

DOCUMENT RESUME

ED 289 939

UD 025 951

TITLE Connecticut Education Evaluation and Remedial Assistance. Grade 8 Mastery Test Results: Summary and Interpretations 1986-87.

INSTITUTION Connecticut State Dept. of Education, Hartford.

PUB DATE 87

NOTE 140p.; For other Mastery Test results, see UD 025 949-950.

PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC06 Plus Postage.

DESCRIPTORS *Academic Achievement; *Academic Standards; Behavioral Objectives; *Grade 8; Junior High Schools; Language Arts; *Mastery Tests; Mathematics; Scoring; *Test Construction; Writing Instruction

IDENTIFIERS *Connecticut

ABSTRACT

The central aspect of Connecticut's agenda for educational equity and excellence is the implementation of statewide mastery testing in mathematics and language arts. The program, designed for grades four, six, and eight, assesses the skill levels of students by measuring their performance on learning objectives they should have mastered in lower grades. Student performance also indicates the effectiveness of remedial assistance programs and regular instruction. This report summarizes the development and implementation of the Grade Eight Mastery Test. These four steps in the program are discussed: (1) mastery test development; (2) setting mastery standards by objective; (3) test administration and scoring; and (4) school district test results reporting. Statewide mastery test results are given for Fall 1986. Four charts show the percentage of students who achieved mastery for each test objective. The learning objectives, sample score report, and information about the school districts are presented in 11 appendices. (VM)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

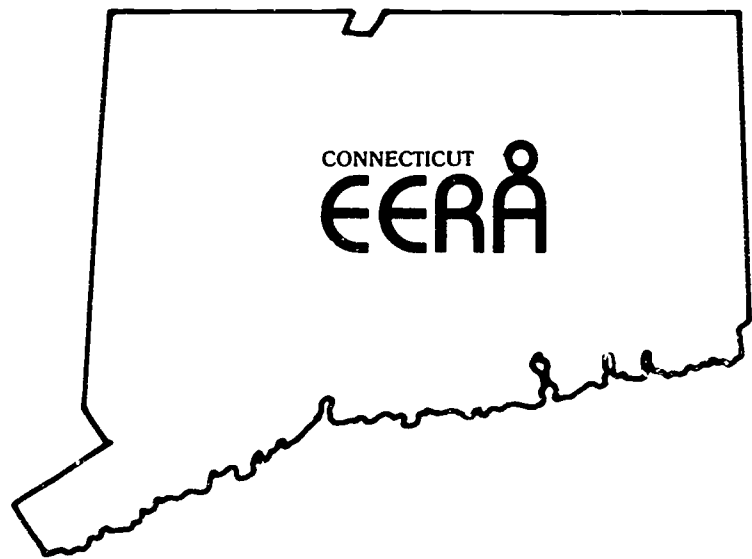
12-10-87

ED289939

CONNECTICUT EDUCATION EVALUATION AND REMEDIAL ASSISTANCE

GRADE 8 MASTERY TEST RESULTS

SUMMARY AND INTERPRETATIONS 1986-87



U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

G. N. Perinetti
CT State Dept. of Ed

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

STATE OF CONNECTICUT DEPARTMENT OF EDUCATION

DD 026 951



State of Connecticut

William A. O'Neill, Governor

Board of Education

Abraham Glassman, Chairman
James J. Szerejko, Vice Chairman
A. Walter Esdaile
Warren J. Foley
Dorothy C. Goodwin
Rita L. Hendel
John F. Mannix
Julia S. Rankin
Humberto Solano

