BIO 188, SCU Biology Dept., Fall 2023 Name: _____

Lab 1: Axe Worksheet

Let's take a closer look at the axe. If at any point you get confused trying to fill this out, continue watching the video (or watch it again) to try to get a better understanding of how to apply the concepts. If that doesn't help, try going back to re-watch the first video.

1.1 - Think about the function of an axe. In your own words, what is it trying to accomplish? What is the driving force behind it and how does it behave as a tool?

1.2 - Draw a front-on diagram of an axe driving into a piece of wood. Make it clear where the applied force is and where the effected force is.

1.3 - Circle the correct answers in the following sentences:

The end of the axe to which force is applied is the **handle / blade**

which means that the other end is the one that **effects / recieves** force to the surroundings.

The direction of work being put into the axe is **down / out**.

The force being put into the axe is **greater than / less than** the force from the axe into the log.

This means that the applied distance must be **greater than / less than** the force from the axe into the log.

Based on this, we know that people use axes to improve **force / distance** of the applied force

at the cost of a greater required **force / distance**.