Minnesota Comprehensive Assessment Strand/Sub-Strand and Benchmark Level Results

The Minnesota K–12 Academic Standards are divided into one or more benchmarks, which describe the specific knowledge or skill that a student must demonstrate to complete part of an academic standard by the end of a grade level or grade band. **Table 1** includes an example of a Minnesota Academic Standard and a related benchmark.

Benchmark Reports are generated at a school or district level for each grade and subject assessed. They may be helpful in assisting educators in interpreting and analyzing student performance on the Minnesota Comprehensive Assessment (MCA), as the data is grouped by each benchmark from the standards. This information can provide a little more insight into patterns or trends in student performance across benchmarks from the grade-level standards.

It is important to keep in mind that the data in the Benchmark Reports are from the previous school year. Thus, the information should be used along with additional data from a comprehensive, balanced, and equitable assessment system to help identify trends and patterns when evaluating new programs or policies or changes to existing programs or policies in relation to standards-based curriculum and instruction. Understanding these trends and patterns can be useful for making larger scope decisions, like program or curricular-level evaluation or alignment work, in relation to the state's expectations for student learning, based on the academic standards.

Table 1. Example Standard and Benchmark

Grade 5, Reading Standard 8	Grade 5, Reading Benchmark 8
Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.	Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).

Interpreting Student Performance Data

The Benchmark Report provides educators with information about overall student performance (at the group level) on each benchmark from the standards for the school and district level. By comparing individual results at the school or district level to the "Meets the Standards" achievement level expectation based on the grade level, a performance level symbol is indicated using a green, blue, or red circle. By comparing school or district performance on a benchmark to the expected performance on a benchmark based on the "Meets" achievement level cut score, three performance levels are delineated as compared to the **"Meets"** achievement level: less than the "Meets" achievement level (red), similar to the "Meets" achievement level (blue), or greater than the "Meets" achievement level (green).

− School performance on this benchmark is **less than** the "Meets" achievement level.

≈ School performance on this benchmark is **similar to** the "Meets" achievement level.

\+ School performance on this benchmark is **greater than** the "Meets" achievement level.

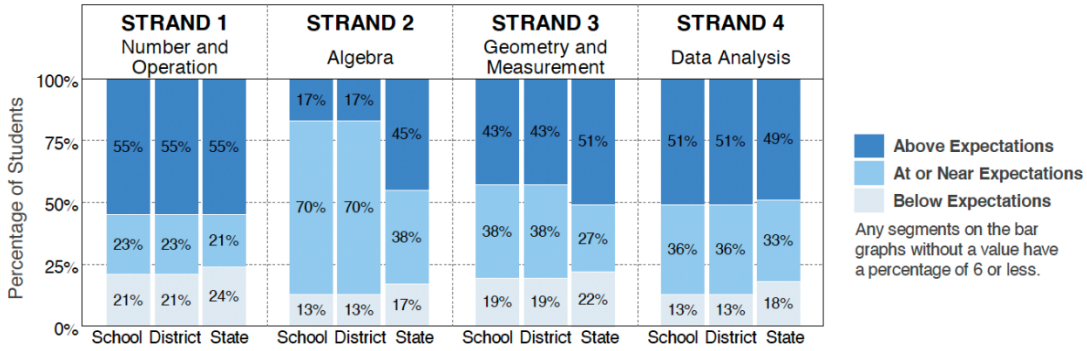
STRAND 3: GEOMETRY AND MEASUREMENT		
Compared to "Meets" Achievement Level	**Benchmark**	
Standard 3.3.1	Use geometric attributes to describe and create shapes in various contexts.	
+	**3.3.1.1**	Identify parallel and perpendicular lines in various contexts, and use them to describe and create geometric shapes, such as right triangles, rectangles, parallelograms and trapezoids.
≈	**3.3.1.2**	Sketch polygons with a given number of sides or vertices (corners), such as pentagons, hexagons and octagons.
Standard 3.3.2	Understand perimeter as a measurable attribute of real-world and mathematical objects. Use various tools to measure distances.	
Not assessed on the MCA-III	**3.3.2.1**	Use half units when measuring distances. For example: Measure a person's height to the nearest half inch.
+	**3.3.2.2**	Find the perimeter of a polygon by adding the lengths of the sides.
*	**3.3.2.3**	Measure distances around objects. For example: Measure the distance around a classroom, or measure a person's wrist size.
Standard 3.3.3	Use time, money and temperature to solve real-world and mathematical problems.	
−	**3.3.3.1**	Tell time to the minute, using digital and analog clocks. Determine elapsed time to the minute. For example: Your trip began at 9:50 a.m. and ended at 3:10 p.m. How long were you traveling?

