**Unit 7: Momentum**

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| --- | --- | --- | --- | --- |
| MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY |
| 30-Jan | 31-Jan | 1-Feb | 2-Feb | 3-Feb |
|  |  | Due: --- | Due: Balloon Lab | Due: Egg Drop |
|  |  | Lect: Impulse |  | Return Energy Test |
|  |  | Lab: Balloon Toss | Lab: Egg Drop | PS1 |
|  |  |  |  |  |
|  |  | HW: Lab Qs | HW: Egg Drop Lab | HW: PS1 |
| 6-Feb | 7-Feb | 8-Feb | 9-Feb | 10-Feb |
| Due: PS1 | Due: Bungee Lab | Due: Mom. WS, PS2 | Due: Conc. Q., PS3 | Due: --- |
| Lab: Bungee Jump | Discuss Lab | Conceptual Qs | **15 pt Quiz** | Lect: 2D Collisions |
| Analysis Questions | Lecture: Cons. of Mom. | PS3 |  | Example Problems |
|  | Momentum WS |  |  |  |
| HW: Finish Lab | HW: PS2 | HW: Conc. Q, PS3 | HW: --- | HW: PS4 |
| 13-Feb | 14-Feb | 15-Feb | 16-Feb | 17-Feb |
| Due: PS4 |  |  |  |  |
| Return Quiz |  |  |  |  |
| Unit Review | **Unit 7 Exam** |  |  |  |
|  |  |  |  |  |
| HW: Test Tomorrow |  |  |  |  |

PS 1

1. 8.57 x 103 m/s
2. -7.5 kg m/s, 375 N
3. 364 kg m/s, 438 N
4. 13.5 kg m/s, 6.75 x 103 N
5. 4.5 Ns, 26 m/s, 6.5 kg m/s

Momentum WS

1. 3 m/s →
2. 2 m/s →
3. 6 m/s ←
4. 2 m/s →
5. 6 m/s →
6. 9 m/s →
7. 6.67 m/s →
8. 4 m/s ←

PS 2

1. 0.030 s
2. 2.25 kg m/s, 450 N
3. 3.75 m/s south
4. 4.25 m/s north
5. 3 kg
6. 0.675 m/s backwards
7. 4.8 m/s left
8. 2 m/s right

PS3

1. 24.5 kgm/s, 0.31 s
2. 12 m/s, 9.6 m/s, the first
3. 1.7 m/s west
4. 1.9 m/s
5. 1.1 m/s
6. 3.0 m/s
7. 5.2 kgm/s west, 0.3 N east
8. Yes, no, no, no, yes

PS 4

1. 9.3 m/s
2. 12.8 m/s
3. 0.89 kg in a SW direction
4. 15 m/s
5. 3.6 m/s
6. 1.03 m/s

Review

1. 1600 N
2. 0.0013 s
3. 6685 N
4. 0.05 m/s backwards
5. 8.8 m/s west
6. 0.81 m/s backwards
7. 0.06 m/s
8. 5.65 m/s
9. 19 m/s
10. 10 kg m/s, 2.5 kg