North Carolina State University: Instructional materials for teachers including a lesson on viruses. [http://ced.ncsu.edu/nanoscale/materials/htm](http://ced.ncsu.edu/nanoscale/materials/htm)


Rice University:


CBEN: Teacher professional development & student enrichment programs run by the Center. [http://cben.rice.edu](http://cben.rice.edu)

Science Central: Information & videos on current nano research. Click link on technology for nano info. [http://www.scientcentral.com](http://www.scientcentral.com)

Science Museum UK Online: Information about nanotechnology & an interactive game. [http://www.scienceum.org.uk/antenna/nano/](http://www.scienceum.org.uk/antenna/nano/)

Understanding Nanotechnology: General information about nanotechnology & its applications. [http://www.understandingnano.com](http://www.understandingnano.com)

University of Illinois at Urbana-Champaign: NanoCEMMS provides teacher & student programs including “lessons in a box.” [https://www.nanocemmss.uiuc.edu/content/education/index.php](https://www.nanocemmss.uiuc.edu/content/education/index.php)

University of North Carolina at Chapel Hill: Site explores relative sizes of objects. Contains the classic video "Powers of 10" by Eames & Eames, along with other resources for investigating scientific notation & the scale of things. [http://www.cs.unc.edu/Research/nano/ed(scale.html](http://www.cs.unc.edu/Research/nano/ed.html)

University of Wisconsin-Madison:

MRSEC A variety of kits & resources focused on nanoscale science & engineering, including societal and environmental issues. [http://www.mrsec.wisc.edu/edetc/modules/index.html](http://www.mrsec.wisc.edu/edetc/modules/index.html)

NSEC Lessons for the K-12 science classrooms & after school groups. [http://nsec.wisc.edu](http://nsec.wisc.edu)


Nanotechnology Lesson Plans and Classroom Resources

National Nanotechnology Infrastructure Network
http://education.nnin.org
The NNIN Education Portal contains general information about nanotechnology, NNIN developed educational resources, links to additional nanotechnology resources, and Nanooze, an online science magazine for students.

Nanotechnology is the science and engineering of small structures and systems. A nanometer is 10⁻⁹ meters, and nanotechnology generally involves structures and materials with dimensions less than 1000 nanometers. At the nanoscale, ordinary materials have new properties, and systems and structures can work faster, better, or with completely new functionality. Because of its multidisciplinary nature, aspects of nanotechnology can fit in the curriculum as Biology, Chemistry, and Physics. Consumer products with nanotechnology are already in the market place but that is just the beginning. Nanotechnology promises new materials, new sensors, new computation and communication technologies, new medical instruments, and new treatments for disease.

A variety of nanotechnology classroom resources are provided by the following institutions and facilities. These are provided for information purposes only and are not related to the National Nanotechnology Infrastructure Network. Links are available online at http://education.nnin.org.


Cornell University:
NBTC: Lending library & activity modules for science & engineering http://www.nbtc.cornell.edu/main-streetscience/index2.html
CNS: Lab kits & modules for physics teachers, including nanophysics. http://www.cns.cornell.edu
CCMR: Teacher resources & lending library of experiments http://www.ccmr.cornell.edu/education
DiscoverNANO: Nano info, activities &, art gallery. http://www.discovernano.northwestern.edu/


Intel: Online exhibits on transistors, microprocessors, chips, clean rooms, memory technology, etc. http://www.intel.com/museum/onlineexhibits.htm

Lawrence Hall of Science: Interactive games, videos, scale, & meet a scientist. http://nanozone.org

Molecularium: Teacher Guide & “Kid’s Site” about the atomic world. http://www.molecularium.com/


NanoSense: Lesson plans & activities designed for teaching nanoscience at the high school level. http://nanosense.org/


National Nanotechnology Initiative: This site has an Education Center link which provides information for K-12 students & teachers. http://www.nano.gov

Children’s On-line Science Magazine
http://www.nanooze.org