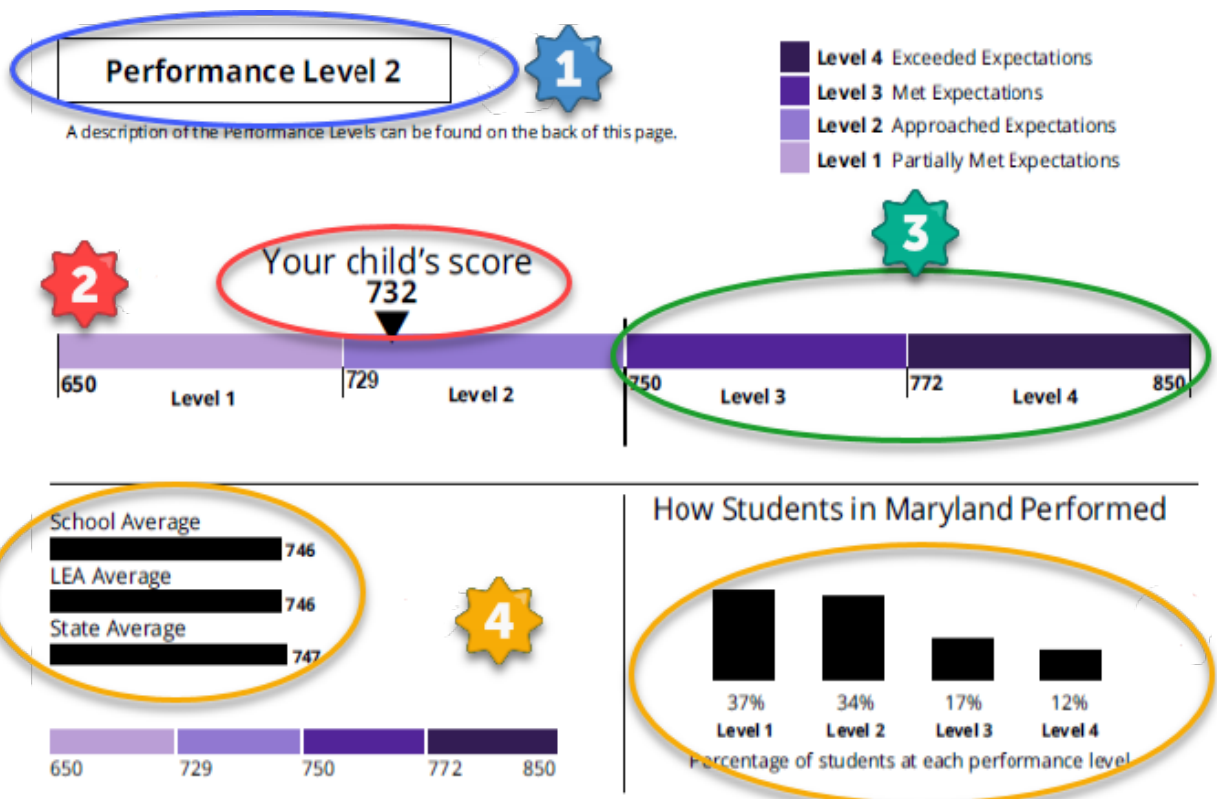


The 2022-2023 Maryland Integrated Science Assessment (MISA) for Science 5 & 8, that aligns to the Maryland College and Career-Ready Standards, was administered in March 2023. The tests assessed student mastery of the three dimensions necessary to understand science: Disciplinary Core Ideas (DCI), Science and Engineering Practices (SEP), and Crosscutting Concepts (CCC). Students demonstrated their mastery by interacting with a stimulus such as a video, chart, or diagram, and then responding to several items supported by the stimulus. MISA scores should be used along with a student's classroom performance, report card grades, and teacher feedback to form a clear picture of a student's progress toward meeting academic standards.