Norma Foreman Glasgow (ex officio)
Commissioner of Higher Education

Gerald N. Tirozzi
Commissioner of Education

Frank A. Altieri
Deputy Commissioner
Finance and Operations

Lorraine M. Aronson
Deputy Commissioner
Program and Support Services

**Connecticut
Education Evaluation and Remedial Assistance**

GRADE 8 MASTERY TEST RESULTS

SUMMARY AND INTERPRETATIONS: 1986-87

STATE OF CONNECTICUT DEPARTMENT OF EDUCATION

CONTENTS

Foreword	v
Acknowledgements	vii
LEGISLATIVE BACKGROUND	1
OVERVIEW OF THE MASTERY TEST DEVELOPMENT PROCESS	2
Test Construction	2
Pilot Tests	3
Survey	4
Mastery Test Content	4
SETTING MASTERY STANDARDS BY OBJECTIVE	5
Setting Remedial (Grant) Standards	6
TEST ADMINISTRATION AND SCORING	7
Testing Guidelines: Grade Eight Connecticut Mastery Test	8
Scoring of the Language Arts and Mathematics Test	8
Scoring of the Writing Sample	8
Analytic Scoring	11
Scoring of the Degrees of Reading Power (DRP) Test	11
SCHOOL DISTRICT TEST RESULTS REPORTING	11
FALL 1986 STATEWIDE MASTERY TEST RESULTS	12
Mathematics	12
Language Arts	12
Test Results by District	17
Participation Rate Results	17
Charts	
Chart 1: Mathematics: Percent of Students Achieving Mastery for Each Objective	13
Chart 2: Language Arts: Percent of Students Achieving Mastery for Each Objective	14
Chart 3: Writing Sample: Percent of Students at Each Score Point	15
Chart 4: Degrees of Reading Power: Percent of Students at Selected Ranges of DRP Unit Scores	16

APPENDICES

Appendix A: Grade Eight Mathematics Objectives	19
Appendix B: Grade Eight Language Arts Objectives	23
Appendix C: Remedial (Grant) Standard-Setting Process Standard-Setting Committees	25 30
Appendix D: Marker Papers for Holistic Scoring	31
Appendix E: Grade Eight Analytic Rating Guide and Marker Papers for Analytic Scoring	41
Appendix F: Sample Grade Eight Mastery Test Score Reports	47
Appendix G: Number of Objectives Mastered	61
Appendix H: Fall 1986 Grade 8 State by District Report: Mathematics	65
Appendix I: Fall 1986 Grade 8 State by District Report: Language Arts	81
Appendix J: Type of Community Classifications	89
Appendix K: Student Participation Rates	91

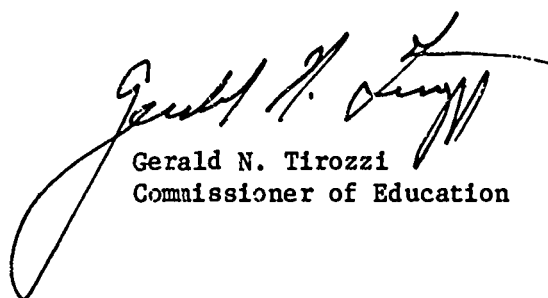
One of my highest priorities and a very central aspect of Connecticut's Challenge: An Agenda for Educational Equity and Excellence is the implementation of the statewide mastery testing program in mathematics and language arts, including listening, reading and writing, for grades four, six, and eight. The testing program is designed to assess specific skill levels of students by measuring performance on various learning objectives that students reasonably can be expected to have mastered by the end of grades three, five, and seven.

The results of the Connecticut Mastery Test are useful in evaluating:

- o individual student performance in mathematics and language arts;
- o the effectiveness of instructional programs in mathematics and language arts; and
- o the effectiveness of the remedial assistance programs in mathematics and language arts.

The Grade Eight Connecticut Mastery Test, given for the first time in the fall of 1986, provides valuable educational information which can be used to improve instruction and the basic skills of Connecticut's students. The test results have helped local districts to re-examine curriculum and to identify students who have not mastered certain skills.

I encourage you to carefully review the mastery test results provided at the student, classroom and district levels. The Department is prepared to assist local school districts in the areas of curriculum and professional development.



Gerald N. Tirozzi
Commissioner of Education

ACKNOWLEDGEMENTS

MASTERY TEST IMPLEMENTATION ADVISORY COMMITTEE

Thomas Jokubaitis, Chair, Wolcott Public Schools
Gerry Brown-Springer, New Britain Public Schools
Benjamin Dixon, Bloomfield Public Schools
Timothy Doyle, Regional School District No. 4
Richard Dubow, Wilton, Connecticut
Charles Guinta, Walden Book Co., Inc.
Cosby Marable, Hamden Public Schools
Johanna Murphy, Hartford, Connecticut
Olive Niles, East Hartford, Connecticut
Philip Pelosi, Watertown Public Schools
Edward Reidy, West Hartford Public Schools
Louis Saloom, Meriden Public Schools
Mark Waxenberg, East Hartford Public Schools
Lauren Welsberg-Kaufman, CT Business & Industry Assoc.

