



ASSISTANT COMMISSIONER, OFFICE OF STATE ASSESSMENT
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To: District Superintendents
Superintendents of Schools
Principals of Public, Religious, and Independent Schools
Charter School Leaders
Science Coordinators

From: Zachary Warner

Subject: Planning for Regents Examinations in Physical Science: Chemistry and Physical Science:
Physics Investigations

The Regents Examinations in Physical Science: Chemistry and Physical Science: Physics Investigations will be administered for the first time in June 2026. More details about the implementation of these new exams are provided in [this memorandum](#). The Regents Examinations will be written tests consisting of multiple-choice and constructed-response questions organized into clusters of questions that follow an assessment storyline. Authentic, hands-on scientific and engineering experiences, called Investigations, will be part of the assessment strategy for high school science. Like the written tests, the Investigations are aligned with the New York State P-12 Science Learning Standards (NYSP12SLS) but provide the opportunity for performance-based assessment of students' science knowledge and skills. The Investigations are designed to be embedded into classroom instruction and assessment and can be offered any time during the school year, dependent on local curricular planning.

Like with the Investigations already released for other sciences, the grading of the Investigations for the Regents Examinations Physical Science: Chemistry and Physical Science: Physics will be left to local discretion (a scoring key will be included with the teacher materials). Student performance on the Investigations will not contribute to final Regents Examination scores. However, approximately 15% of the questions on the written test will measure content related to the performance expectations measured by the Investigations. Other questions will assess concepts related to the activities completed by students in the Investigations. The Investigations will help prepare students for the three-dimensional scientific reasoning they will need to perform on the written test and may be counted as part of the minimum 1200 minutes of hands-on laboratory experiences required under Part 100 of the Commissioner's Regulations.

At this time, the Office of State Assessment is providing the performance expectations (PE) that will be assessed by each of the three Investigations for each course. Course maps for [Physical Science: Chemistry](#) and [Physical Science: Physics](#) contain the performance expectations for guiding curriculum, programming, and instruction within high school science courses aligned to Regents Examinations. In addition, a list of the expected materials is attached so that schools can plan for the necessary procurements. The activities were specifically designed to require relatively common and inexpensive materials. Please note that the materials list prioritizes supplies that schools may not

already have in their science classrooms and will need to order or to procure in bulk or are consumable materials that will need to be replenished. It is likely that other, minor materials (e.g., lab safety equipment, rulers, calculators) that are expected to already be present in science classrooms will be needed to complete the Investigations.

The three required Investigations for Physical Science: Chemistry and the primary performance expectation measured by each are:

- Structures and Properties of Matter: The Fast and the Fragrant – Evaporation and Intermolecular Forces (PE: HS-PS1-3)
- Structures and Properties of Matter: Bend and Stretch – Structure and Function of Designed Materials (PE: HS-PS2-6)
- Chemical Reactions: Just a Drop – Properties of Acids and Bases (PE: HS-PS1-11)

The three required Investigations for Physical Science: Physics and the primary performance expectation measured by each are:

- Forces and Interactions: Induction Junction – What is your Function? (PE: HS-PS2-5)
- Energy: Wheels to Watts – Converting Energy and Maximizing Efficiency (PE: HS-PS3-3)
- Energy: Thermal Tales – The Story of Energy and Calorimetry (PE: HS-PS3-4)

Additional details about the Investigations for the Regents Examinations in Physical Science: Chemistry and Physical Science: Physics will be forthcoming. All documentation for the Investigations will be available in Spring 2025 so that science educators may review it prior to the 2025-26 school year.

The purpose of this communication is to confirm the inclusion of Investigations as part of the strategy for high school science assessment in Physical Science: Chemistry and Physical Science: Physics and to provide schools and districts with a list of materials to aid in budgeting and planning. Details about the implementation of the Investigations for these courses will be shared as soon as possible.

Please contact the Office of State Assessment at emscassessinfo@nysed.gov with any questions about the contents of this memorandum.

