

Blueprints for the HSA Science Bridge Assessments

Teachers and schools across the state are now in the process of implementing the NGSS leading to full implementation by SY 2019-2020. The Bridge Assessments are intended to provide all students, regardless of the extent to which a school has moved forward with NGSS implementation, with a fair, valid, and reliable test of their science knowledge and skills. In addition, the Bridge Assessments ensure that the performance of students and schools is not negatively impacted by moving forward with implementation of the NGSS.

The Bridge Assessment will measure only the knowledge and skills found in both HCPS III and NGSS. These assessments will:

- have the same reporting categories and family reports as the current assessments.
- be administered at grades 4 and 8 and at the end of Biology 1. Grades 4 and 8 students will be provided with **2 opportunities** to take the Bridge Assessment.
- use items from the current HSA and Biology EOC item banks so the look and feel will be like the current assessments.
- only include items addressing HCPS III benchmarks which align with content that also appears in NGSS at grades 4, middle school earth and space science, and high school life science, respectively.
- include NGSS field test items. These items will have no impact on student scores.

Bridge Assessments will be used for SY 2017-2018 and SY 2018-2019. The assessments beginning in SY 2019-2020 will be completely NGSS-based and will be administered in grades 5 and 8 and as an end-of-course exam for Biology 1.

Grade 4 Science Bridge Online HSA Blueprint*

The benchmarks in red with a “double strikethrough”, such as ~~SC.4.4.1~~, will not be tested on the HSA Science Bridge Assessment because they do not appear at this grade level in the Next Generation Science Standards.

Reporting Categories (Strands)	Benchmarks	Percent of Items	Number of items
Scientific Process	SC.4.1.1 SC.4.1.2 SC.4.2.1	20% - 29%	8 - 12
Life Science	SC.4.3.1 SC.4.3.2 SC.4.4.1 SC.4.5.1 SC.4.5.2 SC.4.5.3	32% - 41%	13 - 17
Physical, Earth & Space Science	SC.4.6.1 SC.4.6.2 SC.4.7.1 SC.4.8.1 SC.4.8.2 SC.4.8.3	32% - 41%	13 - 17
Operational Item Total			41
Field Test Item Total**			0 - 10
Total Items on Test			41 - 51

* Revised July, 2017. Revised for HCPS III to NGSS Bridge Assessment. The content of benchmarks removed appear at a higher or significantly lower grade level in NGSS than in HCPS III. Items related to these benchmarks (in red with double strikethrough) will no longer appear on the Grade 4 Science Online HSA.

** Field test items are *not* used to compute students' scores. The number of field test item varies throughout the administration window. Periodically, the Department conducts studies on the assessments which may necessitate an increase or decrease in the number of field test items that are administered to students.

Grade 8 Science Bridge Online HSA Blueprint

The benchmarks in red with a “double strikethrough”, such as ~~SC.8.8.4~~, will not be tested on the HSA Science Bridge Assessment because they do not appear at this grade level in the Next Generation Science Standards.

Reporting Categories	Benchmarks	Percent of Items	Number of items
Scientific Process	SC.8.1.1 SC.8.1.2 SC.8.2.1 SC.8.2.2	20% - 29%	8 - 12
Biological & Physical Sciences	SC.8.5.1 SC.8.6.1 SC.8.6.2 SC.8.6.3 SC.8.7.4	20% - 29%	8 - 12
The Solar System & The Universe	SC.8.8.1 SC.8.8.2 SC.8.8.3 SC.8.8.4 SC.8.8.5 SC.8.8.6 SC.8.8.7 SC.8.8.8 SC.8.8.9 SC.8.8.10 SC.8.8.11 SC.8.8.12	41% - 51%	17 - 21
Operational Item Total			41
Field Test Item Total**			0 - 10
Total Items on Test			41 - 51

* Revised July, 2017. Revised for HCPS III to NGSS Bridge Assessment. The content of benchmarks removed appear at a higher or significantly lower grade level in NGSS than in HCPS III. Items related to these benchmarks (in red with double strikethrough) will no longer appear on the Grade 8 Science Online HSA.

** Field test items are *not* used to compute students' scores. The number of field test item varies throughout the administration window. Periodically, the Department conducts studies on the assessments which may necessitate an increase or decrease in the number of field test items that are administered to students.

Biology I End-of-Course Exam Bridge Online Blueprint *

The benchmarks in red with a “double strikethrough”, such as ~~SC.BS.4.1~~, will not be tested on the Biology 1 End-of-course Exam Bridge Assessment because they do not appear in this course in the Next Generation Science Standards.

Reporting Categories	Benchmarks	Percent of Items	Number of items
Scientific Process	SC.BS.1.1 SC.BS.1.2 SC.BS.1.3 SC.BS.1.4 SC.BS.1.5 SC.BS.1.6 SC.BS.1.7 SC.BS.1.8 SC.BS.1.9 SC.BS.2.1 SC.BS.2.2	27% - 37%	11 - 15
Organisms and the Environment	SC.BS.3.1 SC.BS.3.2 SC.BS.3.3 SC.BS.3.4	20% - 29%	8 - 12
Structure and Functions in Organisms	SC.BS.4.1 SC.BS.4.2 SC.BS.4.3 SC.BS.4.4 SC.BS.4.5 SC.BS.4.6	20% - 29%	8 - 12
Diversity, Genetics, and Evolution	SC.BS.5.1 SC.BS.5.2 SC.BS.5.3 SC.BS.5.4 SC.BS.5.5	20% - 29%	8 - 12
Operational Item Total			41
Field Test Item Total**			0 - 10
Total Items on Test			41 - 51

* Revised July, 2017. Revised for HCPS III to NGSS Bridge Assessment. The content of benchmarks removed appear at a higher or significantly lower grade level in NGSS than in HCPS III. Items related to these benchmarks (in red with double strikethrough) will no longer appear on the Biology End of Course Exam.

** Field test items are *not* used to compute students' scores. The number of field test item varies throughout the administration window. Periodically, the Department conducts studies on the assessments which may necessitate an increase or decrease in the number of field test items that are administered to students.