**A Survey of the Invertebrates and Fungi and Construction of a Dichotomous Key**

**Pre- Lab Assignment Handout**

**Pre-Lab: In lab you will examine demonstrations of 5 different Fungal or Fungal related groups and 8 Invertebrate phyla and practice writing and using dichotomous keys.**

1. **Example of a Dichotomous key:** [What kind of tree do you have?](https://projects.ncsu.edu/cals/plantbiology/ncsc/tnc/identify.htm) - Grab some deciduous or coniferous leaves still attached to 6-12” of branches from a tree outside.  Take a picture to include with your Pre-Lab. Test your dichotomous key abilities! *Record each of your key answer choices* leading up to name identification (or at least as far as you can go).  *In the late Fall or Spring, you may have a hard time finding trees with leaves.  You may try using use this*[*Winter Tree Identification key*](https://www.uwsp.edu/cnr-ap/leaf/Documents/LEAFWinterTreeIDKey.pdf) *(even though not strictly dichotomous choices) if your tree does not have leaves yet, take a picture of the branch tips/twigs.*

Picture of tree leaves or branch tips:

Key answer choices leading to ID:

1. Review the background materials in your lab manual for Unit 7 (p. 116-118 and p. 121-124) and the Lab Website. In lab you will need to determine what Characters or form of the Character is present in each of the groups. In your own words (do not just copy and paste answers) – explain the following characters:

Fungi:

 Hyphae – septate and non-septate

 Association – provide a fungal example and why/how the association is important.

 Structure where meiosis takes place – provide an example and indicate what type of spores are produced.

Invertebrates:

 What are 2 types of Symmetry? Give an example organism for each type.

 Why is Cephalization an important adaptation?

What are the 2 types of Rigid Skeletons seen in Invertebrates? Give an example invertebrate organism for each type.

1. Write your reflection about one of the Fungal Video Clips found on the Lab Website.