MATHEMATICS ADVISORY COMMITTEE

Steve Leinwand, Chair, CT State Department of Education
Linda Ball, Glastonbury Public Schools
Pat Banning, Windham Public Schools
Betsy Carter, CT State Department of Education
Mitchell Chester, Suffield Public Schools
Walter Clearwaters, Naval Underwater Sys. Ctr., New London
Leroy Dupee, Bridgeport Public Schools
David Howell, New Haven Public Schools
Marcia Kenefick, CT State Department of Education
Hilda Negron, Hartford Public Schools
Mary Ann Papa, West Hartford Public Schools
Joanne Parr, Bloomfield Public Schools
Philip Pelosi, Watertown Public Schools
Helen Prescott, Ashford Public Schools
Joyce Reilly, Meriden Public Schools
Carolyn Rosenfield, Norwalk Public Schools
Sylvia Schmutzler, Middletown, Connecticut
Jan Siegel, Ridgefield Public Schools
Dolores Vecchiaralli, Westport Public Schools

BIAS ADVISORY COMMITTEE

Lillian Cruz, Chair, CT State Department of Education
Benjamin Dixon, Bloomfield Public Schools
M. Claudina Fabregas, Bridgeport Public Schools
Janet C. Huber, Windham Public Schools
Rita Jackson, Stamford Public Schools
Susan McCarthy-Miller, South Windsor Public Schools
Harriet McComb, Yale Child Study Center
Ronald S. McMullen, New Haven Public Schools
James F. Mitchell, Groton Public Schools
Angel Muniz, Bridgeport Public Schools
Lyn Nevins, Cooperative Educational Services
Robert Pitacco, Hartford Public Schools
Rosa Quezada, New Haven Public Schools
Nelson Quinby, Regional School District No. 9

LANGUAGE ARTS ADVISORY COMMITTEE

Robert Kinder, Chair, CT State Department of Education
Ruth Allen, Western CT State University
Evelyn Burnham, Colebrook Public Schools
Sue Deffenbaugh, West Hartford Public Schools
Martin Espinola, Granby Public Schools
Mary Fisher, Thompson Public Schools
Marguerite Fuller, Bridgeport Public Schools
John Hennelly, Old Saybrook Public Schools
Jane Jaaskela, Brooklyn Public Schools
Jean Klein, Newtown Public Schools
Olive Niles, East Hartford, Connecticut
Jacqueline Norcel, Trumbull Public Schools
Carol Parmelee, Middletown Public Schools
Lucille Rios, Hartford Public Schools
Ronald Rymash, North Stonington Public Schools
Geraldine Smith, Canton Public Schools
Mary Weinland, CT State Department of Education

PSYCHOMETRICS ADVISORY COMMITTEE

Robert Gable, Chair, University of Connecticut
Baxter Atkinson, Hartford Public Schools
Del Eberhardt, Greenwich Public Schools
Victor Ferry, Waterford Public Schools
Diane Klotz, New London Public Schools
Michael Muro, Norwalk Public Schools
Edward Reidy, West Hartford Public Schools
Judy Singer, Stamford Public Schools
James Snyder, Windsor Public Schools
William Streich, Farmington Public Schools
J. A. Camille Vautour, South Windsor Public Schools

Special thanks to:

John Whritner, former Chair, Mastery Test Implementation Advisory Committee and East Lyme Public Schools

Marsha Van Hise, language arts committee alternate, Trumbull Public Schools

LEGISLATIVE BACKGROUND

In June 1984, the General Assembly of the State of Connecticut amended Section 10-14 m-r of the Connecticut General Statutes, an act concerning Education Evaluation and Remedial Assistance (EERA). This law provides that:

- o By May 1, 1985, each local or regional board of education shall develop and submit for State Board of Education approval, a new plan of educational evaluation and remedial assistance. Each plan is to address the following:
 - o the use of student assessment results for instructional improvement;
 - o the identification of individual students in need of remedial assistance in language arts/reading, and mathematics;
 - o the provision of remedial assistance to students with identified needs; and
 - o the evaluation of the effectiveness of the instructional programs in language arts/reading, and mathematics.
- o The State Board of Education shall administer an annual statewide mastery test in language arts/reading, and mathematics to all fourth-, sixth-, and eighth-grade students.
- o Each student who scores below the statewide remedial standard on one or more parts of the eighth-grade mastery examination or the ninth grade proficiency test shall be retested. Starting in October 1987, these students shall be retested annually, using the eighth-grade mastery test, only in the deficient area(s) until such students score at or above the statewide remedial standard(s).
- o Biennially, each local or regional board of education shall submit to the State Board of Education a report which includes indicators of student achievement and instructional improvement.
- o On a regularly scheduled basis, the State Board of Education shall complete field assessments of the implementation of local EERA plans.
- o On an annual basis, test results and low income data shall be used to determine the distribution of available state funds to support remedial assistance programs.

