

Office of State Assessment

Frequently Asked Questions Related to the Investigations for the Regents Examinations in Science

The Investigations for the Regents Examinations in science have been designed to be hands-on, 3-dimensional learning tasks aligned to the <u>New York State P-12 Science Learning Standards</u> (NYSP-12SLS) that can be embedded into curriculum. The Investigations were conceptualized, written, and reviewed multiple times by NYS-certified science teachers. The Investigations are not standardized State tests; rather they are performance-based tasks that are a component of the State's strategy for assessing science.

The intention of the Investigations is to emphasize Performance Expectations (PEs) that will not be measured at the level of proficiency on the written assessment and to ensure that these PEs are part of instruction. Embedding the Investigations into the locally developed NYSP-12SLS-aligned curriculum will aid in facilitating the necessary shift to 3-dimensional teaching and learning and will provide another way for students to demonstrate their science knowledge and skills. Students will think like scientists as they use scientific practices and recognize common themes across science through cross-cutting concepts. The Investigations will provoke thoughtful conversations between educators, both at and between grade-levels and science domains.

This resource addresses frequently asked questions related to <u>Gaining Access / Security</u>, <u>Implementation</u>, <u>Materials</u>, <u>Scoring</u>, <u>Record Keeping and Transfer Students</u>, and <u>The Relationship</u> Between Investigations and Associated Science Regents Exam.

In addition, the following memos offer details to support the implementation of the Investigations:

- <u>January 2025 Planning for Regents Examinations in Physical Science: Chemistry and Physical Science: Physics Investigations</u>
- May 2024 Investigations for the Regents Examinations in Earth and Space Sciences and Life Science: Biology Now Available
- <u>January 2024 Planning for Regents Examinations in Earth and Space Sciences and Life Science: Biology Investigations Memo Investigations</u>

Gaining Access / Security:

1. How can the Investigations for the Regents Examinations be downloaded? Who can access them?

The required Investigations are available for schools to download in digital format only as Portable Document Files (PDFs) via the free Adobe Acrobat Reader, either as stand-alone files or in a zipped collection. Rubrics can be downloaded as an excel spreadsheet.

To access the required Investigations, you must have access to the NYSED Business Application Portal and the Office of State Assessment Online Examination Request System. Access to the request system is available to the school principal or designated testing coordinator. Please see the appendix attached to the May 2024 memo, specifically pages two through five, for a more detailed description of where to find the Investigations. If you do not have access to the Online

Examination Request System, please contact your school or district administrator or a designated testing coordinator for assistance in accessing and downloading these files.

2. With whom can the Investigations be shared? Can they be shared digitally?

The school principal or designated testing coordinator who accesses the Investigations can share them with science teachers in their school district who will be using them for course work and examination preparation.

Documents can be shared with students by distributing either digital or paper copies. All components of the Investigations may be saved on school-controlled drives as long as they are accessible by faculty only. Digital copies of the Student Directions and Student Answer Packet(s) for the Investigations can be shared with students on school-controlled drives, such as Google Drive or Schoology, as long as only teachers and students within the district are able to access the files.

In the case of a district student receiving home instruction, the home instructor would fall within the approved teacher group. This person could carry the Investigation documents and materials to the student and back again just as they would for documents and materials needed for other hands-on science tasks that they are using with the home instruction student.

3. Are the Investigation documents considered to be "secure materials"?

The Investigations are distributed through the exam request portal and may not be freely distributed to the public. They are intended for use by New York State teachers for course work and examination preparation in the classroom. It is permitted to reproduce, electronically (i.e., scanned, Google doc/form) if necessary, the Student Directions and the Student Answer Packet(s) in limited quantities for local use in instruction. The Teacher Materials documents are not to be provided to students and should not be reproduced electronically or shared with the public. If the Student Directions and/or Student Answer Packet(s) are reproduced, care should be taken to ensure that no content is lost.

Using public/open websites such as Facebook, Pinterest, Teachers Pay Teachers, X (formerly Twitter), Quizizz, YouTube, or Wakelet, etc. as a means of sharing and/or exchanging any portion of the Investigations with students, teachers outside your district, parents, and the public is prohibited.

