

Lab 0: Introduction to Work

In this lab, you will take a closer look at **work**, what that term means, and how to use it in practical applications. This module will set you up with a better understanding of how we can manipulate this simple equation in simple (but powerful) ways. Work through these steps at your own pace and when you feel comfortable, move on to the next video.

0.1 - Using the following equation for **work**

$$W = F \cdot d$$

Complete the sentence:

Work is the product of the _____ exerted on a body and the
_____ the object moves in the _____ direction.

0.2 - Draw a picture (free-body diagram) of a person doing work. Make it clear what force is being applied and how the object is moving across a distance.

0.3 - Fill in the following table with the missing information:

If force stays the same and distance increases then work must _____.

If force goes down and distance stays the same, then work must _____.

If force increase and distance _____, then work must stay the same.

If force decrease and distance _____, then work must stay the same.

If force _____ and distance increase, then work must stay the same.

If force _____ and distance decrease, then work must stay the same.