



2017–18 State High School Science Assessments

Achieve collected, from publicly available sources (e.g., state education agency websites), the science assessments states administered statewide in high school in 2017-18. In 2017-18, states' science assessments were undergoing significant shifts with a number of states administering field tests rather than a full state assessment.

What changes did states make to science assessments in 2017–18?

Fifteen states administered a new high school science assessment (AL, CA, CT, DE, KY, MD, NE, NH, NJ, OK, RI, SD, WA, WV, and WY). Of these, **seven states** administered field tests (CA, CT, DE, KY, MD, NJ, and RI) that were not used for school accountability in 2017-18.

Which assessments are students taking in 2017-18?

States use two types of assessments for students in science:

- **Twenty-nine states** use a comprehensive (i.e., end of grade) assessment (or assessments) that is administered to all students in a cohort at the same time regardless of the courses the student has taken in high school.
- **Eighteen states** administer the comprehensive science assessment at the end of 11th grade, **ten states** do so in the 10th grade, and two states do so in 9th grade (several states give more than one comprehensive assessment).
- **Twenty-two states** use an end-of-course (EOC) assessment (or assessments) that students take upon completion of the requisite coursework regardless of what grade level. In other words, students take the appropriate EOCs for the science courses in which the student is enrolled.

In what science content areas are students assessed?

Twenty states include a biology assessment. Of these, **fifteen states** require that all students take a biology assessment, while **five states** (Idaho, Massachusetts, New York, Utah, and Virginia), allow students to choose from a menu of science EOCs where biology is one option.

Science assessments in state accountability systems

Twenty-four states include results from their science assessment in their accountability formula for high schools. The remaining **26 states and the District of Columbia** assess students in high school science but do not use the results for federal accountability.¹

¹ For additional details on the measures states include in their accountability systems under ESSA, see <https://states.achieve.org/essa-tracker>.



2017–18 High School Science Assessment Name(s)		Grade Administered	Content Areas Assessed	Assessment included in accountability system	Additional Notes
AL	ACT plus Writing	Grade 11	Comprehensive	No	
AK	Alaska Science Assessment	Grade 10	Comprehensive	No	
AZ	Arizona’s Instrument to Measure Standards (AIMS) Science	Grade 10, but may be taken by grade 9 students who are enrolled in a life sciences course.	Comprehensive	No	
AR	ACT Aspire Early High School	Grades 9, 10	Comprehensive	Yes	
CA	California Standards Test	Grade 12	Comprehensive	No	Field Test: For the 2017-18 field test, all grade 12 students will take the California Science Test. Additionally, LEAs have the option to test any grade 10 or 11 student based on the guidelines set forth by the CDE.
CO	Colorado Measures of Academic Success (CMAS) for science	Grade 11	Comprehensive	Yes	
CT	Connecticut Next Generation Science Standards Assessment	Grade 11	Comprehensive	Yes	Field Test: Connecticut received a federal waiver for the 2017-18 school year to field test its statewide science assessment. No student scores will be publicly reported, but the state will report and hold schools accountable for student participation rates.
DE	Delaware Comprehensive Assessment System (DCAS) for science	Grade 10	Comprehensive	Yes	Field Test: Pursuant to a federal waiver, no student scores will be publicly reported, but the state will report participation rates.
DC	DC Next Generation Science Assessment	EOC	Biology	No	Assessment Administration: Due to errors discovered in the assessment, DC did not administer the science assessment in 2018.
FL	Biology I EOC	EOC	Biology	Yes	
GA	Georgia Milestones Biology EOC	EOC	Biology	Yes	Assessment Administration: All students take the Biology EOC prior to graduating. Only students who elect to take the course will take the Physical Science EOC.
	Georgia Milestones Physical Science EOC		Physical Science		
HI	Biology I EOC	EOC	Biology	No	
ID	Biology EOC	EOC	Biology	No	One Science EOC, biology or chemistry, is required in one high school grade (10–12).
	Chemistry EOC	EOC	Chemistry		
IL	Illinois State Science Assessment (content)	EOC	Biology	Yes	A Biology EOC, incorporates NGSS



