**🧪 Physics Learning Resources**

*A curated collection of free and accessible physics tools for students, teachers, and science enthusiasts.*

**🔭 General Learning Platforms**

* [**Khan Academy**](https://www.khanacademy.org/science/physics) – Free lessons, videos, and exercises from basic to advanced physics.
* **HyperPhysics** – Concept maps and concise explanations for all major physics topics.
* [**The Physics Classroom**](https://www.physicsclassroom.com/) – High school-friendly tutorials, simulations, and quizzes.
* **MIT OpenCourseWare** – Free university-level physics lectures, notes, and assignments.
* [**Coursera**](https://www.coursera.org/) and [**edX**](https://www.edx.org/) – College-level physics courses by top universities.

**⚙️ Interactive Simulations & Virtual Labs**

* **PhET Interactive Simulations** – Fun and interactive physics and science simulations.
* [**My Physics Lab**](https://www.myphysicslab.com/) – Simulations in mechanics and systems of motion.
* **Falstad Physics Applets** – Simulations in waves, electricity, optics, and more.
* [**Labster**](https://www.labster.com/) – Virtual labs for in-depth science learning (subscription required).
* **Physics Aviary** – Virtual labs ideal for classroom and remote use.

**📘 Open Textbooks & Reference Guides**

* **OpenStax Physics** – Free downloadable textbooks for high school and college.
* **LibreTexts Physics** – A dynamic, open-source platform for physics content.
* **CK-12 Foundation** – FlexBooks and interactive content across all physics topics.
* **Physics LibreNotes** – Notes and guides for college-level physics.

**🎓 Problem Solving & Assessment Tools**

* [**Brilliant.org**](https://brilliant.org/) – Problem-solving-based physics learning (free & paid).
* [**Isaac Physics**](https://isaacphysics.org/) – Free problems for students moving from high school to university physics.
* [**Physics Stack Exchange**](https://physics.stackexchange.com/) – Ask or browse complex physics questions and expert answers.
* **Past Exam Archives:**
  + Cambridge IGCSE Physics
  + [IB Physics Resources](https://ibphysics.org/)
  + AP Physics Exams

**📺 Video Learning Channels**

* [**MinutePhysics**](https://www.youtube.com/user/minutephysics) – Short, engaging physics videos.
* [**Veritasium**](https://www.youtube.com/user/1veritasium) – Explores deep science concepts and experiments.
* [**PBS SpaceTime**](https://www.youtube.com/pbsspacetime) – Physics and cosmology topics in detail.
* [**Flipping Physics**](https://www.flippingphysics.com/) – High school physics with animations and humor.
* [**Tibees**](https://www.youtube.com/user/tibees) – Exam walkthroughs and physics history in a relaxing style.

**📱 Physics Mobile Apps**

* **Pocket Physics (Android)** – Quick reference for formulas and concepts.
* **PhyWiz (Android/iOS)** – Solves physics problems with step-by-step explanations.
* [**Wolfram Alpha**](https://www.wolframalpha.com/) – Powerful equation solver and physics calculator.
* **Physics Toolbox Sensor Suite** – Turn your phone into a data collection tool!

PHYSICS LEARNING RESOURCES WEBSITES

1. Physics Learning Resources General Learning Platforms Khan Academy - Free lessons, videos, and exercises from basic to advanced physics. (<https://www.khanacademy.org/science/physics>)
2. HyperPhysics - Concept maps and concise explanations for all major physics topics. (<http://hyperphysics.phy-astr.gsu.edu/>)
3. The Physics Classroom - High school-friendly tutorials, simulations, and quizzes. (<https://www.physicsclassroom.com/>)
4. MIT OpenCourseWare - Free university-level physics lectures, notes, and assignments. (<https://ocw.mit.edu/index.htm>)
5. Coursera and edX - College-level physics courses by top universities. (https://www.coursera.org/, <https://www.edx.org/>)
6. Interactive Simulations & Virtual Labs PhET Interactive Simulations - Fun and interactive physics and science simulations. (<https://phet.colorado.edu/>)
7. My Physics Lab - Simulations in mechanics and systems of motion. (<https://www.myphysicslab.com/>)
8. Falstad Physics Applets - Simulations in waves, electricity, optics, and more. (<https://www.falstad.com/mathphysics.html>)
9. Labster - Virtual labs for in-depth science learning. (<https://www.labster.com/>)
10. Physics Aviary - Virtual labs ideal for classroom and remote use. (<https://www.thephysicsaviary.com/Physics/Programs/Labs/>)
11. Open Textbooks & Reference Guides OpenStax Physics - Free downloadable textbooks. (<https://openstax.org/subjects/science>)
12. LibreTexts Physics - Open-source platform for physics content. (<https://phys.libretexts.org/>)
13. CK-12 Foundation - FlexBooks and interactive content. (<https://www.ck12.org/student/>)
14. Physics LibreNotes - Notes and guides for college-level physics. (<https://phys.libretexts.org/>)
15. Problem Solving & Assessment Tools Physics Learning Resources Brilliant.org - Problem-solving-based physics learning. (<https://brilliant.org/>)
16. Isaac Physics - Free problems for high school to university. (<https://isaacphysics.org/>)
17. Physics Stack Exchange - Complex physics Q&A. (<https://physics.stackexchange.com/>)
18. Past Exam Archives: IGCSE (<https://www.cambridgeinternational.org>),
19. IB (https://ibphysics.org/), AP (<https://apstudents.collegeboard.org/courses/ap-physics-1>)
20. Video Learning Channels MinutePhysics - Short, engaging videos. (<https://www.youtube.com/user/minutephysics>)
21. Veritasium - Deep science concepts and experiments. (<https://www.youtube.com/user/1veritasium>)
22. PBS SpaceTime - Physics and cosmology topics. (<https://www.youtube.com/pbsspacetime>)
23. Flipping Physics - High school tutorials. (<https://www.flippingphysics.com/>)
24. Tibees - Exam walkthroughs and history. (<https://www.youtube.com/user/tibees>)
25. Physics Mobile Apps Pocket Physics - Quick reference for formulas. (<https://play.google.com/store/apps/details?id=com.nineapps.pocketphysics>)
26. PhyWiz - Step-by-step problem solving. (<https://phywiz.herokuapp.com/>)
27. Wolfram Alpha - Equation solver and calculator. (<https://www.wolframalpha.com/>)
28. Physics Toolbox Sensor Suite - Phone as a data collection tool. (<https://www.vieyrasoftware.net/physics-toolbox-suite>)