Physical Science: Chemistry Materials List

- Burets (1 for every 2 students)
- Buret clamps (1 for every 2-4 students, depending on type of clamp)
- Bromothymol blue indicator (1 drop for every student)
- Phenol red indicator (1 drop for every student)
- Potassium hydroxide solution (several concentrations)
- White PTFE tape (20 centimeters for every 2 students)
- Porcelain well plates (6-12 wells, 1 for every 2 students)
- Containers for cooling and storage, e.g., paper box lid
- Surfaces for cooling, e.g., parchment paper, foil, metal cookie sheet, etc.
- Unflavored gelatin powder (2.8 grams for every 2 students)
- White vinegar (10 drops for every 2 students)
- Rubbing alcohol (10 drops for every 2 students)
- Beaker tongs or forceps (1 for every 2 students)
- Petri dishes (1 for every 4 students)
- Electronic balances, minimum accuracy to the nearest tenth (optimally, 1 for every 4-5 students)
- Vegetable glycerin (2 mL for every student)
- Ethanol 95-100% (2 mL for every student)
- Acetone 100% (5 mL for every student)
- Containers/dropper bottles, approximately 50mL
- Cotton balls (4 for every 2 students)
- Small rubber bands, 3/16-inch orthodontic rubber bands suggested (1 for every 2 students)
- Shoelaces
- Stopwatches (1 for every 2 students)
- Coffee filters (1 for every 2 students)

Physical Science: Physics Materials List

- Foam sheets or bubble wrap (1 for every 2 students)
- Paper cups (1 for every 2 students)
- Alcohol thermometers (2 for every 2 students)
- 150 mL beakers (1 for every 2 students)
- 600 mL beakers (1 for every 2 students, plus 1 additional for heating of water)
- Large, insulated paper cups (1 for every 2 students)
- Nested 32-ounce paper food containers with lids (2 for every 2 students)
- Electronic balances, minimum accuracy to the nearest tenth (optimally, 1 for every 4-5 students)
- Light corn syrup (50 mL for every 2 students)
- Vegetable oil (50 mL for every 2 students)
- 5-gallon buckets (1 for every 6 students)
- 12-inch length, 3/16-inch diameter wooden dowels (4 for every 6 students)
- #1 rubber stoppers (2 for every 6 students)
- #4 rubber stoppers (1 for every 6 students)
- DC motors, 1.5 - 3.0V (1 for every 6 students)
- Resistors, 5-15 ohms (1 for every 6 students)
- Digital multimeters (1 for every 6 students)
- Duct tape
- Large funnels (1 for every 6 students)
- Tabletop clamps and support rods (1 for every 6 students)
- 3-inch, 5-inch, and 6-inch support rings (1 of each for every 6 students)
- Low-temperature hot glue guns (1 of each for every 6 students)
- Foam disks or balls, 6-10 cm diameter; consider biodegradable/sustainable options (1 for every 2 students)
- Toothpicks (10-15 for every 2 students)
- Skewers (10-15 for every 2 students)
- Straws (10-15 for every 2 students)
- Aluminum pie tins (1 for every 2 students)
- Cardstock (10-15 sheets for every 2 students)
- Plastic spoons (10-15 for every 2 students)
- Craft sticks or popsicle sticks (10-15 for every 2 students)
- 24-inch length of PVC pipe, ½-inch diameter (1 for every 2 students)
- 28 AWG enameled magnet wire (approximately 22 meters for every 2 students)
- Electrical tape
- Sandpaper
- Magnetic compasses (1 for every 2 students)
- Neodymium magnets, 12-mm diameter x 3-mm height (6 for every 2 students)
- Red, blue, and green LEDs (1 each for every 2 students)
- Iron nails, 10 penny or larger in size (1 for every 2 students)
- Wires with alligator clips, 18-gauge nonmagnetic wire, approximately 22-inch length (5 for every 2 students)