



ARKANSAS K-12 SCIENCE STANDARDS

EDUCATION FOR A NEW GENERATION



Frequently Asked Questions

Q: What is the process for creating new science content standards in Arkansas?

- The periodic review and revision of science content standards is outlined in law and rule for the Arkansas Department of Education (ADE).
- The State Board of Education endorsed the [Next Generation Science Standards](#) (NGSS) to guide the development of the new Arkansas K-12 Science Standards.
- Committees of K-12 teachers and instructional facilitators, assisted by higher education content experts, have completed [Grades K-8](#) standards and are currently creating new high school courses.
- More information about the work is available on the [Arkansas K-12 Science Standards](#) on the [ADE website](#).

Q: What science standards are required to be taught?

[Arkansas Science Curriculum Frameworks](#), revised in 2005, will be taught until new standards are implemented. Districts and schools can implement the new standards early because the State Board of Education adopted them in advance of the years planned for implementation. However, teachers need to be prepared to teach them effectively. The Arkansas K-12 Science Standards represent a fundamental change in the way science is taught, and if implemented well, will ensure that all students gain a mastery over fundamental concepts of science.

Q: When will the new standards be implemented?

Arkansas schools will implement Grades K-4 in 2016-2017, Grades 5-8 in 2017-2018, and new high school courses in 2018-2019. This allows Arkansas educators the time necessary to transition to the new standards. The [timeline](#) indicates the projected dates for implementation.

Q: What are the Next Generation Science Standards?

NGSS are K-12 science standards rich in content and practice and designed to provide all students an internationally-benchmarked science education. The NGSS are based on *A Framework for K-12 Science Education*, published by the National Research Council and available as a free download ([Click here](#)). The National Research Council is a private, nonprofit institution that provides expert advice on pressing issues pertaining to science, engineering, and medicine. The final version of [NGSS](#) was released in April, 2013.

Q: Who was involved in the NGSS development process?

Arkansas was one of the 26 [lead states](#) actively engaged in the development and review of the NGSS. Writing and review teams included K-12 teachers, higher education faculty, scientists, engineers, and business leaders. These teams were joined by several partner organizations, including the [National Academies of Sciences, Engineering, and Medicine](#), the [National Science Teachers Association](#) (NSTA), and the [American Association for the Advancement of Science](#) (AAAS).

Q: What are some of the strengths of the Arkansas K-12 Science Standards?

The new Arkansas standards make connections to English Language Arts, literacy, and mathematics standards and provide a clear vision of rigorous science instruction across K-12. These standards offer all students 21st century learning opportunities to be more scientifically literate and prepared for high-paying jobs.

Q: What science assessments are being administered?

The ADE Science Benchmark assessments for Grades 5 and 7 and the Biology EOC have been replaced by The ACT Aspire assessment. The ACT Aspire assesses science for Grades 3-10. In addition, The ACT for Grade 11 also includes a science test. The ADE Alternate Portfolio Assessments continue for Grades 5, 7, and 10. Information about these [assessments](#) is available on the [ADE website](#).



ARKANSAS

K-12 SCIENCE STANDARDS

EDUCATION FOR A NEW GENERATION



Frequently Asked Questions

Q: What skills will be assessed on The ACT Aspire and The ACT assessments?

The [ACT Aspire](#) and [The ACT](#) will focus more on student understanding of how science works and less on recall of science facts. The ACT tests assess science in the following three categories:

- Interpretation of Data
- Scientific Investigation
- Evaluation of Models, Inferences and Experimental results.

Q: What can educators do to prepare for the transition to new science standards?

- Ensure that sufficient time is allotted in the school day for hands-on science instruction.
- Evaluate and inventory the science resources currently available to determine if appropriate and sufficient resources, including safety equipment, are available to support hands-on learning.
- Incorporate the practices and crosscutting concepts from the Arkansas K-12 Science Standards in current units of study. [Resources](#) are available from the National Science Teachers Association (NSTA). [Implementation resources](#) are available from the NGSS website.
- Increase collaboration within the science department and across disciplines.
- Participate in ADE science [professional development](#).
- Utilize the science specialists at local [educational cooperatives](#) and/or [university STEM centers](#) for professional development offerings and school support.

Q. What is the best method for staying up-to-date with Arkansas's progress toward new science standards?

Information is available at

<http://www.arkansased.org/divisions/learning-services/curriculum-and-instruction/arkansas-k-12-science-standards>. In addition, information about the development of and transition to new science standards will be sent out through ADE's Curriculum and Instruction Listserv. To be added to the ADE curriculum listserv, please send your name, e-mail address, and district name to ADE.CandI@arkansas.gov.

Q. When is the best time to purchase new science instructional materials?

NGSS-aligned resources are currently being developed. School districts are encouraged to access the free [resources](#) available from [NGSS @ NSTA](#). Check with local educational cooperatives and/or university STEM centers for instructional materials (including lab equipment and kits) that schools can check out.

For more information, please contact Michele Snyder, Science Specialist for Curriculum and Instruction

Arkansas Department of Education
Division of Learning Services
#4 Capitol Mall, Room 202B
Little Rock, AR 72201
501-682-7942
michele.snyder@arkansas.gov