



The University of the State of New York  
THE STATE EDUCATION DEPARTMENT

Office of State Assessment  
Albany, New York 12234

**INFORMATION BOOKLET FOR SCORING  
THE REGENTS EXAMINATIONS IN THE SCIENCES**

**JUNE 2018 ADMINISTRATION**

Living Environment  
Physical Setting/Earth Science  
Physical Setting/Chemistry  
Physical Setting/Physics

**AUGUST 2018 ADMINISTRATION**

Living Environment  
Physical Setting/Earth Science  
Physical Setting/Chemistry

**GENERAL INFORMATION**

The general procedures to be followed in administering Regents Examinations are provided in the publications [Directions for Administering Regents Examinations, June and August 2018 Administrations](#) (DET 541) and the [School Administrator's Manual](#), both available on the Department's website.

Questions about **general administration procedures** for Regents Examinations should be directed to the Office of State Assessment (OSA) at 518-474-5902 or 518-474-8220. For information about the rating of the Regents Examinations in the sciences, contact OSA at 518-474-5900.

School administrators should print or photocopy this information booklet and distribute copies to all school personnel who will be scoring these examinations.

**SCORING THE EXAMINATIONS**

**NOTE:** Teachers are **not** permitted to score their own students' answer papers.

**Scoring Keys and Rating Guides**

Printed copies of scoring keys and rating guides will **not** be sent to schools for any of the Regents Examinations. Instead, [scoring keys and rating guides](#) will be posted on the Department's website at approximately 11:00 a.m. for morning examinations and approximately 3:00 p.m. for afternoon examinations in June and at 11:30 a.m. for morning examinations and 3:30 p.m. for afternoon examinations in August. Schools must print sufficient copies to supply one to each rater.

**All scoring keys and rating guides posted on the Department's website will be password protected by two levels of password protection. In order to access the scoring keys and rating guides, schools will be required to enter the online request system (portal) using the same username and password that was used to order test materials.**

The open-ended questions on each examination must be scored by a committee of science teachers. It is strongly recommended that the committee scoring each of the science Regents Examinations be composed of teachers of that area of science. Each committee must consist of at least two teachers. Each of these teachers should be responsible for scoring no more than approximately one-half of the open-ended questions. **No teacher is to score any of the responses written by his or her own students.** For the August examinations, student responses may not be scored by the student's summer school teacher or the 2017–18 school year teacher. The more teachers serving on a committee, the fewer questions each teacher scores. This process yields consistent and reliable scores and allows scoring to proceed quickly.

Each student answer sheet includes a section labeled "Raters'/Scorers' Names" with the letters A–J. Each rater must be assigned a letter and the rater's name must be clearly printed on the answer sheet next to the letter the rater has been assigned. There are designated spaces next

to each of the open-ended questions. The letter identifying the rater that scored a specific open-ended question must be clearly written in the designated area.

When student papers are scored in cooperation with another school, answer papers may be transported to the cooperating school. It remains the principal's responsibility to ensure the security of such papers while they are out of the building.

Students' responses must be scored strictly according to the scoring keys and rating guides. No credit should be granted for a multiple-choice question if a student records more than one answer. If a student writes more than one answer for an open-ended question, only the first answer should be rated. For open-ended questions, credit may be allowed for responses other than those provided in the scoring keys and rating guides if the response is a scientifically accurate answer to the question and demonstrates adequate knowledge as indicated by the examples in the scoring keys and rating guides. Fractional credit is not allowed. Only whole-number credit may be assigned to a response. Units need not be specified by the student when the wording of the question allows such omissions.

For the Regents Examinations in the sciences, the answer sheets provide spaces for recording the scores for each part of the written test, the total raw score, and the final (scale) score. The answer sheet for the Regents Examination in Physical Setting/Earth Science also includes an area for recording the performance test score.

