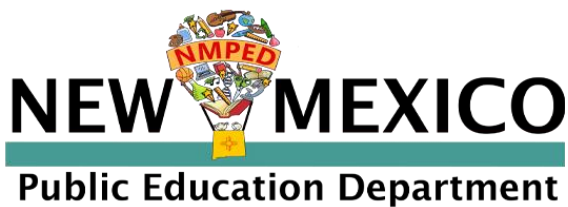




# NM-Assessment of Science Readiness: **Interpretive Guide to Student Reports**

Spring 2024



NEW MEXICO ASSESSMENT  
OF SCIENCE READINESS

### Test Purpose

The New Mexico Assessment of Science Readiness, or NM-ASR, is a summative assessment in Science for students in grades 5, 8, and 11 aligned to the New Mexico STEM Ready! Standards. The assessment measures whether students are on track to be ready for college and/or career.

### Test Content

The Science assessment focuses on the integration of Science and Engineering Practices, Disciplinary Core Ideas, and Crosscutting Concepts to explain phenomena and solve problems.

For more information about what topics/standards are assessed, please see the New Mexico STEM Ready! Standards

### Test Format

The NM-ASR is given in both computer-based and paper-based formats. Students show their acquired skills and knowledge by answering selected-response, extended response items, and technology-enhanced (TE) items. Depending on the grade level and test version, TE items might include ordering, matching, or labeling functions.

## How are NM-ASR assessments scored?

First, the points a student earned on the test questions are added together without deducting points for incorrect answers. Some questions are worth more than one point. Next, this raw score is converted to a scale score. Scale scores range from 500–590, 800–890, and 1100–1190 and are divided into four performance levels.

## What is a Scale Score?

A scale score is a numerical value that summarizes student performance. Using scale scores is like putting a meter stick up to a student to measure ability, and then using the same meter stick to measure all students' ability year after year. These scores reflect your child's grade level and difficulty level of the test items that he/she completed. Not all students respond to the same set of test items, so each student's scaled score accounts for the slight differences in difficulty among various forms and administration years within a grade or course and content area. Scale scores are helpful to see the progress your child makes in science from year to year.

The Scale Score Ranges for the NM-ASR are provided in the table below:

		Scale Score Range			
Subject	Grade	Novice	Nearing Proficiency	Proficient	Advanced
Science	5	500–543	544–559	560–574	575–590
	8	800–843	845–859	860–881	882–890
	11	1100–1153	1154–1159	1160–1181	1182–1190

## What does the Performance Level mean?

The Performance Level indicates a score range which is defined by a student's overall scale score and is used to report overall student performance by describing how well students meet the expectations for their grade level. There are four performance levels for NM-ASR:

- Level 4: Advanced – students show **thorough** understanding of all 3 dimensions in making sense of phenomena and designing solutions
- Level 3: Proficient – students show **satisfactory** understanding of all 3 dimensions in making sense of phenomena and designing solutions
- Level 2: Nearing Proficiency - students show **partial** understanding of all 3 dimensions in making sense of phenomena and designing solutions
- Level 1: Novice – students show **emerging** understanding of all 3 dimensions in making sense of phenomena and designing solutions

## How should you use NM-ASR results?

Use these scores to help:

- Identify your child's relative strengths and limitations.
- Determine your child's progress toward meeting state curriculum standards.
- Compare your child's performance to that of other students in the school, district, and state.

## How can you help your child improve his or her NM-ASR score?

Improving a student's NM-ASR (New Mexico Assessment of Science Readiness) score involves a combination of targeted preparation, understanding the test format, practicing relevant skills, and providing support. Here are steps parents can take to help their child improve their NM-ASR score:

