



Exploration

STUDENT worksheet

Name _____

Date _____

Tote Those Books

Overview

In this Exploration you will explore the work involved in lifting textbooks to different heights.

Questions

1. Which combination of book load and height resulted in the most work done?

2. How much work would be done (in joules) if five books are lifted three meters? _____

3. What are the two essential components of work? _____

How to Use This Exploration

1. Read the Introduction and click the Continue button.
2. Select a Book Load and Height and click on the Play button.
3. Read the formula that determined the work done. Note that the amount of force exerted on an object is measured in newtons (N). The distance the books moved is measured in meters. The unit for work is then called the newton meter (Nm). Another word for the Nm is the joule (J). One J equals the work done by a force of 1 N that moves an object 1 meter.
4. Select other Book Loads and Heights and try to predict the joules or work done. Enter your prediction in the Data section and then click on the Play button.

Data
