Physics G

Momentum

(Chapter 6 Syllabus)

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| Block | Class | Due on this class | |
| 1  **Feb 28/ Mar 3** | -Momentum Exploration  -Momentum  -Impulse as a change in momentum  -Rocket Propulsion | Your Smiling Face  **Read:** 6-1 | |
| 2  **Mar 4/5** | -More Rocket Propulsion  -Work in Quiz groups | **Check:** I&M:1-10+P6A:1(2482 kg m/s),2(121.05 kgm /s), 3(3:46 m/s East)[[1]](#footnote-1) | |
| 3  **Mar 6/7** | -**PreQuiz 6.1** Impulse and Momentum  -Why momentum must be conserved  -How to solve conservation of momentum problems | **Check:** I&M:11-15 (Don't turn it in yet)  **Read:** 6-2 | |
| 4  **Mar 10/11** | -Newton's Two Laws of motion  -Work in quiz groups on Conservation of Momentum  -**SkillSet 6.1** | **Check:** P6B:1,3,4(+9.0 m/s, -15 m/s)  **Turn In:** Impulse and Momentum + P6A:1-3, P6B:1,3,4[[2]](#footnote-2) | |
| 5  **Mar 12/17** | -Momentum and energy problems  -Elastic and inelastic collisions  -The tunnel of Transmogrification and other demos | **Check:** COM:1-4 + P6D:1,2(1.66 m/s), 3,4 (38 kg) | |
| 6  **Mar 18/19** | -Clocking the physics cannon  -Solving difficult Conservation of momentum problems  -**PreQuiz 6.2** Conservation of Momentum | **Check:** COM:5-7 + P6E:1,2(1.83 m/s),3,4(4.2 m/s right),5  **Read:** 6-3  **Turn In:** Clocking the Physics Cannon | |
| 7  **Mar 20/21** | -**SkillSet 6.2**  -More difficult Conservation of momentum problems  -Work on Momentum Lab | **Video Flip:** Conservation of Momentum Lab | |
| **Mar 24-28** | Yay Spring Break Yay Spring Break Yay Spring Break Yay |  | |
| 8 Mar 31/ Apr 1 | -Lab/problem time | **Check:** SOCOM: 3,2  **Turn In:** Conservation of Momentum + P6D:1-4, P6E:1-5[[3]](#footnote-3)2 | |
| 9  **Apr 2/3** | -Lab/problem time  -Mock Test | **Check:** SOCOM:1,4 | |
| 10  **Apr 4/7** | -**Test** on Momentum | **Turn In:** Conservation of Momentum Lab  **Turn In:** Son of Conservation of Momentum worksheet | |
| Assignments:   * 3 Worksheets + book problems:   + *Impulse and Momentum* (15) P6A 1-3, P6B 1,3,4 (6) + 2 stamps /46 pts   + *Conservation of Momentum* (7) P6D 1-4, P6E 1-5 (9)+ 2 stamps /36 pts   + *Son of Conservation of Momentum*  (17) + 4 stamps /42 pts * 2 Labs:   + *Clocking the Physics Cannon* lab – (in class) /10 pts   + *Conservation of Momentum* lab – Collision with air track /30 pts * 2 PreQuizzes/SkillSets (10 pts each)   + 6.1: Impulse and Momentum   + 6.2: Conservation of Momentum * 1 Test on Momentum | | Handouts:  This Syllabus  Worksheet-ImpulseAndMomentum  Worksheet-ConservationOfMomentum  Worksheet-SonOfConservationOfMomentum  Lab-ConservationOfMomentum  PreQuiz 6.1  PreQuiz 6.2 |

1. Practice problems are in your chapter. The numbers in the parenthesis are the answers to even problems, the odd answers are in the back of the book so you can check to see if you have them right. [↑](#footnote-ref-1)
2. Staple the book problems to the worksheet problems. (Or just do them on the same paper) [↑](#footnote-ref-2)
3. [↑](#footnote-ref-3)