4. Can the Investigations be shared with teacher preparation programs and science supply vendors?

The Investigations are intended for use by New York State teachers for course work and examination preparation in the classroom. The Investigations are not intended to be utilized in teacher preparation programs. Additionally, the New York State Education Department (NYSED) and the Office of State Assessment (OSA) are not providing the Investigations to vendors for the purposes of creating and selling kits.

5. How can translated and Braille versions of the Investigations be accessed?

Translated versions of the Student Directions and Student Answer Packets for the Earth and Space Sciences and Life Science: Biology Investigations are available in Arabic, Bengali, Chinese (Simplified), Chinese (Traditional), Haitian Creole, Korean, Russian, and Spanish. In the same

way as the English language version, these translated versions are available on the NYSED Business Application Portal and the Office of State Assessment Online Examination Request System.

Hard copies of the Student Directions and Student Answer Packets in Unified English Braille (UEB) for *all* Investigations for the Regents Examinations in science may be requested by contacting the Office of State Assessment (OSA) at emscassessinfo@nysed.gov.

Implementation:

6. If a teacher's instruction is aligned with the 1996 Learning Standards for Math Science and Technology and their students are being prepared for the Regents Exam aligned to the MST, should the Investigations be implemented?

Students receiving or having received instruction aligned with the 1996 Learning Standards for Math Science and Technology should take the Regents Exam aligned to the MST. These students would *not* be required to complete the NYSP-12SLS-aligned Investigations.

The <u>Science Implementation Roadmap and Timeline</u>, revised April 2021, provides guidance on the transition, implementation, and sustainability of the New York State P-12 Science Learning Standards (NYSP-12SLS). Districts should follow the Implementation Timeline as they transition their curriculum to the NYSP-12SLS. The <u>Implementation Schedule for New Regents Examinations memo</u> released in January 2023 addresses the overlap of the 1996 Learning Standards for Math Science and Technology (MST) and the New York State P-12 Science Learning Standards (NYSP-12SLS) from an assessment perspective.

The overlap period of the old and new exams ensures that students can complete the exam that matches the instruction they received. Selecting which curriculum a district is implementing is a local decision and is not dictated by the state. Transition to the New York State P-12 Science Learning Standards was strongly recommended using the given Implementation Timeline. Holding off implementation is not recommended as any district that chooses to provide instruction aligned to the Learning Standards for Math, Science and Technology, 1996 (MST) will risk having students who fail the exam repeat these classes to a course aligned with the New York State P-12 Science Learning Standards (NYSP-12SLS). Please note there will no longer be Earth Science or Living Environment exams aligned to the MST after June 2026 and Chemistry and Physics aligned to the MST after June of 2027, as outlined in the Implementation Schedule for New Regents Examinations in Mathematics, Science, and English Language Arts.

7. If a teacher's instruction is aligned with the New York State P-12 Science Learning Standards and their students are being prepared for the Regents Exam measuring the NYSP-12SLS, should the Investigations be implemented?

Students receiving instruction aligned with New York State P-12 Science Learning Standards should take the Regents Exam aligned with NYSP-12SLS and successfully complete the NYSP-12SLS-aligned Investigations prior to the administration of the exam. The Investigations are designed to be embedded into classroom instruction and can be offered any time during the school year, depending on when teachers cover the Performance Expectation(s) assessed.

These same students would not be required to take the Earth Science Performance test or participate in the Living Environment Required Labs, as these activities are not NYSP-12SLS-aligned.

8. Did the development of the Investigations take into account the appropriate level of reading comprehension and academic rigor for students in the course?

The Investigations use vocabulary and rigor found in the language of the NYSP-12SLS for each science domain at the level of the written assessment. The New York State Education Department employed the principles of Universal Design in developing the Investigations. To develop 3-dimensional performance tasks suited for the appropriate grade level, NYS-certified teachers experienced with high school-level science students reviewed and provided feedback on all of the materials associated with the Investigations.

Traditional reading formulas do not work well in determining a reading level on science performance or assessment questions primarily due to the necessary application of domain-specific vocabulary. Readability concerns are addressed throughout the development process by NYS-certified teachers, editors, and review committees. NYSED relies on the best professional judgement of our NYS-certified teacher consultants during all phases of the development process to help ensure that the reading level is appropriate for the students performing these tasks.

