

# National Museum of Nuclear Science & History

## 2017-2018 EDUCATION PROGRAMS GUIDE

### Education Programs

All programs align with the New Mexico Education Standards and may be enhanced with self-guided or docent-guided tours. Check online for our teacher guides and more information at [nuclearmuseum.org/learn/for-teachers/](http://nuclearmuseum.org/learn/for-teachers/).

We welcome large groups! Teachers leading groups of 60-200 students may design a program to suit their needs with the help of our staff. Large group programs consist of 20-minute station rotations and may include elements from our *Choose Your Own Ed-Venture*, *Get a Half Life*, and history programs, as well as docent-guided tours. Teachers bringing groups fewer than 60 students may select from the following fifty-minute long science and history program options.

### Book a Program

Call 505-245-2137, extension 122, or visit [www.nuclearmuseum.org](http://www.nuclearmuseum.org) and click on “Learn from the Museum” and “For Teachers.”

- **Choose Your Own Ed-Venture (Grades 2-8)**

Participate in a variety of hands-on science activities selected especially to match classroom goals and curriculum. Teachers may select from the following subjects to customize the perfect program: flight, energy, electricity, matter, chemistry, espionage and physics. Sample experiences include exploring friction with a ride-on hovercraft, investigating the properties of non-Newtonian fluid slime, using a human circuit to play a simple video game, locating a suspected ‘dead drop’ using infrared thermometers, participating in a chain reaction simulating atomic energy production, or discovering espionage clues by digging through a trashcan.

- **Secrets and Spies (Grades 6-8)**

Your mission: Uncover the spies who’ve infiltrated the Manhattan Project. Using primary source materials and cryptography, this program immerses students in a presentation about New Mexico’s unique connections to espionage history. Students will think critically to analyze known data to arrive at a conclusion and reveal the mole.

- **Get a Half Life (Grades 6-12)**

An introduction to nuclear radiation. Using Geiger counters to measure the radioactivity of common substances and radioactive isotopes, students will discover the difference between the three types of radiation and model the three methods of reducing radiation exposure. Students will also see the effects of alpha particles with a modified webcam.

- **60 Minutes to Doomsday (Grades 6-12)**

Tick, tick, tick, tick. The closer the doomsday clock gets to midnight, the closer the world gets to nuclear disaster. Students will use logical reasoning, debate and rhetoric to become immersed in role-playing as they use ‘intelligence’ to stop the clock and prevent the next World War.

- **Decision to Drop (Grades 9-12)**

Weigh the pros and cons of dropping Fat Man and Little Boy over Japan through the use of primary sources and the viewpoints of historical figures. Students will engage in role-playing activities designed to stimulate critical thinking skills. Through an evaluation of the situation in 1945, they will choose from a number of historical options that confronted the military, scientific, and political leaders at the time. They may even change history.

- **Isotope Discovery (Grades 9-12)**

Explore the Periodic Table of Elements and the isotopes. Students will build their understanding of isotopes and their relationship to the line of stability with an interactive chart of the nuclides.

- **Split Over the Atom (Grades 9-12)**

Nuclear power may be coming to a town near you. Students will take on the roles of various interested parties in a mock public hearing to debate the possibility of a new nuclear power plant being built in their community. The students will use probability, discussion, and critical reasoning skills to explore if nuclear power is the right choice for their community.

### Museum Exhibits and Tours

Discover the Museum through a docent-guided tour, or accompany your students on a self-guided tour with the Museum scavenger hunt, available on the website (for groups up to 60).

Contact our [Tours and Groups Coordinator](#) to reserve your program or tour at 505-245-2137, extension 122.