

Science (K-5)

The West Allegheny School District Elementary Science Curriculum strongly supports the assertion that there is a balance between science content and process. The balance promotes the inclusion of inquiry-based instruction and provides classroom environments and experiences that facilitate students' learning of science. Inquiry is not the entire science program, but rather a tool to enhance instruction and student engagement and ownership. Through teacher modeling and facilitation, students learn to develop questions and find their own answers.

The science department recognizes the importance of using expository text for science instruction. Students need to utilize comprehension strategies to understand informational text. Teacher modeling and direct instruction of comprehension strategies through the use of textbooks, informational tradebooks, and supplemental and/or web-based articles expand students' knowledge base and enhance the development of science skills and concepts. The district advocates the use of technology to guide scientific inquiry and develop perspectives on scientific process, content, progress, and history. Internet resources can be integrated into science instruction to facilitate student understanding of key concepts as well as serve as tools to promote networking with scientists, teachers, and other students and the gathering of information and data.

The district utilizes hands-on kits and materials outlined in the ASSET science program. Additional information about ASSET can be found at <https://www.assetinc.org>. The thoughtful design and implementation of the K-12 Science Curriculum provide comprehensive experiences for the West Allegheny students across the grade levels. The support, guidance, and coordination among teachers maximize student instruction and provide an exemplary science program that will help to prepare our students to participate and be successful in a world where science is an integral part of everyday life.

ASSET science units utilized at each grade level are listed below:	
Kindergarten	Trees
Grade 1	Weather, Organisms
Grade 2	Changes, Life Cycle of Butterflies
Grade 3	Rocks and Minerals, Chemical Tests, Plant Growth and Development
Grade 4	Physics of Sound, Magnetism and Electricity, Land and Water
Grade 5	Variables, Mixtures and Solutions, Motion and Design

[Pennsylvania's Science, Technology & Engineering, Environmental Literacy & Sustainability \(STEELS\) Standards](#)

* New academic standards for Science, Technology & Engineering, Environmental Literacy & Sustainability were adopted by the State Board of Education in January 2022. The standards were part of amendments to 22 Pa. Code Chapter 4 that were [published as final in the Pennsylvania Bulletin on July 16, 2022](#). The new standards will help create the conditions for all students to be scientifically, technologically, environmentally, and engineering literate, both to support Pennsylvania's economic vitality and its civic strength.

To support schools' implementation of the new integrated standards for science, technology & engineering, and environmental literacy & sustainability, there will be a three-year implementation window. Effective June 30, 2025, the academic standards for [Science and Technology \(2002\)](#) and [Environment and Ecology \(2002\)](#) will be sunset. The new sets of standards, Science, Technology & Engineering, Environmental Literacy & Sustainability (STEELS) will be fully integrated into classroom instruction by the 2025-26 school year.

The Science curriculum is currently under review to assess alignment to the new STEELS Standards.