	aligned to Biology I)				
IN	Indiana Statewide Testing for Educational Progress Plus (ISTEP+) End of Course Assessments in Biology I	EOC (Administered in Grade 10)	Biology	No	
IA	Iowa Assessments	Grade 11	Comprehensive	No	
KS	Kansas Assessment Program – Science	Grade 11	Comprehensive	No	
KY	Kentucky End-of-Course Field Test - Biology	EOC	Biology	Yes	Field Test: The EOC field tests will not produce student scores or performance levels; therefore, test results will not be included in public reporting for Fall 2018.
LA	Biology EOC	EOC	Biology	Yes	Students take the assessment upon completion of the course. EOCs comprise between 15 percent and 30 percent of the student’s final grade in the subject. To earn a standard high school diploma, students must earn a score of Fair or above on three EOCs, including one in each category — Algebra I or Geometry, English II or English III, and Biology or U.S. History.
ME	Maine Educational Assessment (MEA)	Grade 11	Comprehensive	No	
MD	Maryland Integrated Science Assessment (MISA)	EOC (Grade 9, 10, or 11 depending on course) sequence	Comprehensive	No	Field Test: In science, Students were required to pass the HSA Biology every year until the 2016-2017 school year. Students who took the Biology HSA in 2016-17 met the graduation requirement by participating. In 2017-18, students are required to participate in the no fault field test for the high school MISA if they have not met their science assessment requirement as determined by participation in the school year 2016-2017 administration of the HSA Biology. Beginning in school year 2019-2020, to fulfill the science graduation assessment requirement, students will be required to pass the HSA MISA.
MA	Massachusetts Comprehensive Assessment System (MCAS) Technology/Engineering EOC	EOC	Technology/ Engineering	Yes	Student Stakes: Students must pass one of the Science and Technology/Engineering assessment options to satisfy the graduation requirement.
	MCAS Biology EOC		Biology		
	MCAS Chemistry EOC		Chemistry		
	MCAS Introductory Physics EOC		Introductory Physics		
MI	Michigan Student Test of	Grade 11	Comprehensive	No	



	Educational Progress (M-STEP)				
MN	Minnesota Comprehensive Assessments (MCA-III): Science	End-of-Instruction in Life Science or Biology.	Biology/Life Science	No	
MS	Subject Area Testing Program, 2 nd Edition (SATP2) in Biology	EOC. Students participate in assessment when they complete the associated course. Biology is typically taken in grade 9.	Biology	Yes	
MO	Biology EOC	EOC	Biology	No	The Physical Science EOC is a local option.
	Physical Science EOC		Physical Science		
MT	Criterion-Referenced Test (CRT) in Science	Grade 10	Comprehensive	No	
NE	Nebraska State Accountability Tests (NeSA) Science (ACT)	Grade 11	Comprehensive	Yes	
NV	Nevada High School Science Assessment	EOC	Life Science	Yes	Student Stakes: Students need to pass the end-of-course examination in science to fulfill high school graduation requirements starting with the class of 2020.
NH	New Hampshire Statewide Assessment System (SAS) for Science	Grade 11	Comprehensive	No	
NJ	New Jersey Student Learning Assessment – Science (NJSLA-S)	Grade 11	Comprehensive	No	Field Test: This assessment is being field tested in 2017-18.
NM	New Mexico Standards Based Assessment (SBA) in science	Grade 11	Comprehensive	Yes	Student Stakes: In order to receive a standard diploma, students must pass the SBA in science.
NY	New York State Regents Exam in Chemistry	EOC	Chemistry	Yes	Student Stakes: In science, students must pass one exam to graduate.
	New York State Regents Exam in Earth Science		Earth Science		
	New York State Regents Exam in Living Environment		Living Environment		
	New York State Regents Competency Tests in Physics		Physics		
NC	North Carolina READY EOC in Biology	EOC	Biology	Yes	Student Stakes: Scores are factored into course grades.



