

Resources: Day 2

Assignment in DAY 1 - HOMEWORK

3

FEB



STATUS

REMEMBER, YOUR ASSIGNMENTS FOR THIS TASK ARE AS FOLLOWS:

1. Watch **all** videos and take notes.
2. Take a selfie of you taking notes or watching the videos and upload it below.
3. Write 5 questions that you have on the material covered in the videos.
4. Post 5 questions in "Discussion: Day 2 Questions"

Video Playlist: Newton's Laws, Momentum and Energy (https://www.youtube.com/playlist?list=PLluyWtXSgv-X27OumxJGTMcqlxmdyl_PS)

TOPIC 1: NEWTON'S LAWS OF MOTION

In this chapter, we will study Newton’s Three Laws of Motion. These laws work in our daily lives and were the fundamental principles that helped mankind reach the moon. They were developed by **Isaac Newton**.



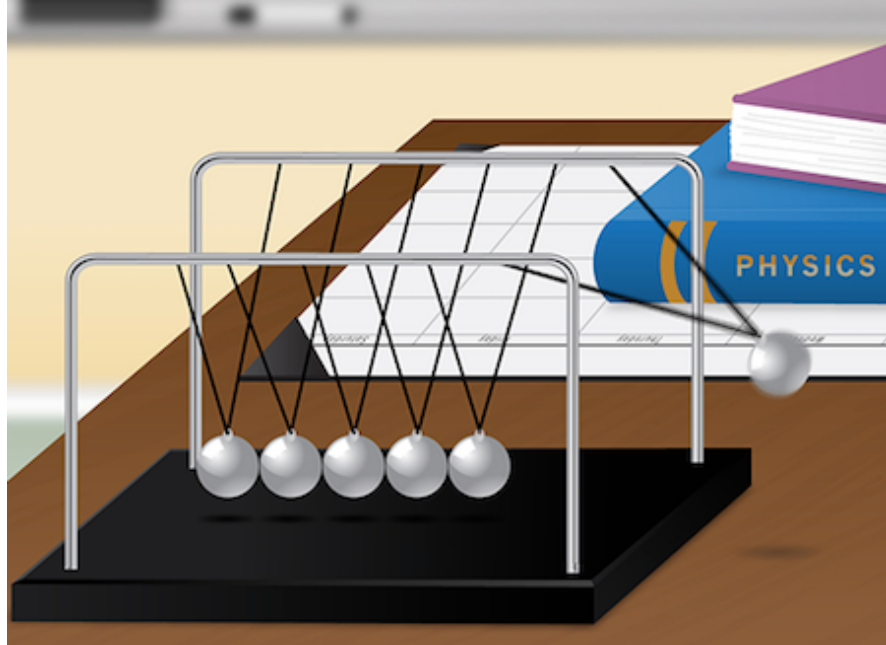
Textbook: Sections 4.1, 4.2, 4.3, 4.4. and 4.5

Additional References (optional)

Newton's Three Laws (<https://www.khanacademy.org/science/physics/forces-newtons-laws/newtons-laws-of-motion/v/newton-s-1st-law-of-motion>)

TOPIC 2: MOMENTUM AND ENERGY

This chapter starts with an exploration of momentum. Momentum is a powerful tool for understanding a lot of life's sudden changes. We will examine the use of this concept in analyzing events such as collisions. The principle of conservation of momentum is introduced as well. A number of examples will be presented to show how these ideas are used, particularly the conservation of momentum.



The topic of energy is usually approached by how it is added to a system. This involves the concept of work, which has a special meaning in physics. If a force does work on a system, the energy of the system increases. Work is a means of transferring energy. So, we will begin by defining work and showing how to find it in simple cases. In different circumstances, work done on a system increases either the potential or kinetic energy of the system. Finally, we will tie all of these ideas together by introducing the principle of conservation of energy and apply it to practical situations.

Textbook: Sections 6.1, 6.2, 6.3, 6.4, 7.1, 7.2, and 7.4

Additional References (optional)

Momentum (<https://www.khanacademy.org/science/physics/linear-momentum>)

Work and Energy (<https://www.khanacademy.org/science/physics/work-and-energy/work-and-energy-tutorial/v/introduction-to-work-and-energy>) (<https://www.khanacademy.org/science/physics/work-and-energy/work-and-energy-tutorial/v/introduction-to-work-and-energy>)

Comments