### **Scoring of Multiple-Choice Questions**

For the June and August 2018 Regents Examinations in the sciences, all schools must use the uniform scannable answer sheets provided by the regional information center or large-city scanning center. **If the students' responses for the multiple-choice questions are being hand scored prior to being scanned, the scorer must be careful not to make any marks on the front of the answer sheet except to record the total raw scores for the parts of the test in the spaces provided on the answer sheet for that purpose. Marks elsewhere on the front of the answer sheet will interfere with the accuracy of the scanning.**

Before scannable answer sheets are machine scored, several samples must be both machine and manually scored to ensure the accuracy of the machine-scoring process. All discrepancies must be resolved before student answer sheets are machine scored. When machine scoring is completed, a sample of the scored answer sheets must be scored manually to verify the accuracy of the machine-scoring process.

### **DETERMINING THE STUDENT'S FINAL EXAMINATION SCORE**

A [chart](#) for converting the student's raw score(s) to a scale score is provided for each administration on the Department's website. The scale score is the student's final examination score. Because the scale scores corresponding to raw scores in the conversion chart change from one examination administration to another, it is *crucial* that, for each administration, *only* the conversion chart provided for that administration be used to determine the student's final score. If the determination of the student's scale score is being done by hand, extreme care must be taken in recording the student's score on each part of the examination, adding these scores to determine the total written test raw score, and using the conversion chart to obtain the correct scale score.

Appendices I through IV include more specific information about determining the student's final examination score for each of the Regents Examinations in the sciences.

When the teacher scoring committee completes the scoring process, test scores must be considered final and must be entered onto students' permanent records. In addition, each rater must sign the *Examination Scoring Certificate* attesting that he or she fully and faithfully observed the rules and regulations for scoring the examination. The principal must also sign to attest that the rules and regulations for scoring were fully and faithfully observed.

Schools are *not* permitted to rescore any of the open-ended questions on any Regents Examination in science after each open-ended question has been rated once, regardless of the final examination score. Schools are required to ensure that the raw scores have been added correctly and that the resulting scale score has been determined accurately.

Principals and other administrative staff in a school or district do not have the authority to set aside the scores arrived at by the teacher scoring committee and rescore student examination papers or to change any scores assigned through the procedures described in this manual and in the [scoring materials](#) provided on the Department's website. Any principal or administrator found to have done so, except in the circumstances described below, will be in violation of Department policy regarding the scoring of State examinations. Teachers and administrators who violate Department policy with respect to scoring State examinations may be subject to disciplinary action in accordance with Sections 3020 and 3020-a of Education Law or to action against their certification pursuant to Part 83 of the Regulations of the Commissioner of Education.

On rare occasions, an administrator may learn that an error occurred in the calculation of a final score for a student or in recording students' scores in their permanent records. For example, the final score may have been based on an incorrect summing of the student's raw scores for parts of the test or from a misreading of the conversion chart. When such errors involve the answer papers for no more than 5% of the school's test takers for the examination or five students, whichever is greater, and when they are detected within four months of the test date, the superintendent of a public school district or the chief administrative officer of a Religious, Independent, or charter school may arrange for the corrected score to be recorded in the student's permanent record. However, in all such instances, the superintendent or chief administrative officer must advise the Department in writing that the student's score has been corrected. The written notification to the Department must be signed by the superintendent or chief administrative officer and must include the initials or student identification numbers (at the discretion of the principal) of the students whose scores have been corrected, the examination title, the students' original and corrected scores, and a brief explanation of the nature of the scoring error that was corrected.

