NECAP Student Report - Spring 2012

This report contains results from the Spring 2012 New England Common Assessment Program (NECAP) science tests. The NECAP tests are administered to students in New Hampshire, Rhode Island, and Vermont as part of each state's statewide assessment program. The NECAP tests are designed to measure student performance on standards developed and adopted by the three states. Specifically, the tests are designed to measure the content and skills that students are expected to have at the end of the K–4, 5–8, and 9–11 grade spans.

NECAP science test results are used primarily for program evaluation, school improvement, and public reporting. Detailed school and district results are used by schools to help improve curriculum and instruction. Individual student results are used to support information gathered through classroom instruction and assessments. Contact the school for more information on this student's overall achievement.

Achievement Levels and Corresponding Score Ranges

Student performance on the NECAP tests is classified into one of four achievement levels describing students' level of proficiency on the content and skills required through the end of the tested grade. Performance at Proficient or Proficient with Distinction indicates that the student has a level of proficiency necessary to begin working successfully on higher grade content and skills. Performance below Proficient suggests that additional instruction and student work may be needed as the student is introduced to new content and skills at the next grade. Refer to the Achievement Level Descriptions contained in this report for a more detailed description of the achievement levels.

There is a wide range of student proficiency within each achievement level. NECAP test results are also reported as scaled scores to provide additional information about the location of student performance within each achievement level. NECAP scores are reported as three-digit scores in which the first digit represents the grade level. The remaining digits range from 00 to 80. Scores of 40 and higher indicate a level of proficiency at or above the Proficient level. Scores below 40 indicate proficiency below the Proficient level. For example, scores of 440 at grade 4, 840 at grade 8, and 1140 at grade 11 each indicate Proficient performance at that grade level.

Comparisons to Other End of Grade Span Students

The tables in the middle section of the report provide the percentage of students performing at each achievement level in the student's school, district, and state. Note that one or two students can have a large impact on percentages in small schools and districts. Results are not reported for schools or districts with nine (9) or fewer students.

Performance in Science Domains

This section of the report provides information about student performance on sets of items measuring four science domains within the test. These results can provide a general idea of relative strengths and weaknesses in comparison to other students. However, results in this section are based on fewer test items and should be interpreted cautiously.

Students at Beginning of Proficient

This column shows the average performance on these items of students who performed at the beginning of the Proficient achievement level on the overall test. Students whose performance in a category falls within the range shown performed similarly to those students. This comparison can provide some information about the level of performance needed to perform at the Proficient level.

Achievement Level Descriptions

Proficient with Distinction (Level 4) - Students performing at this level demonstrate the knowledge and skills as described in the content standards for this grade span. Errors made by these students are few and minor and do not reflect gaps in knowledge and skills.

Proficient (Level 3) - Students performing at this level demonstrate the knowledge and skills as described in the content standards for this grade span with only minor gaps. It is likely that any gaps in knowledge and skills demonstrated by these students can be addressed by the classroom teacher during the course of classroom instruction.

Partially Proficient (Level 2) - Students performing at this level demonstrate gaps in knowledge and skills as described in the content standards for this grade span. Additional instructional support may be necessary for these students to achieve proficiency on the content standards.

Substantially Below Proficient (Level 1) - Students performing at this level demonstrate extensive and significant gaps in knowledge and skills as described in the content standards for this grade span. Additional instructional support is necessary for these students to achieve proficiency on the content standards.

Student	Grade	School	District	State

Spring 2012 - Grade 4 NECAP Science Test Results

Achievement Level	Scaled Score	This Student's Achievement Level and Scaled Score
		Below / Partial / Proficient / Distinction 400 427 440 463 480

Interpretation of Graphic Display

The line (**I**) represents the student's score. The bar ( ) surrounding the score represents the probable range of scores for the student if he or she were to be tested many times. This statistic is called the standard error of measurement. See the reverse side for the achievement level descriptions.

This Student's Achievement Level Compared to Other End of Grade 4 Students by School, District, and State

	Student	School	District	State
Proficient with Distinction				
Proficient				
Partially Proficient				
Substantially Below Proficient				

This Student's Performance in Science Domains

	Possible Points	Student	Average Points Earned			
			School	District	State	Students at Beginning of Proficient
Physical Science						
Earth Space Science						
Life Science						
Inquiry						

Description of the Inquiry Task

There are many interesting and essential facts, formulas, and processes that students should know across the three content domains of science. But science is more than content. Inquiry skills are skills that all students should have in addition to the content. Inquiry skills are the ability to formulate questions and hypothesize, plan investigations and experiments, conduct investigations and experiments, and evaluate results. These are the broad areas that constitute scientific inquiry. Content from Physical Science, Earth Space Science, and Life Science forms the basis of each NECAP Science Inquiry Task. Instead of measuring student knowledge of content, inquiry tasks measure the student's ability to make connections, express ideas, and provide evidence of scientific thinking.

The grade 4 inquiry task, *Conductors and Insulators*, required students to investigate the electrical conductivity of various materials. Using a circuit tester, students determined if each material conducted electricity. Students analyzed the results to determine which materials were conductors and which materials were insulators. Students worked with partners to complete the task and then answered questions on their own.