The purpose of this report is to summarize the development and implementation of the eighth-grade Connecticut Mastery Test. The mastery test assesses how well each student is performing on those skills identified by content experts and practicing educators as important for students entering eighth grade to have mastered.

OVERVIEW OF THE MASTERY TEST DEVELOPMENT PROCESS

In the spring of 1984, the Connecticut General Assembly amended the Education Evaluation and Remedial Assistance (EERA) legislation to authorize the creation of mastery tests in the basic skill areas of mathematics and language arts, including listening, reading and writing skills. The tests were to be established for grades 4, 6, and 8.

The goals of the mastery testing program are:

- o earlier identification of students needing remedial education;
- o testing a more comprehensive range of academic skills;
- o setting high expectations and standards for student achievement;
- o more useful test achievement information about students, schools and districts;
- o improved assessment of suitable equal educational opportunities; and
- o continual monitoring of students in grades 4, 6, and 8.

The type of test that best addresses these goals is a criterion-referenced test. Criterion-referenced tests are designed to assess the specific skill levels of students. Such tests usually cover relatively small units of content. Their scores have meaning in terms of what the student knows or can do. Test results are used to identify the areas of strengths and weaknesses of each student.

Test Construction

The development of the eighth-grade criterion-referenced mastery test required the formation of seven statewide advisory committees. These included the Mathematics and Language Arts Committees, the Psychometrics Committee, the Bias Committee, the Mastery Test Implementation Advisory Committee, and two standard-setting committees, one for mathematics and one for language arts. These committees were comprised of representatives from throughout the state. Members were selected for their area of expertise. Approximately 150 Connecticut educators participated on the mastery test committees which met over 80 times over an 18-month period (see Acknowledgements, p. vii).

Beginning in the spring of 1985, content committees in both language arts and mathematics participated in each stage of the test development process, including assisting the State Department of Education in the selection of the Psychological Corporation as its test contractor. First, the content committees reviewed the curriculum materials prevalent throughout the state and the scope of the national tests in use in Connecticut at the respective grade levels. Additional resources included the Connecticut curriculum guides in mathematics and language arts, developed in 1981, as well as the results of recent Connecticut Assessment of Educational Progress (CAEP) assessments in mathematics and language arts. Next, the committees identified sets of preliminary mathematics and language arts objectives which reflected existing curriculum materials and the goals of the mastery testing program. The content committees defined an objective as an operationalized learning outcome that was fairly narrow and clearly defined.

Four criteria were used in identifying the appropriate learning outcomes or test objectives and in selecting specific test items to be included on the Grade 8 Connecticut Mastery Test. To have been considered for use, test objectives and items must have been:

- (1) significant and important;
- (2) developmentally appropriate;
- (3) reasonable for most students to achieve; and
- (4) generally representative of what is taught in Connecticut schools.

Once the objectives were identified, item specifications and/or sample items were written. Item specifications are written descriptions of the types and forms of test items that assess an objective. They also prescribe the types of answer choices that can be used with each item.

After the test specifications were written and agreed upon, the test contractor wrote items and response choices for each of the objectives. The items were then reviewed by the content committees. Items which met the criteria of the test specifications and received the approval of the content committees were considered for the pilot test. Before testing, the Bias Committee reviewed each item for potential adverse discrimination of gender, race or ethnicity in the language or format of the question or response choices. After their review was completed, the pilot test forms were constructed. Over 1600 customized Connecticut items were included in the October 1985 Grade 8 pilot test in language arts and mathematics.

The Psychometrics Committee provided advice concerning other aspects of the pilot test including the sampling design, statistical bias analysis, the design of item specifications, and pilot test administration procedures. The recommendations proposed by the Psychometrics Committee were reviewed and endorsed by the Mastery Test Implementation Advisory Committee.

Pilot Tests

After the items had been reviewed, twelve test forms (six in mathematics, and six in language arts) were piloted for the Grade 8 test. The purpose of several pilot test forms was to ensure that enough test items were included to construct three comparable test forms from the pilot test results.

Over 8,000 Grade 8 students participated in the October 1985 pilot test. In January 1986, the pilot test results were made available to Connecticut State Department of Education (CSDE) staff. The process of selecting items to construct three comparable test forms began by the Bias Committee examining the pilot test statistics of each item for potential bias. As a result, some items were eliminated from the item pool. From the remaining items, test forms were constructed to be equivalent in content and difficulty at both the objective and total test levels.