If an administrator has substantial reason to believe that the teacher scoring committee has failed to accurately score the answer papers for more than 5% of the school's test takers for the examination or five students, whichever is greater, or when errors are detected more than four months after the test date, the administrator must first obtain permission in writing from the Department before arranging for or permitting a rescoring of student papers. The written request to the Department must come from the superintendent of a public school district or the chief administrative officer of a Religious, Independent, or charter school and must include the examination title, date of administration, and number of students whose papers would be subject to such rescoring. This request must also include a statement explaining why the administrator believes that the teacher scoring committee failed to score appropriately and, thus, why he or she believes rescoring the examination papers is necessary. As part of this submission, the school administrator must make clear his or her understanding that such extraordinary re-rating may be carried out only by a full committee of teachers constituted in accordance with the scoring guidelines presented above and fully utilizing the scoring materials for this test provided by the Department.

The Department sometimes finds it necessary to notify schools of a revision to the scoring key and rating guide for an examination. Should this occur after the scoring committee has completed its work, the principal is authorized to have appropriate members of the scoring committee review students' responses only to the specific question(s) referenced in the notification and to adjust students' final examination scores when appropriate. Only in such circumstances is the school not required to notify or obtain approval from the Department to correct students' final examination scores.

# Appendixes

## Appendix I

### Determining the Student’s Final Examination Score for the Regents Examination in Living Environment

If the determination of each student’s final examination score is being done by hand, record in the designated areas on the student answer sheet the student’s scores for the multiple-choice questions for Part A, Part B–1, Part B–2 and Part D. Add the scores for these multiple-choice (MC) questions and enter the total in the designated area of the answer sheet. Enter the student’s total score for the constructed-response (CR) questions in Part B–2, Part C, and Part D on the designated line. Add the student’s total MC and CR scores to determine and record the student’s Total Raw Score. The maximum total raw score for the test is 85.

To determine the student’s final examination score, use the [chart](#) provided for each administration on the Department’s website. Locate the student’s total-test raw score in the column labeled Raw Score and then locate the scale score that corresponds to that raw score. The scale score is the student’s final examination score. Record this score in the box labeled Scale Score.

The format of the chart is illustrated below. The chart provided on the Department’s website for each administration of this examination will include scores ranging from 0 to 100 within the cells of the chart. It is *crucial* that, for each administration, *only* the conversion chart provided for that specific administration be used to determine the student’s final examination score.

**Regents Examination in Living Environment  
Chart for Converting Total Test Raw Scores to  
Final Examination Scores (Scale Scores)**

Raw Score	Scale Score	Raw Score	Scale Score	Raw Score	Scale Score
85	100	56		27	
84		55		26	
83		54		25	
82		53		24	
81		52		23	
80		51		22	
79		50		21	
78		49		20	
77		48		19	
76		47		18	
75		46		17	
74		45		16	
73		44		15	
72		43		14	
71		42		13	
70		41		12	
69		40		11	
68		39		10	
67		38		9	
66		37		8	
65		36		7	
64		35		6	
63		34		5	
62		33		4	
61		32		3	
60		31		2	
59		30		1	
58		29		0	0
57		28			

## Appendix II

### Determining the Student's Final Examination Score for the Regents Examination in Physical Setting/Chemistry

If the determination of each student's final score is being done by hand, record on the student's answer sheet the student's scores for Part A and Part B–1 in the area designated for MC and record the scores for Part B–2 and Part C in the area designated for CR. Add the student's total MC and CR scores to determine and record the student's Total Test Score. The maximum total raw score for the test is 85.

To determine the student's final examination score, use the [chart](#) provided for each administration on the Department's website. Locate the student's total-test raw score in the column labeled Raw Score and then locate the scale score that corresponds to the raw score. The scale score is the student's final examination score. Record this score in the box labeled Scale Score.

The format of the chart is illustrated below. The chart provided on the Department's website for each administration of this examination will include scores ranging from 0 to 100 within the cells of the chart. It is *crucial* that, for each administration, *only* the conversion chart provided for that specific administration be used to determine the student's final examination score.

