

Using This Guide

The *Einstein's Big Idea Library Guide* has been reviewed by a national board of public librarians and is designed for public libraries of all sizes and for visitors of all ages. We hope you'll use this guide to create displays, conduct programs with science activities, and plan community events. Inside you'll find:

- **Display ideas**
- **Display materials** (including resource lists, a poster, display sheets, magnet/sticker template, and Web site markers)
- **Reproducible information handouts**
- **Hands-on science activities**
- **Scavenger Hunt and Trivia Night event plans**

These resources can be used to demystify Einstein's famous equation, reveal its fascinating "backstory," and showcase science as a process of inquiry and collaboration. All these materials are available online in html and PDF format at: www.pbs.org/nova/einstein/lrk.html

Celebrate Physics in 2005!

Did you know that 2005 marks the centennial of Einstein's famous equation $E=mc^2$ and has been declared the "World Year of Physics," an international celebration of physics endorsed by the National Science Foundation? Join the celebration . . . bring $E=mc^2$ displays and programming to your community!

Physics Degree Not Necessary!

You don't need to be a science expert to inspire your visitors to explore $E=mc^2$. The "Big Ideas" below offer ways to approach the content, regardless of science background. Each resource inside this guide is connected to these ideas.

Big Ideas behind *Einstein's Big Idea*

- 1 $E=mc^2$ has a human story.** And it is dramatic—filled with people obsessed with finding answers, struggling to gain acceptance in societies that scorn or dismiss them, buoyed by friends and lovers, and betrayed by colleagues and nations.
- 2 Science is a process of inquiry and synthesis.** Scientists ask questions about the world and test their ideas. Their results lead to new questions. Scientists learn from and build on the work of others. Einstein, with his radical imagination, distilled a rich idea from his own and others' questions and answers.
- 3 Science is influenced by society.** Other people can help or hinder the work of a scientist, and the time must be right for an idea to be accepted. Politics, religion, and war have profound influence on scientific ideas and their applications, and on the lives of scientists.
- 4 The legacy of $E=mc^2$ continues.** A myriad of inventions, techniques, and discoveries owe their existence to $E=mc^2$.



A tax collector with a passion for science, Antoine-Laurent Lavoisier (Julian Rhind-Tutt) demonstrated that the total amount of matter is conserved in any chemical reaction.

Taping Rights and Video Purchase

You may tape "Einstein's Big Idea" and make it available for noncommercial, nonbroadcast educational use for up to one year after the broadcast date. The program is also available on DVD and VHS approximately 12 weeks after broadcast. Call WGBH Boston Video (800) 949-8670 or visit www.shop.wgbh.org to place an order.

Note: All videos purchased from WGBH Boston Video may be shown in a classroom and include limited public performance rights. They may also be shown to any public group when no admission is charged.