Once the items were sorted on this basis, the test contractor prepared three complete forms of the mathematics test and two complete forms of the language arts test. These forms were approved by the content committees. Each form was created to be equal in difficulty and test length. A third language arts test will be constructed after a few additional items are piloted as part of a future test administration. The psychometric procedures used to construct these test forms focus primarily on the use of the one-parameter latent trait model.

Survey

In October 1985, a survey of preliminary Grade 8 mastery test objectives was sent to over 4,000 Connecticut educators. The purpose of the survey was to determine (1) the importance of the proposed mathematics and reading/language arts objectives; and (2) whether the objectives were taught prior to the fall of grade 8. Approximately a 45% response rate was achieved which included approximately one-third of the respondents representing urban school districts. Thirty-six out of the thirty-seven original objectives were judged to be important learning skills or outcomes.

Mastery Test Content

Mathematics. The Mathematics Committee recommended a Grade 8 mathematics test that assessed thirty-six (36) specific objectives in four domains: (1) Conceptual Understanding; (2) Computational Skills; (3) Problem Solving/Applications; and (4) Measurement/Geometry. There are four test items per objective for a total of 144 items on the mathematics test. A detailed list of domains and objectives is given in Appendix A (p. 19).

Language Arts. The Language Arts committee recommended a 111 item Grade 8 language arts test that covers two domains: Reading/Listening, and Writing/Study Skills. The eleven (11) objectives recommended by the Language Arts Committee are presented in Appendix B (p. 23).

The general content area of Reading/Listening consisted of narrative, expository, and persuasive passages on a variety of topics measuring a student's ability in: (1) Literal Comprehension; (2) Inferential or Interpretive Comprehension; and (3) Critical or Evaluative Comprehension. Audiotapes were used to assess students' listening comprehension ability in: (1) Literal Comprehension and (2) Inferential and Evaluative Comprehension. The Degrees of Reading Power (DRP) test was also used to assess reading. The DRP test included eleven (11) passages and seventy-seven (77) test items. It was designed to measure a student's ability to understand nonfiction English prose at different levels of reading ability.

The general content area of **Writing/Study Skills** consisted of three components. First, there was a holistic writing sample where writing skills were directly assessed. Each student was asked to write a composition on a designated topic. Writing was then judged on a student's demonstrated ability to convey information in a coherent and organized fashion. Second, the mechanics of good writing, which was defined as (1) Capitalization and Punctuation, (2) Spelling, (3) Agreement, and (4) Tone was assessed in a multiple choice format. Third, Study Skills were assessed through Locating Information and Notetaking/Outlining. Locating Information (Schedules, Maps, Index and Reference Use) measured a student's ability to find and use information from the sources listed. Notetaking and Outlining tested a student's ability to take notes and report information as well as complete missing outline information. A detailed list of objectives and number of items per objective is given in Appendix B (p. 23).

SETTING MASTERY STANDARDS BY OBJECTIVE

The essence of the Connecticut Mastery Test (CMT) is the establishment of a specific mastery standard that accurately reflects students' knowledge and competency on each objective. The mastery test incorporates appropriate and challenging expectations for Connecticut public school students. The goal of the CMT Program is for each student to achieve mastery of all objectives. The objectives being tested were identified as appropriate and reasonable for students at each of the grades tested. These tests are designed to measure a student's performance against these specific objectives.

The process of establishing the mastery standards by objective used a statistical method that required two decisions to be operationalized. The first decision defined a student who mastered a particular skill as one who had a 95% chance of correctly answering each item within the objective. The second decision was that the specific standard for each objective would identify 99% of the students who mastered the skill. For example, literal reading comprehension is measured by 8 questions. By applying the two decision rules stated above to a binomial distribution table, a student is identified as mastering the skill if he/she gets at least 6 of the 8 items correct.

The mastery standards are as follows:

- o In mathematics, for each of the 36 objectives, a student must answer correctly at least 3 out of 4 items.
- o In language arts, for the eleven multiple choice objectives with varying numbers of items, a student must answer correctly the following number of items:

	<u># ITEMS CORRECT FOR MASTERY</u>
WRITING MECHANICS	
(1) Capitalization & Punctuation	9 out of 12
(2) Spelling	6 out of 8
(3) Agreement	11 out of 15
(4) Tone	3 out of 4
STUDY SKILLS	
(5) Locating Information	9 out of 12
(6) Notetaking and Outlining	3 out of 4
LISTENING COMPREHENSION	
(7) Literal	3 out of 4
(8) Inferential & Evaluative	12 out of 16
READING COMPREHENSION	
(9) Literal	6 out of 8
(10) Inferential	10 out of 14
(11) Evaluative	10 out of 14

No mastery levels were set for the two holistic language arts measures, the Degrees of Reading Power (DRP) test and the Writing Sample, since these measures are not composed of objectives against which mastery could be assessed.