9. Can students be provided with assistance during the administration of the Investigations?

The Investigations were designed to be hands-on, 3-dimensional learning tasks aligned to the NYSP-12SLS that can be embedded into curriculum. Instruction associated with the Investigations should therefore be consistent with the practices and teaching strategies used in the classroom during daily science learning tasks. Like any other classroom activity, students must be provided with supports and accommodations, as detailed in their Individualized Education Program (IEP) or Section 504 Accommodation Plan, while completing the Investigations.

10. Can the Investigations be changed to reflect students' needs? Can a district choose to not administer specific questions/portions of the Investigations?

The use of supplemental materials, such as adding graphic organizers or creating task cards to scaffold procedural steps, is acceptable if this practice is consistent with instruction during other hands-on science activities. Like any other classroom activity, students must be provided with supports and accommodations, as detailed in their Individualized Education Program (IEP) or Section 504 Accommodation Plan, while completing the Investigations.

All parts of the Investigation should be administered for students to properly experience hands-on learning aligned to the NYSP-12SLS. Removing portions or specific questions from the tasks has the potential to disrupt the 3-dimensional design of the activities within the Investigations. However, the inclusion of additional tasks or questions is at the teacher's discretion.

11. Do all aspects of the Investigations need to be completed by students themselves, or can teachers guide and direct?

For students to complete the Investigations with integrity, they must be allowed to fully experience hands-on learning aligned to the NYSP-12SLS. Overly guiding and directing students will disrupt the 3-dimensional design of the activities within the Investigations. For example, a Science and Engineering Practice (SEP) often used in the Investigations is "Planning and Carrying Out Investigations". Teachers who instruct students to select certain variables when planning their investigation are removing the students' ability to show proficiency in this SEP.

12. Can the Investigation tasks be pre-recorded for students to watch?

NYSED strongly discourages pre-recording portions of the Investigations as it limits student discovery and takes away the authentic, hands-on laboratory experiences that the Investigations are intended to provide and that are required by the NYSP-12LS.

13. Approximately how much time is needed to conduct each Investigation and will the time count for the 1200-minute requirement?

The actual times needed to complete each Investigation may vary depending on the Investigation itself, the length of scheduled laboratory periods, specific classroom set-ups and student groups, whether lab questions are to be completed in class or outside of class as homework, and if teachers choose to supplement the Investigations with additional instruction or activities.

Minutes accrued while completing the Investigation tasks count toward the 1200 minutes of hands-on laboratory experience required by Part 100 of the Commissioner's Regulations. Investigations must be documented as satisfactory to be counted toward the 1200-minute requirement. The Teacher Materials document associated with each Investigation for Regents Science includes the maximum number of minutes that the activity is intended to satisfy.

Materials:

14. Where can schools/districts obtain materials/kits for the Investigations?

NYSED is a non-endorsing state agency and thus does not approve local school district curriculum or endorse vendors. The Investigation activities were specifically designed to require many relatively common and inexpensive materials. Many of the supplies used in the Investigations may already be included in high school science classrooms.

Some BOCES may provide materials and/or kits. Schools should reach out to their BOCES directly with questions about obtaining materials for the Investigations.

15. Are the materials/equipment for the Investigations secure?

The materials/equipment for the Investigations do not have to be treated as "secure" testing materials and therefore can (and often should) be used throughout the year for other investigations/activities. However, it is strongly discouraged to mirror the Investigation tasks/activities in a way that limits student discovery in the Investigations themselves.

16. To what extent can substitutions be made in the lab materials/equipment used in the Investigations?

In some cases, there is flexibility with some materials/equipment to ensure schools are not disadvantaged based on what they can procure. For example, a 4-ounce container could be plastic or glass, filter paper could be lab grade or coffee filters. However, there are some materials that cannot be substituted, such as the 10-cm circular protractor with continuous 0-360-degree markings used in the ESS Investigation, Unearthing Mars. Specific questions may be directed to the Office of State Assessment Science Team at emscassessinfo@nysed.gov.

Scoring:

17. Can a classroom teacher score their own students' completed Investigations? Is there a recommended point value for each question/data table? Do scores need to be reported to NYSED?

Teachers may score their own students' Investigations. Although a Scoring Key and Rubric have been provided for each Investigation, all aspects of grading the required Investigations, as well as their use in course grades, are at the discretion of the teacher.

Scores on the Investigations will *not* be reported to the State or included in the students' final Regents Examination scores. The Investigations themselves are not considered a state test; rather, they are locally administered performance-based tasks that are one of multiple components of the strategy for assessing science learning.

