

Physics 11 – Impulse and Momentum

Resources: This unit is not in your usual Physics 11 Textbook.

- Go to “Phys 11 Resources” channel
- Then click on “Files”
- Then open the folder, “Impulse Momentum”

You may wish to download that whole folder to your computer. That way you won't have to be on-line when you refer to the resources (it's faster if you work from your computer — there's always a bit of delay opening the files on-line)

The primary textbook resource is the file titled:

- “Physics 11 level chapter -Momentum and conservation”

The other files in the “Impulse Momentum” folder are Worksheets and answer keys, providing examples of problem solving strategies.

Week of May 11 – Lesson and Assignment

9.2: The Conservation of Momentum

- Lesson video #1 - Conservation of momentum theory with examples, including car crash and bullet/block examples: <https://www.loom.com/share/8740a63a7a764b349c4e163fc512c87b>
- Lesson video #2 - 3 types of collision: perfectly inelastic, perfectly elastic, partially elastic; Percent elasticity: <https://www.loom.com/share/f0b00c61cd354f35ad44a0f3c8f896c4>
- Lesson video #3 - Multi-concept problems (including conservation of momentum and conservation of energy: for example, ballistic pendulum):
<https://www.loom.com/share/19ac7ade53e348f891ab90a0defe7e12>
 - Ballistic pendulum (e.g. https://en.wikipedia.org/wiki/Ballistic_pendulum)

For fun: Phet simulation - Collisions (this is in 2-D, which is Physics 12 level, but it's still interesting!):
<https://phet.colorado.edu/en/simulation/legacy/collision-lab>

Assignment:

- **Question set #2: Section 9.2 – The Conservation of Momentum**
- **Question set #3: Multi-concept problems**