WDE FAQ

WY-TOPP Scale Score Proficiency-Level Ranges *updated 8/15/2022*

The Scale Score Proficiency-Level Ranges are based upon scale and performance-level cut scores determined by standard-setting panels in July 2018. The standard-setting process addressed the Wyoming Content and Performance Standards for grades 3-10 in English Language Arts (ELA) and Mathematics and grade 10 in Science. For grades 4 and 8 Science, the 2014 scale and performance ranges remained in effect until the 2016 Science Standards were assessed in 2021-22. In June 2022, additional standard-setting panels determined the new Scale Score Proficiency-Level Ranges for science in grades 4, 8, and 10.

SCALE SCORE PROFICIENCY-LEVEL RANGES FOR GRADES 3–10 ENGLISH LANGUAGE ARTS

Grade	Below Basic	Basic	Proficient	Advanced
3	≤563	564-591	592-627	≥628
4	≤579	580-612	613-648	≥649
5	≤600	601-626	627-667	≥668
6	≤613	614-639	640-688	≥689
7	≤616	617-643	644-691	≥692
8	≤625	626-652	653-707	≥708
9	≤628	629-655	656-708	≥709
10	≤630	631-666	667-712	≥713

SCALE SCORE PROFICIENCY-LEVEL RANGES FOR GRADES 3–10 MATHEMATICS

Grade	Below Basic	Basic	Proficient	Advanced
3	≤416	417-437	438-460	≥461
4	≤441	442-465	466-490	≥491
5	≤465	466-493	494-532	≥533
6	≤489	490-520	521-559	≥560
7	≤515	516-551	552-587	≥588
8	≤542	543-584	585-626	≥627
9	≤572	573-616	617-667	≥668
10	≤602	603-652	653-713	≥714

SCALE SCORE PROFICIENCY-LEVEL RANGES FOR GRADES 4, 8, 10 SCIENCE

Grade	Below Basic	Basic	Proficient	Advanced
4	≤376	377-400	401-424	≥425
8	≤776	777-803	804-828	≥829
10	≤979	980-1000	1001-1027	≥1028

How Were the Cut Scores Determined for ELA and Math?

From July 10–12, 2018, AIR (now CAI) facilitated standard-setting workshops for grades 3-10 in English Language Arts (ELA) and Mathematics. The 84-member panel was composed of Wyoming teachers, curriculum specialists, education administrators, and other stakeholders. The members were selected from large and small Wyoming school districts throughout the state, ensuring diverse perspectives throughout the standard-setting process.

The panelists used the Bookmark method, the most common procedure used throughout the country and for previous Wyoming assessments. Panelists were given a booklet of items ordered by level of difficulty. During the process, the panelists referenced the Wyoming College and Career-Readiness Standards, the Performance-Level Descriptors (PLDs), and student performance data from the 2018 WY-TOPP Summative Assessment. The panelists bookmarked items representative of minimum performance of Basic, Proficient, and Advanced performance levels. There were multiple rounds of review and resolution during the three-day workshop.

The cut scores are used to determine the four performance levels - Below Basic, Basic, Proficient, and Advanced.

How Were the Cut Scores Determined for Science?

From June 14-15, 2022, CAI facilitated a standard-setting workshop for Science in grades 4, 8, and 10. The 34-member panel was composed of Wyoming teachers, curriculum specialists, education administrators, and other stakeholders. The members were selected from large and small Wyoming school districts throughout the state, ensuring diverse perspectives throughout the standard-setting process.

Because the new science items - specifically the item clusters - represent multiple, interdependent interactions through which students engage in scientific phenomena, scoring assertions were ordered by difficulty to create an ordered assertion booklet. Panelists were presented with ordered scoring assertions for each item separately. Panelists mapped each scoring assertion to the most appropriate performance-level descriptor (PLD). Mapping of scoring assertions was based on the consideration of test content.

During the process, the panelists were provided contextual information, including the percentage of students who performed at or above the performance level associated with each assertion (impact data), as well as the 2021 WY-TOPP science performance level corresponding to each assertion (benchmark data). The panelists performed the assertion mapping in two rounds of standard-setting.

The cut scores are used to determine the four performance levels - Below Basic, Basic, Proficient, and Advanced.

Was Student Information From Wyoming Students Used to Set Cut Scores?

Yes. Panelists reviewed student performance data from the Spring 2018 WY-TOPP ELA and Math Summative administration during each round of review in the bookmarking process. For Science, panelists reviewed student performance data from the Spring 2022 WY-TOPP Science Summative administration.

What Role Did Writing Play in How Cut Scores Were Determined For?

ELA cut scores were set using the overall scaled score for each test at each grade level. Because writing is assessed in grades 3, 5, 7, and 9, ELA panelists reviewed student responses to writing prompts from the 2018 assessment to determine overall ELA cut scores for those grades. Performance-level cut scores were not set for individual reporting categories; therefore, there is no cut score for writing only.

When Viewing Summative Results, Why Are There Only Three Performance Levels for the Reporting Categories?

The cut scores are used to determine four performance levels - Below Basic, Basic, Proficient, and Advanced. These cut scores were set based on the overall score, not each individual reporting category. Reporting categories are classified into three levels of achievement estimates - Below Standard, At/Near Standard, and Above Standard. Reporting categories have fewer items leading to a larger standard error of measure compared to overall scaled scores.

What Assessments use the Cut Scores Set During the Standard-Setting Workshop?

The WY-TOPP Summative and Interim assessments in grades 3–10 for ELA and math, and grades 4, 8, and 10 for science will use these cut scores. Achievement estimates based upon the Proficient cut score are used for Modular assessments. All cut scores will remain in effect until there is a change in the standards or the assessment. For example, the 2016 Wyoming Science Content and Performance Standards were assessed for the first time in Spring 2022; therefore, a standard-setting workshop was held to set the cut scores for the new science test, as outlined earlier in this document.