_\_\_\_\_\_\_\_\_\_\_ into \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_".

**Using a Dichotomous Key**

At each \_\_\_\_\_\_\_\_\_\_, the user is given two \_\_\_\_\_\_\_\_\_\_\_; each alternative leads to another question until the item is identified.

|  |
| --- |
| 1a. If the leaves are flat….go to question 4. |
| 1b. If the leaves are needle-like….go to question 2 |
| 2a. Are the needles in a bunch? Go to question 5 |
| 2b. Are they spread along the branch? …pine tree |

Eventually, when enough questions have been answered, the identity of the tree is revealed.

**Examples**

**Opposite Paired Statements**

|  |
| --- |
| 1. a. tail fins are horizontal—whale………………….go to 2  b. tail fins are vertical—fish……………………….go to 3 |
| 2. a. has teeth or tusk—toothed whale………………..go to 4  b. has no teeth………………………...BALEEN WHALE |
| 3. a. has gill slits behind mouth—shark…….………...go to 5  b. has no gill slits……………………..NONSHARK FISH |
| 4. a. black with white underside………….KILLER WHALE  b. tusk, gray with dark spots………………....NARWHAL |
| 5. a. head is hammer-shaped……..HAMMERHEAD SHARK  b. tail is half the body length……….THRESHER SHARK |

**Yes or no Questions**

