

Level 2: Dynamics

AP Physics 1

Welcome to Level 2. This is the starting level for the entire class and will be taught synchronously, except for any optional assignments. You will need to work through this mandatory level in the order specified below, but feel free to work ahead on assignments. Some assignments are optional, and some are mandatory. Mandatory steps will be assigned to you and will be worth formative or summative points. Optional assignments will earn you coins. Edpuzzle videos for synchronous levels are assigned individually, so the links for those videos are not clickable and will appear in Edpuzzle as they are assigned. Synchronous videos may not be viewed during class time, as it is an expectation they are completed as homework when assigned. As always, mandatory steps must be completed in the order specified prior to attempting optional steps.

1. Edpuzzle (mandatory; 25 points): View and take notes on Introduction to Dynamics.
2. Edpuzzle (mandatory; 25 points): View and take notes on Examples of Forces.
3. Edpuzzle (mandatory; 25 points): View and take notes on Newton's First Law.
4. Forces PhET Simulation (optional; 5 coins): Complete the simulation activity in your lab notebook ([click here](#)).
5. Edpuzzle (mandatory; 25 points): View and take notes on Free Body Diagrams.
6. Edpuzzle (mandatory; 25 points): View and take notes on Newton's Second Law.
7. AP Lab 4: Newton's Second Law (optional; 15 coins): As you work through the next steps, you may start to conduct this investigation in class. All labs are written in your lab notebook. ([click here for lab](#)).
8. Edpuzzle (mandatory; 25 points): View and take notes on Summing the Forces.
9. Tension Force Challenge (optional; 5 coins) Complete this in-class challenge and submit write-up in your lab notebook.
10. Dynamics Quiz #1 (mandatory; 100 points): This quiz will be administered in class and you must earn an 70% mastery to be eligible to earn additional coins on this level.
11. Edpuzzle (mandatory; 25 points): View and take notes on Force of Gravity.
12. Pedersen Science (mandatory; 100 points): Attempt questions 1-7, 10-18. and read facts on the Dynamics [problem set](#). After attempting these problems, [view the solutions video](#) on Edpuzzle to check all answers. This must be done through Edpuzzle. You will also submit your attempted answers to the Level 2 module in Canvas.
13. Edpuzzle (mandatory; 25 points): View and take notes on Two-Dimensional Forces.
14. Edpuzzle (mandatory; 25 points): View and take notes on Newton's Third Law.
15. Edpuzzle (mandatory; 50 points): View and take notes on Apparent Weight.
16. Pedersen Science (mandatory; 100 points): Attempt questions 19-27. and read facts on the Dynamics [problem set](#). After attempting these problems, view the solutions video on Edpuzzle to check all answers. This must be done through Edpuzzle. You will also submit your attempted answers to the Level 2 module in Canvas.
17. Dynamics Quiz #2 (mandatory; 100 points): This quiz will be administered in class and you must earn an 70% mastery to be eligible to earn additional coins on this level.
18. AP Lab 5: Determination of the Coefficient of Friction (mandatory; 100 points): As you work through the next steps, you may start to conduct this investigation in class. All labs are written in your lab notebook. ([click here for lab](#)).
19. Edpuzzle (mandatory; 25 points): View and take notes on Force of Friction.
20. Edpuzzle (mandatory; 25 points): View and take notes on Kinetic and Static Friction.

21. Pedersen Science (mandatory; 100 points): Attempt questions 28-36 and read facts on the Dynamics [problem set](#). After attempting these problems, view the solutions video on Edpuzzle to check all answers. This must be done through Edpuzzle. You will also submit your attempted answers to the Level 2 module in Canvas.
22. Edpuzzle (mandatory; 25 points): View and take notes on Forces on Inclined Planes.
23. Edpuzzle (mandatory; 25 points): View and take notes on Atwood Machine Problems.
24. Pedersen Science (mandatory; 200 points): Attempt questions 37-52 and read facts on the Dynamics [problem set](#). After attempting these problems, view the solutions video on Edpuzzle to check all answers. This must be done through Edpuzzle. You will also submit your attempted answers to the Level 2 module in Canvas.
25. Atwood Machine Investigation (optional; 10 coins): As you work through the next steps, you may start to conduct this investigation in class. All labs are written in your lab notebook. ([click here for lab](#)).
26. Edpuzzle (mandatory; 25 points): View and take notes on Tension Force Derivation.
27. Unit 2 Derivation Guide (optional; 10 coins): Attempt the derivation problem ([click here](#)).
28. Edpuzzle (mandatory; 50 points): View and take notes on Center of Mass.
29. My AP Classroom Progress Check (mandatory; 200 points): Complete the Unit 2 MCQ Part A and Part B and FRQ, which have been assigned to you in My AP Classroom.
30. Dynamics Exam (mandatory; 100 points): This summative exam will be administered in class and you must earn a 70% mastery to finish this level.

The class will now advance to Level 3. You may also warp to Levels 0, 1, 7.

Level 0 closes January 29, 2021

Level 1 closes March 31, 2021

Level 7 closes April 30, 2021