Setting Remedial (Grant) Standards

The Psychometrics Committee also considered alternative ways to set standards for grant and remedial purposes. Section 10-14 m-r of the CT General Statutes requires that the Connecticut State Board of Education establish statewide standards for remedial assistance in order to meet two responsibilities:

- to identify and monitor the progress of students in need of remedial assistance in language arts/reading and mathematics as part of the EERA field assessments; and
- to distribute EERA funds based on the number of needy students statewide, as well as for use in the Chapter 2 and Priority School District Grants.

The Psychometrics Committee advised setting the standards by the number of items correct because of important technical considerations in equating test forms. The committee conducted lengthy deliberations over the technical feasibility of establishing standards by the number of objectives passed but felt there were significant obstacles which could not be overcome. Standard-setting committees in mathematics and language arts/reading were convened in March 1986 to determine the grant/remedial standards. The standard-setting committees recommended the following remedial standards:

1. In mathematics, a student who answers fewer than 78 of the 144 items (54%) correctly is required to receive further diagnosis by the local school district and, if necessary, to be provided with remedial assistance.
2. In reading, a student whose Degrees of Reading Power (DRP) unit score is lower than 55 is required to receive further diagnosis and, if necessary, to be provided with remedial assistance.
3. In writing, a student receiving a total holistic score less than 4 is required to receive further diagnosis by the local school district and, if necessary, to be provided with remedial assistance.

The recommendations of the Psychometrics Committee and the Standard-Setting Committees were reviewed by the Mastery Test Implementation Advisory Committee in March 1986. The Mastery Test Implementation Advisory Committee (MTIAC) endorsed the procedures used to establish the remedial standards with the clarification that the remedial standards should be considered broad indicators of student achievement and need. The criterion-referenced test is a valuable diagnostic tool used to help districts identify students in need of remedial assistance, to target State Department of Education resources to those students most in need, and to provide useful information to local school districts for improving their curriculum and instructional programs. The MTIAC felt strongly that the data generated by the State Department of Education should not be used to compare performance among districts.

The mastery and remedial standards were adopted, as recommended, by the State Board of Education on June 4, 1986. For a detailed explanation of the remedial standard-setting process, see Appendix C (p. 25).

TEST ADMINISTRATION AND SCORING

Test sessions were conducted by local school district staff under the supervision of local test coordinators who had been trained by staff of the Department and The Psychological Corporation. A student who took all subtests participated in approximately eight hours of testing.

The Grade 8 Mastery Test schedule allowed for three weeks of testing (including make-ups). This allowed local districts as much latitude as possible in adapting test administration to local conditions, in meeting students' needs, and in accommodating religious holidays that occur during testing. Local plans for administration of the Grade 8 Mastery Test were acceptable if the following guidelines were met for all students:

Testing Guidelines: Grade 8 Connecticut Mastery Test

- a) The writing sample MUST occur on Tuesday, September 23, 1986.
- b) Other testing must occur sometime between September 22 and October 3, 1986, with make-up testing during the week of October 6-10.
- c) All eighth graders in a district must be tested on the same schedule.
- d) Testing must occur during the regular school day in a regular classroom setting.
- e) No more than two (2) testing sessions may be administered in one day with at least a fifteen minute break between testing sessions (e.g., two a.m. sessions or one a.m. session and one p.m. session).
- f) Make-up sessions MUST conclude by Friday, October 10, 1986. Conditions "d" and "e" above must also hold for all make-up sessions.

The Grade 8 Connecticut Mastery Test had eight testing sessions.

- Mathematics I (60 minutes)
- Mathematics II (60 minutes)
- Mathematics III (60 minutes)
- Writing Sample (45 minutes)
- Degrees of Reading Power (70 minutes)
- Reading Comprehension (60 minutes)
- Listening Comprehension (45 minutes)
- Writing Mechanics/Study Skills (60 minutes)

At the conclusion of the make-up testing period, answer booklets were returned to National Computer Systems (NCS) of Iowa City, Iowa for optical scanning and scoring, and then organized in preparation for holistic scoring workshops.