18. Should teachers review the Investigations with their students after they have been completed/scored?

The method of offering feedback to students is left to teacher discretion. Teachers may use any method that provides students with the opportunity to demonstrate their growth in science knowledge and skills. The chosen feedback method would also depend on how the Investigation is being used, e.g., formative assessment versus hands-on performance task.

19. Is there a description of what is deemed "successful completion"?

The definition of "successful completion" is left to the discretion of the teacher. The rubric for each Investigation is perhaps the best tool to guide teachers in determining student success. The Investigation Rubrics were created to allow teachers to assess where individual students are on a continuum of skills and knowledge embedded in the PE. As a result, teachers will be able to identify areas for remediation and determine that Investigations have been successfully completed.

Record Keeping and Transfer Students:

20. If a student transfers from one NYS district to another, how should records of complete Investigations be transferred?

A copy of the Student Answer Packets (SAPs) for all completed Investigations can be transferred to the student's new district, if applicable. Alternatively, a written attestation of successful completion, including the signatures of both the teacher who administered the Investigation (if possible) and the current building principal, could be sent in lieu of the completed SAPs. If a district does not receive such documentation when a student transfers from another NYS school district, a guidance counselor, administrator, or teacher from the new district should contact the previous district to request evidence or confirmation of successful completion of the Investigations.

21. Are the Investigations an "entry ticket" to sit for the Regents Exams? That is, if a student does not have the Investigations completed (or records cannot be found that prove they have done the Investigations in other districts), may they sit for the associated Regents Exam?

Successful completion of the Investigations for the course will be required for admission to the respective Regents Examination. The definition of successful completion is left to local discretion.

Completion of the Investigations prepares students for the written test by providing a hands-on opportunity to demonstrate attainment of science knowledge and skills that also will be assessed on the written test. The Department understands that the dynamic of student mobility may be challenging for districts; teachers, guidance counselors, and administrators should work together on a student-by-student basis to prepare them for success on the written exam.

For students who experienced a disrupted school year due to chronic absenteeism, school transfer, etc., district teachers, guidance counselors, and administrators should work together on a student-by-student basis to prepare students for success on the Regents Exam. Districts will need to develop and implement a plan to help students cover the curriculum, meet the 1200 minutes of hands-on laboratory experience required by Part 100 of the Commissioner's Regulations, and prepare for the Regents Exam. This plan should include how to administer the Investigations to all students before they take the Regents Exam. Exactly how to conduct Investigations for these students is a local decision. A district's plan should be consistent with what is already in place to meet the needs of students with education disruptions.

22. How long do schools need to keep student Investigations? Is there a record keeping requirement and format to document student completion?

Students should record all Investigation data and answers in the Student Answer Packets (SAPs), which must be retained by the school as evidence of a student's successful completion of the activity and should be kept on file for at least six months following the date of the Regents Exam. However, the method of retaining Student Answer Packets and tracking successful completion of Investigations, including keeping copies digitally, is left to local discretion. Digital copies of the Investigations can be stored on school-controlled drives if they are accessible by faculty only.

The Relationship Between Investigations and Associated Science Regents Exam:

23. Will there be a separate Performance Test for Earth and Space Sciences in addition to the Investigations?

No, the new Regents Exam will be administered as a written examination only.

24. The January 2025 memo states that "15% of the questions on the written test will measure content related to the Performance Expectations measured by the Investigations". What will those questions look like?

The questions encompassed in the 15% will not be about the specific Investigation tasks themselves, but the content and skills of the PE the Investigation is aligned to or related PEs. For example, students may see questions related to feedback mechanisms on the Life Science: Biology Regents Exam, but they would *not* be expected to plan and carry out an investigation to show a feedback mechanism in the way that they did during the "Balancing Act" Investigation. Other questions will assess scientific practices (SEPs) and common themes across

science (i.e., Cross Cutting Concepts) related to the activities undertaken by students in the Investigations, such as making and using scientific models and identifying patterns.

Additional questions related to the Investigations for the Regents Examinations in Science should be directed to the Office of State Assessment via email at emscassessinfo@nysed.gov or by calling (518) 474-5902.

Information related to the <u>New York State P-12 Science Learning Standards</u>, including the <u>Implementation Timeline for Science</u>, can be found on NYSED's <u>Office of Standards and Instruction Science webpage</u>.