ND	North Dakota State Assessment (NDSA) for science	Grade 11	Comprehensive	No	
OH	Biology Ohio State Test (OST)	EOC	Biology	Yes	Student Stakes: Beginning with the Class of 2018, there are three ways for students to meet assessment requirements to graduate: 1) students in Ohio earn points toward graduation on seven end-of-course exams: English I and II, Algebra I/Integrated Math I, Geometry/Integrated Math II, physical science, American history and American government; 2) students earn an industry-recognized credential or group of credentials and earn the required score on the WorkKeys test; or 3) students earn remediation-free scores in math and ELA on the ACT or SAT. If students do not meet any of the above three pathways, Ohio law provides two additional options through the class of 2018 only.
OK	Oklahoma School Testing Program (OSTP) Grade 10 assessment in science	Grade 10	Comprehensive	Yes	Students who have previously taken the Biology EOI and have a valid score may be exempt from the Grade 10 science assessment at the discretion of the school district.
OR	Oregon Assessment of Knowledge and Skills (OAKS) for Science	Grade 11	Comprehensive	No	
PA	Keystone Exam in Biology	EOC	Biology	Yes	Student Stakes: Gov. Wolf signed SB 880 (2016), which delays the graduation requirement associated with the state's end-of-course tests for two years, until the 2019-20 school year.
RI	Rhode Island Next Generation Science Assessment (NGSA)	Grade 11	Comprehensive	Yes	Field Test: The NGSA will be administered in grade 11 as a census field test. The assessment will be included in the state's accountability system after the spring 2020-21 administration.
SC	End-of-Course Examination Program (EOCEP) in Biology	EOC	Biology	Yes	Student Stakes: Student Stakes: EOCEP examination scores count 20 percent in the calculation of the student's final grade in gateway courses. Defined gateway courses currently include the following courses or courses with other names and activity codes in which the same academic standards are taught: Algebra 1, Intermediate Algebra, Biology 1, English 1, and United States History and the Constitution.
SD	South Dakota Science	Grade 11	Comprehensive	No	
TN	Biology I EOC	EOC	Biology	Yes	All students must take a Biology course (and thus the Biology EOC) as a graduation requirement. Only students who elect to take a chemistry course will be assessed using the Chemistry EOC.
	Chemistry EOC	EOC	Chemistry		
TX	State of Texas Assessments of	EOC	Biology	No	Student Stakes: Students must pass the STAAR EOC to graduate.



	Academic Readiness (STAAR) EOC in Biology				
UT	Student Assessment of Growth and Excellence (SAGE) EOC in Biology	EOC	Biology	Yes	
	SAGE EOC in Earth Science		Earth Science		
	SAGE EOC Chemistry		Chemistry		
	SAGE EOC Physics		Physics		
VT	Vermont Science	Grade 11	Comprehensive	Yes	
VA	Earth Science Standards of Learning (SOL)	EOC	Earth Science	No	Student Stakes: Students must pass one science SOL to fulfill their graduation requirement for a Standard Diploma. To graduate with an Advanced Studies Diploma, students must earn two verified credits in science.
	Biology SOL		Biology		
	Chemistry SOL		Chemistry		
WA	Washington Comprehensive Assessment of Science	Grade 11	Comprehensive	No	
WV	SAT	Grade 11	Comprehensive	No	
WI	ACT Aspire	Grades 9-10	Comprehensive	No	
	ACT	Grade 11	Comprehensive		
WY	The Wyoming Test of Proficiency and Progress (WY- TOPP)	Grade 10	Comprehensive	No	

Source: These data are based on the Achieve's ongoing monitoring of states' academic standards, graduation requirements, assessments and accountability systems. Updates to the table will be made on an ongoing basis as states' assessments and related policies evolve.