- **Understand the NM-ASR:** Familiarize yourself with the format, content, and expectations of the NM-ASR test. This includes knowing which science concepts and skills are assessed and the types of questions typically asked.
- **Review the Science Curriculum:** Ensure that your child is familiar with the science curriculum taught in their grade. Focus on key concepts, vocabulary, and skills in the New Mexico STEM Ready! Standards.
- **Use NM-ASR Practice Materials:** Access NM-ASR practice tests provided by the state. Practice tests help your child become familiar with the test structure and content.
- **Focus on Science Process Skills:** Emphasize science process skills such as observation, inference, data analysis, experimental design, and critical thinking. These skills are often tested on the NM-ASR and are essential for understanding scientific concepts.
- **Practice Problem-Solving:** Encourage your child to practice solving science problems and answering scientific questions. Use real-world examples, experiments, and scenarios to apply scientific knowledge and reasoning skills.
- **Support Science Inquiry:** Foster your child's curiosity and encourage them to ask questions, investigate phenomena, make hypotheses, and draw conclusions based on evidence. Engage in discussions about scientific concepts and encourage critical analysis.
- **Monitor Progress:** Regularly assess your child's schoolwork, especially quizzes and assignments. Where possible, identify areas of strength and areas that need improvement to guide targeted study sessions.
- **Encourage a Positive Mindset:** Build your child's confidence by acknowledging their efforts and progress. Encourage a positive attitude towards learning, emphasize the value of persistence, and provide encouragement and support throughout the preparation process.

By implementing these strategies and actively supporting your child's science education and test preparation, you can help them improve their NM-ASR score and develop a strong foundation in scientific literacy and inquiry skills.

## What are the tests like?

NM-ASR tests are taken online through Kite Student Portal. If you would like to see Student Portal in action, Technology Practice Tests are available online. Refer to the [NM-ASR Kite Practice Test Guide](#) for information about accessing Technology Practice Tests.


## Student Report Walkthrough

① The Individual Student Report (ISR) includes a student's name, state student ID, grade level, the school name, and the district name.

② This section of the report provides the student's overall score and performance level. Students receive an overall scale score and, based on that score, are placed in one of four performance levels, with Level 3 indicating the student in on target and Level 1 indicating the student needs support.

③ This is a letter from the New Mexico Secretary of Education, Arsenio Romero, Ph.D. which explains how this report was created for this school year. There is information here to guide families to more assessment literacy resources.

④ This section of the report shows a side-by-side comparison of a student's overall scale score with the average scale score of their peers in their school, in their district, and in the state.



### Spring 2024 Student Report


New Mexico Assessment of Science Readiness

① **Lastname, First**  
GRADE 8  
MEADOWLARK SCHOOL  
SUNFLOWER SCHOOL DISTRICT

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## First's OVERALL SCIENCE PERFORMANCE

② **862**



**800** **890**

**PROFICIENT**

*A student's test score can vary. If your student took this test again, it is likely that they would score between 859 and 865 points*

③ **Greetings from our Secretary of Education**

Dear Parents and Guardians,

Thank you for your continued support and partnership with the Public Education Department to ensure all New Mexico students are healthy, secure in their identity, and holistically prepared for college, career, and life. The Public Education Department is grateful for the time you have given to support your student's education.




This Individual Score Report describes your student's performance on their spring 2024 state summative science assessment, the New Mexico Assessment of Science Readiness (NM-ASR).

The report is designed to give teachers, and you, a snapshot of where your student finished the 2023-24 school year relative to the New Mexico STEM Ready! Science Standards. The PED reminds families that these results reflect a single measure and should be supplemented with other information received from the classroom and school for a more comprehensive look at your child's progress.

Additional resources to support your child, including the Parent Guide to Reports, can be found at the online family portal <https://nmassessments.org/families>.

If you have specific questions about your student's performance on the assessment, you are encouraged to reach out directly to your local school administration. Additional resources are available on the PED Assessment Bureau's Parent Resource page at NM-ASR Resources – New Mexico Public Education Department ([state.nm.us](http://state.nm.us)). <https://webnew.ped.state.nm.us/bureau/assessment/nmasr-resources/>




The PED appreciates the opportunity to be a part of your student's educational success.



