|  |  |  |
| --- | --- | --- |
| **REFERENCE DETAILS** | myPhysicsLab Moveable Pendulum 2021, Myphysicslab.com, viewed 20 July 2024, <https://www.myphysicslab.com/pendulum/moveable-pendulum-en.html>. | |
| **Reliability** | This source is likely very reliable, as the simulation provided at the top of the page seems very accurate and provides the physics formulas they used, and the derivations to show they are accurate. | |
| **Authority/CREDIBILITY** | Author has 2 degrees, one in mathematics and has been developing physics simulations for over 20 years | |
| **Purpose** | The author developed this website as both an online science museum and as a personal project. | |
| **Key Information:**   * Formula for angular acceleration of a pendulum on a moving pivot () * Example simulation to double check against | | |
| **USEFULNESS** | | LIMITATIONS |
| I can apply the acceleration formula gained from this source in a physics simulation if I decide to build it myself with no libraries or sources. This source helps answer sub-question 1, which is all about finding or building a physics simulation. The source was very easy to understand, as it has an intuative simulation at the top of the page and a step by step derivation with variable definitions of the final formula. The source should be very accurate, as if there were any inconsistencies within the final formula, I could notice it within my simulation or the example simulation. | | The source does not have a coded implementation of the formula and it is left to me to implement it. The source does contribute to my first subquestion, but may not be applicible if I decide to use a premade physics engine or library. Without testing the formula, there is no way to know if it the right one for my simulation, and it may not function correctly for my simulation. |
| **CAPABILITY** | | |
| This source will help me develop my skills in *Information and Communication Technologies* and my *Critical and Creative Thinking*. This is because I will need to convert the mathematical formula into code that a computer can understand, and then debug and adjust it if it doesn’t work properly. | | |
| **Related Sources** | | |
| [The Coding Train: "Coding Challenge #159: Simple Pendulum Simulation"](https://www.youtube.com/watch?v=NBWMtlbbOag)   * Also contains information about creating a pendulum simulation | | |