**Regents Examination in Physical Setting/Chemistry  
Chart for Converting Total Test Raw Scores to  
Final Examination Scores (Scale Scores)**

Raw Score	Scale Score	Raw Score	Scale Score	Raw Score	Scale Score	Raw Score	Scale Score
85	100	63		41		19	
84		62		40		18	
83		61		39		17	
82		60		38		16	
81		59		37		15	
80		58		36		14	
79		57		35		13	
78		56		34		12	
77		55		33		11	
76		54		32		10	
75		53		31		9	
74		52		30		8	
73		51		29		7	
72		50		28		6	
71		49		27		5	
70		48		26		4	
69		47		25		3	
68		46		24		2	
67		45		23		1	
66		44		22		0	0
65		43		21			
64		42		20			

## Appendix III

### Determining the Student's Final Examination Score for the Regents Examination in Physical Setting/Earth Science

Record the student's performance test score in the designated area on the student's answer sheet. The maximum raw score for the performance test is 16.

If the determination of each student's final score is being done by hand, record on the student's answer sheet the student's scores for Part A and Part B–1 in the area designated for MC, and record the scores for Part B–2 and Part C in the area designated for CR. Add the student's total MC and CR scores to determine and record the student's Total Written Test Score. The maximum total raw score for the written test is 85.

To determine the student's final examination score, use the [chart](#) provided for each administration on the Department's website. Locate the student's performance test score across the top of the chart and the student's total written test score down the side of the chart. The point where those two scores intersect is the student's final examination score. Record this score in the designated area on the answer sheet.

The format of the chart is illustrated on the next page. (Only the first half of the chart has been reproduced in this publication.) The chart provided on the Department's website for each administration of this examination will include scores ranging from 0 to 100 within the cells of the chart. It is *crucial* that, for each administration, *only* the conversion chart provided for that specific administration be used to determine the student's final examination score.

**Regents Examination in Physical Setting/Earth Science  
Chart for Converting Total Test Raw Scores to Final Examination Scores (Scale Scores)**

	Total Performance Test Score																
	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
85	100																
84																	
83																	
82																	
81																	
80																	
79																	
78																	
77																	
76																	
75																	
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This abbreviated chart is for illustration purposes only. The chart provided on the Department's website for each administration of this examination will be two pages long and will provide score conversions for the entire range of total written test scores (0-85) and of total performance test scores (0-16).



## Appendix IV

### Determining the Student’s Final Examination Score for the Regents Examination in Physical Setting/Physics

If the determination of each student’s final examination score is being done by hand, record on the student’s answer sheet the student’s scores for Part A and Part B–1 in the appropriate areas designated for multiple-choice questions and record the scores for Part B–2 and Part C in the area designated for constructed response questions. Add the student’s total MC and CR scores to determine and record the student’s total-test raw score. The maximum total raw score for the test is 85.

To determine the student’s final examination score, use the [chart](#) provided for each administration on the Department’s website. Locate the student’s total test raw score in the column labeled Raw Score and then locate the scale score that corresponds to that raw score. The scale score is the student’s final examination score. Record this score in the box labeled Scale Score.

The format of the chart is illustrated below. The chart provided on the Department’s website for each administration of this examination will include scores ranging from 0 to 100 within the cells of the chart. It is *crucial* that, for each administration, *only* the conversion chart provided for that specific administration be used to determine the student’s final examination score.

**Regents Examination in Physical Setting/Physics  
Chart for Converting Total Test Raw Scores to  
Final Examination Scores (Scale Scores)**

Raw Score	Scale Score	Raw Score	Scale Score	Raw Score	Scale Score	Raw Score	Scale Score
85	100	63		41		19	
84		62		40		18	
83		61		39		17	
82		60		38		16	
81		59		37		15	
80		58		36		14	
79		57		35		13	
78		56		34		12	
77		55		33		11	
76		54		32		10	
75		53		31		9	
74		52		30		8	
73		51		29		7	
72		50		28		6	
71		49		27		5	
70		48		26		4	
69		47		25		3	
68		46		24		2	
67		45		23		1	
66		44		22		0	0
65		43		21			
64		42		20			