Scoring of the Language Arts and Mathematics Test

The mathematics and language arts multiple-choice tests were machine-scored by NCS. Mathematics scores were reported for the total test as well as for mastery by each objective. Likewise, language arts scores were reported for the total test as well as for mastery of each objective.

Scoring of the Writing Sample

The writing sample was scored by Connecticut elementary teachers using a technique known as the holistic scoring method. Holistic scoring is an impressionistic and quick scoring process that rates written products on the basis of their overall quality. It relies upon the scorers' trained understanding of the general features that determine distinct levels of achievement on a scale appropriate to the group of writing pieces being evaluated.

The major assumption upon which holistic scoring is based is that the quality of a piece of writing should be judged on its overall success as a whole presentation, rather than on the quality of its component parts. Contributing to the rationale underlying holistic scoring is evidence that: (1) no aspect of writing skill can really be judged independently; (2) teachers can recognize and agree upon good writing when they see it regardless of how they describe writing ability; and (3) teachers will rate pieces of writing in much the same way regardless of any discrepant views they might hold about how particular components of writing should be weighed.

The procedure for holistic scoring is specific to the complete set of writing samples on a given topic that a group of scorers have been asked to evaluate. That is, the scoring scale is based on the range of ability reflected in the particular set of writing samples being assessed.

Preparation for scoring. Prior to the training/scoring sessions, a committee consisting of Connecticut State Department of Education (CSDE) consultants, representatives of the language arts committee and other language arts specialists, two Chief Readers and project staff from Measurement Inc. of Durham, North Carolina, met and read a substantial number of essays drawn from the total pool of essays to be scored. Approximately 60 essays were selected to serve as "range-finders" or "marker papers," representing the range of achievement demonstrated in the total set of papers. Copies of those range-finders served as training papers during the scoring workshops which followed. Each range-finder paper was assigned a score according to a four-point scale, where 1 represented a poor paper and 4 represented a superior paper.

Scoring workshops. During the month of November, eight holistic scoring workshops were held in two different locations in the state. Attendance at the grade eight scoring workshops totaled 210 teachers. A Chief Reader and two assistants were present at every workshop in addition to representatives of the CSDE. Each workshop consisted of a training session and a scoring session.

The general procedure for a training session is described below.

- o Each training paper (range-finder) was studied in turn and trial-scored by all scorers. Scoring judgments were independent, quick, immediate, and were based on the scorer's overall impression of the paper. No fractional points on the score scale (1-4) were permissible.
- o After all scorers had scored the first four training papers, their judgments were compared to the score assigned during the range-finding process. Any discrepancies were discussed. Through repeated discussions on succeeding training papers, scorers came to identify and internalize those features of written composition that distinguish the papers along the established range. This "holistic" process obviates the need to articulate explicitly the specific criteria that separate one score point from the next.

- o Scorers were "calibrated" by ascertaining that they were making judgments consistent with one another and with the Chief Reader. Discussions about papers continued until agreement was reached on the scores of the training papers.

Once scorers were calibrated, actual scoring of the writing exercises occurred. Each paper was read independently by two different scorers; that is, the second reader did not see the score assigned by the first reader. The Chief Reader was responsible for adjudicating any disagreement of more than one point between the judgments of the two scorers as well as any score in combination with a zero score. In other words, discrepancies of one point between scores (e.g., 4 and 3, 1 and 2, 2 and 3) were acceptable, but larger discrepancies (e.g., 2 and 4, 3 and 1, 1 and 4) had to be resolved by the Chief Reader. Once a paper was assigned two non-discrepant scores, the two scores would be summed to produce the final score for each student. The possible scale of summed scores ranged from a low of 2 to a high of 8.

Understanding the holistic scores. Examples of actual student papers which are representative of the scoring range will assist the reader in understanding the statewide standard set for writing and interpreting the test results. Sample papers representing four different holistic scores are presented in Appendix D (p. 31). Note that the process of summing the scores assigned by the two readers expands the scoring scale to account for "borderline" papers. A paper which receives a 4 from both scorers (for a total score of 8) is likely to be better than a paper to which one reader assigns a 4 and another reader assigns a 3 (for a total score of 7). In addition, it should be emphasized that each of the score points represents a range of student papers--some 4 papers are better than others.

A score of zero (0) was assigned to student papers in certain cases. A score of 0 indicates that a paper is not scorable and, therefore, that the student's writing skills remain to be assessed. The cases in which a score of 0 was assigned were as follows:

- o responses merely repeated the assignment;
- o illegible responses;
- o blank responses;
- o responses in languages other than English;
- o responses that failed to address the assigned topic in any way; and/or
- o responses that were too brief to score accurately, but which demonstrated no signs of serious writing problems (for example, a response by a student who wrote the essay first on scratch paper and who failed to get very much of it recopied).

