

BHMSD Science/Health/Computer Science Curriculum Development and Support 2023

In 2022, the Indiana Department of Education (IDOE) adopted the Next Generation Science Standards (NGSS) to replace the 2016 Indiana Academic Standards for Science. The Indiana Academic Standards are a set of guidelines for what students in Indiana should know and be able to do in various subjects, including English language arts, mathematics, science, social studies, and others. These standards help educators determine what content and skills should be taught in each grade level and provide a basis for evaluating student performance and progress. The information in this document provides required information related to HEA 1590: Various Education Matters to publish a list of high quality curricular materials for STEM subjects which includes Science and Computer Science.

Links to the [Indiana Academic Standards](#)

After the NGSS were adopted, educators and Department of Education Content Specialists set out to support school districts in converting to them. They created updated Frameworks for every grade level, Kindergarten through eighth grade, and several high school courses. Among other things, Frameworks:

- help unpack the standards.
- give examples of observable student behaviors that indicate that the student has mastered the standard.
- connect the standard with STEM practices and core content area ideas
- provide key content vocabulary.
- explain cross cutting (cross curricular) connections.
- provide vetted units and lesson plans.

Frameworks/Blueprints/Other:

- [2022 K-8 Computer Science Frameworks](#)
- [Integrated STEM Standards](#)
- [Grade 4 Science ILEARN Blueprint](#)
- [Grade 4 Science ILEARN Item Specifications](#)
- [Grade 6 Science ILEARN Blueprint](#)
- [Grade 6 Science ILEARN Item Specifications](#)
- [Kindergarten Science 2023 Framework](#)
- [1st Grade Science 2023 Framework](#)
- [2nd Grade Science 2023 Framework](#)
- [3rd Grade Science 2023 Framework](#)
- [4th Grade Science 2023 Framework](#)
- [5th Grade Science 2023 Framework](#)
- [6th Grade Science 2023 Framework](#)
- [7th Grade Science 2023 Framework](#)
- [8th Grade Science 2023 Framework](#)
- [Biology 2023 Framework](#)
- [Chemistry 2023 Framework](#)
- [Integrated Chemistry & Physics 2023 Framework](#)
- [Physics 2023 Framework](#)

Science Resources 2023

Grade Level	Core Program	Supplemental
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Kindergarten	Wonders Reading	
Grade 1	Wonders Reading	Thematic Units
Grade 2	Wonders Reading	
Grade 3	Wonders Reading	
Grade 4	Wonders Reading	Rotations

In addition to the Wonders Reading program, the elementary team is interested in pursuing TWIG Science. This supplemental program would allow teachers to intentionally add science to the curriculum daily. Currently, teachers may have National Geographic materials in the classroom from a previous adoption cycle, but there is limited use of these materials. We will continue to monitor science instruction and achievement at the elementary level and revisit the additional program at a later time.

Grade 5	Savvas Realize, Elevate Science (2023)	
Grade 6	Savvas Realize, Elevate Science (2023)	
Grade 7	Savvas Realize, Elevate Science (2023)	
Grade 8	Savvas Realize, Elevate Science (2023)	
Biology	Biology, Miller & Levine	
Integrated Chemistry/Physics (ICP)	McGraw Hill ICP (2023)	
Chemistry I	Chemistry, Savvas (2023)	
Physics	Inspire Physics, McGraw-Hill	
Environmental Science	Environmental Science Your World, Your Turn	
AP Physics	*This course is not offered during the 2023-2024 school year	College Physics for the AP Course, BFW Publishers *To be ordered Summer 2024
AP Chemistry	Chemistry: The Central Science from Pearson/Savvas (2023)	
Biology II	Campbell Biology, 12th Edition for the AP Course (2023)	
Health 5-8	G-W Essential Health Skills for Middle School (2023)	Alive & Well

Health 9-12	McGraw-Hill Health	Alive & Well
Computer Science BHES K-4	Code.org	Design & Innovation Studio
Computer Science BMS, Grades 7 and 8	Code.org	Design & Innovation Studio (2023)
Digital Citizenship BMS, Grades 5-8	Learning.com	
Computer Science I	Code.org	
Computer Science II	Code.org	

Science Assessments

Grade Level/Course	Assessments Utilized	Timeline
4	iLearn from IDOE	April/May annually
6	iLearn from IDOE	April/May annually
Biology	iLearn from IDOE	February and May annually