

**GRADE 8 SCIENCE**

# Science Assessment Report, 2021-2022

This report shows whether FIRSTNAME met grade band expectations in science and is on track for the next grade band. The items on the assessment measure your child's understanding of concepts and practices in science and require critical thinking to find solutions to problems. The Maryland Integrated Science Assessment is one of several ways to help families and teachers understand how well your child is acquiring science concepts and practices.

### How Can You Use This Report?

Ask your child's teachers:

- What do you see as my child's strengths and areas for improvement in science?
- How can these assessment results be used to help my child make progress in science?





To learn more about the Maryland Science Program visit <http://marylandpublicschools.org/about/Pages/DCAA/Science/index.aspx>.

For Practice Tests visit Test Preparation on <http://support.mdassessments.com>.

## How Did FIRSTNAME Perform Overall?

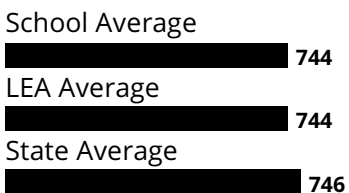
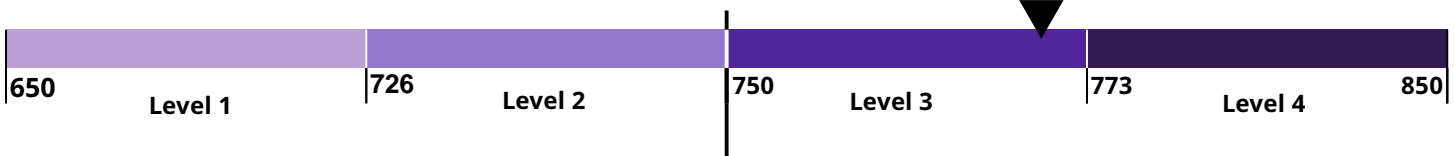
**Performance Level 3**

A description of the Performance Levels can be found on the back of this page.

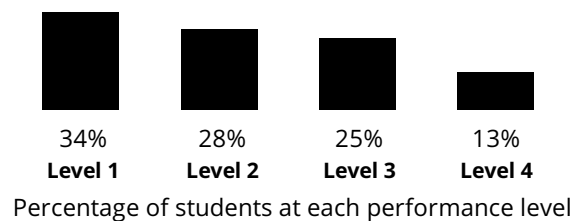
-  **Level 4** Exceeded Expectations
-  **Level 3** Met Expectations
-  **Level 2** Approached Expectations
-  **Level 1** Partially Met Expectations

Your child's score

**770**



## How Students in Maryland Performed



### How are assessment results used?

Results from the assessment give your child's teacher, school, and school district information about their science performance, and provide you with some insight on how your child is meeting expectations. These results never stand alone, but can be used with other assessments and class work when gauging student performance.

## 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.

### Science Performance Level Descriptions

**Level 4 Exceeded Expectations:** Students who perform at this level demonstrate an effective ability to apply scientific thinking to understand the natural world and apply engineering design to find solutions to problems. Students demonstrate the ability to think critically about physical and chemical interactions that affect the world around them; factors that affect organism survival and reproduction; factors that influence the Earth and our solar system; and how to optimize design solutions. Students apply skills such as asking questions that lead to explanations supported by evidence, using mathematics to analyze data, and applying scientific ideas to develop, test, compare, and improve design solutions.

**Level 3 Met Expectations:** Students who perform at this level demonstrate the ability to apply scientific thinking to understand the natural world and apply engineering design to find solutions to problems. Students demonstrate the ability to explain physical and chemical interactions that affect the world around them; factors that affect organism survival and reproduction; factors that influence the Earth and our solar system; and how to optimize design solutions. Students use skills such as asking questions that can lead to reasonable predictions, using mathematics to describe data, and applying scientific ideas to evaluate a design solution.

**Level 2 Approached Expectations:** Students who perform at this level are approaching the ability to apply scientific thinking to understand the natural world and apply engineering design to find solutions to problems. Students are beginning to demonstrate the ability to describe physical and chemical interactions that affect the world around them; factors that affect organism survival and reproduction; factors that influence the Earth and our solar system; and how to optimize design solutions. Students are beginning to demonstrate skills such as asking questions about changes in an investigation, organizing simple data sets that reveal patterns, and identifying scientific evidence used to support a claim.

**Level 1 Partially Met Expectations:** Students who perform at this level demonstrate an emerging ability to apply scientific thinking to understand the natural world and engineering design to find solutions to problems. Students are beginning to identify physical and chemical interactions that affect the world around them; factors that affect organism survival and reproduction; factors that influence the Earth and our solar system; and how to optimize design solutions. Students are beginning to develop skills such as asking questions about changes in an investigation, organizing simple data sets that reveal patterns, and identifying scientific evidence used to support a claim.