The Benchmark Report also contains information about group-level student performance on each strand and sub-strand in the content areas of reading, mathematics, and science. These school- and district-level data are compared to the "**Meets**" achievement level expectation set by the state and are described as "**Above Expectations**," "**At or Near Expectations**," and "**Below Expectations**." These scores provide a more detailed picture of student achievement of the standards for reading, mathematics, and science.

GRADE 3 MATHEMATICS PERFORMANCE BY STRAND

For the grade 3 Mathematics MCA-III, the strand performance levels are reported as: Below Expectations, At or Near Expectations, or Above Expectations. The strand performance level is determined by comparing the school performance to the state expectation at the "Meets" achievement level.

The graphs below show the percentage of students in each performance level for each strand calculated by aggregating the individual student strand performance levels at your school, at your district, and at the state level.



It should be noted that not all benchmarks identified in the MCA appear in the assessment. For benchmarks that are not assessed on the MCA, teachers will need to turn to other assessment methods in a comprehensive, balanced, and equitable assessment system to gain a clear, well-rounded picture of student achievement of the standards. Likewise, the MCA includes assessment tasks that measure Depth of Knowledge (DOK) levels 1, 2, and 3 but not level 4. This means that teachers are expected to provide opportunities for students to demonstrate their knowledge and skills at DOK level IV in their classrooms. See Understanding Statewide Testing Resources: Depth of Knowledge for more information.

Acting On Student Performance Data

The Benchmark Report includes valuable data depicting student performance on the MCA. Because the MCA is a summative assessment and each benchmark indicator is based on a limited set of questions, the data have limitations when used in isolation. **Table 2** includes examples of appropriate and inappropriate uses of the school, district, and state-level data generated by the MCA. As you recall, a balanced, comprehensive, and equitable system of assessment includes not only summative assessments but also an ongoing formative assessment process, formal classroom assessments, screening and intervention assessments, and interim assessments. These assessments work together to ensure that learning is moving forward throughout the school year toward achievement of the learning expectations defined in the standards.

Table 2. Ways to Use MCA Data to Inform Classroom Decisions

Appropriate Uses	Uses That Are Not Appropriate
Understand learning at the group level	Understand learning at the individual student level
Evaluate school programs, policies, and plan for improvement	Evaluate lessons and instructional strategies
Use in conjunction with additional evidence of student learning to gain a clearer picture of student understanding	Use as the only piece of evidence to make claims about student learning
Look across multiple years of data and surface system-level patterns	Focus on single data source and drill down to claims about individual learners
Use data to help inform future curricula, programming, and support structures	Inform day-to-day next steps in instruction

MCA Benchmark Reports are available by going to PearsonAccess Next under Reports > Published Reports for DAC and Assessment Administrator (AA) user roles (login required). If you would like to access your Benchmark Reports and are not sure who your District Assessment Coordinator (DAC) is, their contact information can be found by going to MDE-ORG > Contact Lists > District Assessment Coordinator.

Before digging in and making inferences from the Benchmark Reports, review the following resources:

- The *2021–22 Benchmark Report Interpretive Guide* and *2021–22 Benchmark Report "How To" Quick Guides* are posted on the Additional Reporting Resources page of the PearsonAccess Next website.
- The *2021–22 Benchmark Report Video* on the Additional Reporting Resources page of the PearsonAccess Next website.
- The Minnesota Questions Tool (MQT) posted on the Released MCA Questions page of the **Testing 1, 2, 3** website contains released test questions (items) from past MCAs, as well as links to data about each item. Educators can use these items to better understand how the MCA is aligned to the Minnesota K–12 Academic Standards and

how the items are written to reflect the rigor and complexity of the standards. The MQT is explored more deeply in Activity 3 of this module.

- Minnesota Department of Education staff developed and posted Benchmark Achievement Level Descriptors for reading and mathematics on the Success Criteria of the **Testing 1, 2, 3** website (under the Achievement Level Descriptors [ALDs] expandable header). The Benchmark ALDs can help make meaning out of the Benchmark Reports as they describe the knowledge and skills students typically demonstrate across the four achievement levels for each benchmark from the standards.

Note: There were no Benchmark Reports produced for 2020 due to the COVID-19 pandemic. In 2019, the MCA Benchmark Report was redesigned using a different calculation method to report school and district performance on benchmarks. School and district staff should not compare Benchmark Reports before 2019 to Benchmark Reports from 2019, 2021, and 2022.