How to Read Your Student's Score Report

- 1 Overall Performance** – Students receive an overall score and based on that score, are placed in one of four performance levels, with Level 4 indicating the student exceeded expectations and Level 1 indicating the student partially met expectations.
- 2 Score Range** – This scale includes the score ranges for each performance level and shows where your student's score falls within that range.
- 3 On Track for College and Career** – Students scoring a 4 or 5 meet or exceed grade-level expectations and are on track to be ready for college-level coursework when they graduate from high school.
- 4 Overall Score Comparisons** – This section shows how your student is performing compared to students in the same grade at the same school, across the school district, and around the state. It also details the percentage of students who achieved at the different performance levels and Student Grown Percentile to measure individual student progress.



How to Read Your Student's Score Report (Continued...)

5

Dimensions of Science Reporting Categories – The report shows the student's performance for the three dimensions of science: Disciplinary Core Ideas (DCI), Science and Engineering Practices (SEP), and Crosscutting Concepts (CCC). In addition, there are three subcategories in the DCI dimension: Physical Science, Life Science, and Earth and Space Sciences.

6

Dimension Performance Indicator – each dimension is marked with a dimension performance indicator.

- **An up arrow** indicated the student “Met or Exceeded Expectations”. Students in this category are likely academically well prepared to engage successfully in further studies in the dimension of science content area and may need instructional enrichment.
- **A bidirectional arrow** indicates the student “Approached Expectations”. Students in this category likely need academic support to engage successfully in further studies in the dimension of science content area.
- **A down arrow** indicates the student “Partially Met Expectations”. Students in this category are likely not academically well prepared to engage successfully in further studies in the dimension of science content area. Such students likely need instructional interventions to increase achievement in the dimension of science content area.

How Did Your Child Perform in the Three Dimensions of Science?

Disciplinary Core Ideas (DCI)

Physical Sciences

Your student performed about the same as students who **partially met expectations**. Students meet expectations by demonstrating an understanding of matter and its interactions, motion and stability, forces and interaction, energy, waves and their applications in technologies for information transfer.

Life Science

Your student performed about the same as students who **approached expectations**. Students meet expectations by demonstrating an understanding of how the structures and processes function from molecules to organisms, the interactions, energy, and dynamics of ecosystems, the inheritance and variation of traits in heredity, and the unity and diversity of biological evolution.

Earth and Space Sciences

Your student performed about the same as students who **partially met expectations**. Students meet expectations by demonstrating an understanding of Earth's place in the universe, Earth's systems, and Earth and human activity.

LEGEND

Your child performed about the same as students who:

↓ Partially Met Expectations ↔ Approached Expectations ↑ Met or Exceeded Expectations

Science and Engineering Practices (SEP)

Your student performed about the same as students who **met or exceeded expectations**. Students meet expectations by demonstrating an understanding of the practices scientists and engineers use to investigate theories about the natural world giving them opportunities to immerse themselves in these practices and explore why they are central to science and engineering.

Crosscutting Concepts (CCC)

Your student performed about the same as students who **approached expectations**. Students meet expectations by demonstrating an understanding of how scientists connect and explain knowledge from various science disciplines and engineering practices into a coherent and scientifically based view of the world.

Facts About Science Assessments in Maryland

- ✓ Federal law requires that all students in grades 5,8 and once in high school take an annual statewide Science assessment.
- ✓ Maryland educators are highly involved in the development and improvement of the Science tests, from analyzing the items to reviewing them for appropriateness.
- ✓ Parents of students with disabilities should be contacted by their child's IEP or 504 team to discuss allowable accessibility features and accommodations for testing.
- ✓ Scores demonstrate a student's understanding of multi-year level Science standards at the end of the school year.
- ✓ Science score reports are tools teachers use to plan instruction and enrichment for students in the coming year that prepare students for their next steps.
- ✓ Families can use the scores to start a conversation with the child's teachers and school officials about the child's academic strengths and areas for improvement.
- ✓ Together everyone can decide how best to support the student's learning needs both in school and at home.

Additional Resources

[Spring 2023 MCAP Score Report Interpretation Guide For MISA \(Science\)](#)

MCAP Practice Tests for Science

MCAP Practice Tests - <https://support.mdassessments.com/practice-tests/>