Week 3 Writing Activity: Hierarchy of Detail

Prof. Jordan C. Hanson (INTD100) September 14, 2022

Video Solution for This Exercise: https://youtu.be/g1q_6JDNpdg

1 Concise Writing I: Hierarchy of Detail Exercise

Consider the following paragraph, describing an experiment we perform to measure the strength of a spring (see Fig. 1).

Let **F** be the force of the spring, k be the constant of proportionality between force and displacement, and \mathbf{x} be the displacement. The force of a spring is proportional to the distance it is displaced from its equilibrium length. The force is always in the opposite direction as the displacement. According to Hooke's Law, $\mathbf{F} = -k\mathbf{x}$. The force applied to the spring, given the total mass M hung from it, will be M times the gravitational constant, g. Each displacement x may be recorded alongside Mg, so that k will be Mg/\mathbf{x} . To measure the k-value of a spring, we may hang weights of known masses from the spring, while recording the new length as each weight is added.

Reorganize the sentences above so that they are in the proper hierarchy of detail. The new paragraph should make more sense.

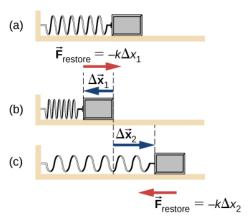


Figure 1: A spring exerts a force on a mass when compressed or stretched.