Arsenio Romero, Ph.D.  
Secretary of Education, New Mexico Department of Public Education

Novice	Nearing Proficiency	Proficient	Advanced
Students show <b>emerging</b> understanding of all 3 dimensions in making sense of phenomena and designing solutions.	Students show <b>partial</b> understanding of all 3 dimensions in making sense of phenomena and designing solutions.	Students show <b>satisfactory</b> understanding of all 3 dimensions in making sense of phenomena and designing solutions.	Students show <b>thorough</b> understanding of all 3 dimensions in making sense of phenomena and designing solutions.

④ **Regional Averages** →

 School Average <b>859</b>	 State Average <b>855</b>	 District Average <b>859</b>
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5 Overall scores are based on total points earned in the science content areas of physical, life, and earth & space sciences. Within each of these content areas, students are assessed on the PRACTICES that scientists and engineers use while DOING their work. Students are also required to use the CROSSCUTTING CONCEPTS, which are like the LENSES a scientist or engineer looks through to make connections among the content areas.


6 This section provides the number of points the student earned in each area of the assessment. The first number is the number of points the student earned and the second number represents the total number of points possible.

7 A students' reporting category performance indicator represents how well the student

performed in that category. Reporting category performance indicators are:

- Above Standard
- Near Standard
- Below Standard

8 In the lower half of this page, you will find helpful information and resources that you can use to help your child improve their science score.




**Spring 2024  
Student Report**  
New Mexico Assessment  
of Science Readiness


**Lastname, First**  
GRADE 8  
MEADOWLARK SCHOOL  
SUNFLOWER SCHOOL DISTRICT


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5 **First's overall score is comprised of scores in these three areas:**

Practices and Crosscutting Concepts in **Physical Sciences**

  
BELOW  
STANDARD


  
NEAR  
STANDARD


  
ABOVE  
STANDARD


**POINTS:**  
8 / 21

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7 **Practices and Crosscutting Concepts in Life Sciences**

  
BELOW  
STANDARD


  
NEAR  
STANDARD


  
ABOVE  
STANDARD


**POINTS:**  
10 / 22

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**Practices and Crosscutting Concepts in Earth and Space Sciences**

  
BELOW  
STANDARD

  
NEAR  
STANDARD

  
ABOVE  
STANDARD

**POINTS:**  
10 / 21

### The Three Dimensions of Science Learning

Within the **Next Generation Science Standards (NGSS)**, there are three distinct and equally important dimensions to learning science. These dimensions are combined to form each standard—or performance expectation.

**Crosscutting Concepts (CCC)** help students explore connections across the four domains of science, including Physical Science, Life Science, Earth and Space Science, and Engineering Design.

**Science and Engineering Practices (SEP)** describe what scientists do to investigate the natural world and what engineers do to design and build systems.

**Disciplinary Core Ideas (DCIs)** are the key ideas in science that have broad importance within or across multiple science or engineering disciplines.

For more information, visit [NextGenScience.org](https://NextGenScience.org)

### Additional Resources for Families

- K-12 New Mexico STEM Ready! Science Standards: <https://webnew.ped.state.nm.us/bureaus/math-science/nm-stem-ready-science/nm-stem-ready-science-standards/>
- Smithsonian Education for Students: <https://smithsonianeducation.org/students/>
- NASA's The Space Place for Kids: <https://spaceplace.nasa.gov/menu/solar-system/>
- Energy for Kids: <https://www.eia.gov/kids/>
- Lawrence Hall of Science: <https://lawrencehallofscience.org/kidsite>
- New Mexico Museum of Natural History and Science: <https://www.nmnaturalhistory.org/education/sections/educational-resources>
- NGSS Parent Guides: <https://www.nextgenscience.org/resources/ngss-parent-guides>
- Building Family-Centered Models for Science Education through Learning in Places: <https://stemteachingtools.org/brief/77>

**How Can I Help My Student?**

To create a more complete understanding of your student's progress in relation to grade level science standards, information from this report should be used alongside additional sources, such as report cards, school assessments, and teacher feedback. Consider discussing with your student's teachers and school:

- What do you see as my student's academic strengths and opportunities for improvement in science?
- What can I do to support my student's learning at home?
- What local resources are available to help support our learning at home?

Also, be sure to discuss with your student their thoughts on what they are learning in science class, what they find challenging about science, and what they are looking forward to in science class.