**Classroom Program:** Dichotomy Key Practice

**Audience:** 4th – 8th grade students

**Length:** 20-45 Minutes

**Location:** Classroom

**Program Goals:**

1) Students will learn how to use a dichotomous key

2) Students will be able to identify species using a dichotomous key

3) Students will understand the importance of identifying species (specifically invertebrates)

**Materials:**

- Computer
- Projector
- Dichotomy Key (One for every pair of students-Print multiple copies of third page)
- Dichotomy Key Practice Worksheet (One for every student-Print multiples of fourth page)

**Procedure:**

**Set Up/Introduction (2-5 Minutes)**

- Explain to students that this activity is designed to prepare them for their upcoming field trip.

- Explain that they will be practicing identifying organisms. Make sure to explain what it means to identify something if students are unclear of its meaning

- Pass out the Dichotomy Key Practice Worksheet to each student

- Break students into pairs and pass out the Dichotomy Key to each group
Lab (15-30 Minutes)

- Start the slideshow

- Run through the slides and help students if they need further explanation

- After the “Directions” slide students will work with their partner to identify the organism on the screen using their Dichotomy Key

- Help students as necessary

- After they go through all ten organisms and the bonus question, have groups exchange papers to correct

- Have groups correct the worksheets by following the slideshow, it will go through the answers

- As a class, go through the “Class Discussion” questions

- Collect worksheets (if applicable)
Key to Macroinvertebrate Life in the River

**The River**
- Stream
- Oligo-Terrestrial
- No Oligo-Terrestrial

**Wings**
- Leathery Wings
- Butterfly-Wings
- No Wings

**Larvae**
- Three Pairs of Legs
- Four Pairs of Legs

**Rocks**
- Sand and Gravel
- Single Stone
- Double Stone
Dichotomy Key Practice

Directions: Follow along the slideshow and work with your key to identify what organism is up on the screen. Once you identify what organism it is, write the name of that organism on the line next to what number you complete. You will be given two minutes for each organism and then it will switch to the next one. Try not to worry if you don’t make it in the time allotted, just try your best!

1. ________________________________________________________________
2. ________________________________________________________________
3. ________________________________________________________________
4. ________________________________________________________________
5. ________________________________________________________________
6. ________________________________________________________________
7. ________________________________________________________________
8. ________________________________________________________________
9. ________________________________________________________________
10. ________________________________________________________________

BONUS QUESTION (Worth 1 point):_____________________________________

Now, go through the answers, and see how many organisms were correctly identified.

Total Score: ____/10