Both readers had to agree that a paper deserved a zero before this score was assigned. If the two readers disagreed, the Chief Reader arbitrated the discrepancy. Papers which were assigned a score of zero were not included in summary reports of test results.

Analytic Scoring

All papers receiving holistic scores below the remedial standard also received analytic scoring in five categories (traits): focus, organization, support/elaboration, mechanics and sentence formation. Analytic scoring is a thorough, trait-by-trait analysis of those components of a writing sample that are considered important to any piece of writing in any context. This scoring procedure can provide a comprehensive picture of a student's writing performance if enough traits are analyzed. It can identify those traits that make a piece of writing effective or ineffective. However, the traits need to be explicit and well defined so that the raters understand and agree upon the basis for making judgments about the writing sample. The analytic rating guide and sample marker papers for the analytic scoring are presented in Appendix E (p. 41).

Scoring of the Degrees of Reading Power (DRP) Test

The scores reported are in DRP unit scores. These scores identify the difficulty or readability level of prose that a student can read with comprehension. This makes it possible to match the difficulty of written materials with student ability. These scores can be better interpreted by referring to the readability levels of some general reading materials as shown below:

- o Elementary textbooks (grades 7-9) - 54-65 DRP Units
- o Personality Section - teen magazines - 55 DRP Units
- o Adult General Interest Magazines - fiction - 60 DRP Units

A much more extensive list of reading materials is contained and rated in the booklet Readability Report, Seventh Edition, published by The College Board.

The conversion between DRP unit scores and raw scores can be made from the tabled values in The College Board's Degrees of Reading Power Form PB Series Conversion Tables, effective March, 1985.

SCHOOL DISTRICT TEST RESULTS REPORTING

The CMT school district reports are designed to provide useful and comprehensive test achievement information about students, schools and districts. Four standard test reports are generated to assist teachers, principals, superintendents and parents to understand and use criterion-referenced test results. Appendix F (p. 47) presents samples of the school district and parent/student diagnostic score reports.

FALL 1986 STATEWIDE MASTERY TEST RESULTS

The Grade Eight Connecticut Mastery Test provides a comprehensive report card on how students perform on specific skills that Connecticut educators feel are important at the beginning of eighth grade. The mastery test is instructionally useful since it identifies areas of weakness, as well as areas of strength.

Mathematics

In mathematics, eighth graders mastered an average of 23.7 objectives of the 36 tested, or 65.8 percent. The state's goal is that all students master every objective, or 100 percent. Chart 1 (p. 13) illustrates that, statewide, students demonstrated strong scores in the areas of basic computational skills (such as multiplication/division with whole numbers and addition/subtraction with whole numbers and decimals); rounding of whole numbers; and computing with calculators. However, students did not perform as well on items that assess computational skills with fractions and mixed numbers; measurement; and solving process problems involving the organization of data.

A total of 35 percent of the students mastered 29 or more objectives on the mathematics test, and 4 percent mastered all 36 objectives (see Appendix G, p. 61).

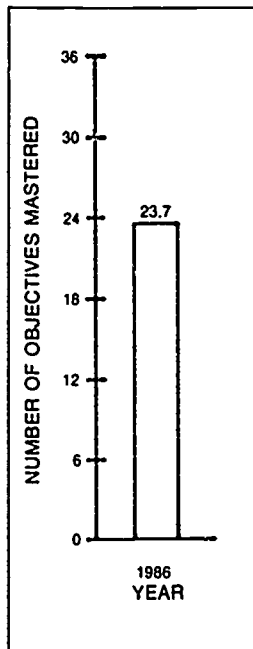
Students getting fewer than 78 questions correct on the 144-question mathematics section (17%) were identified as needing further diagnosis and possible remedial instruction.

Language Arts

In language arts, eighth grade students averaged 7.5 objectives of the eleven tested, or 68.2 percent. The state's goal is that all students master every objective, or 100 percent. Chart 2 (p. 14) illustrates that while students did reasonably well on writing mechanics and on study skills, significant weaknesses were found in higher order inferential and evaluative reading comprehension and literal listening comprehension. A total of 48 percent of the students mastered nine or more objectives on the language arts test, which includes writing and reading skills, and 21 percent of the students mastered all eleven objectives (see Appendix G, p. 61).

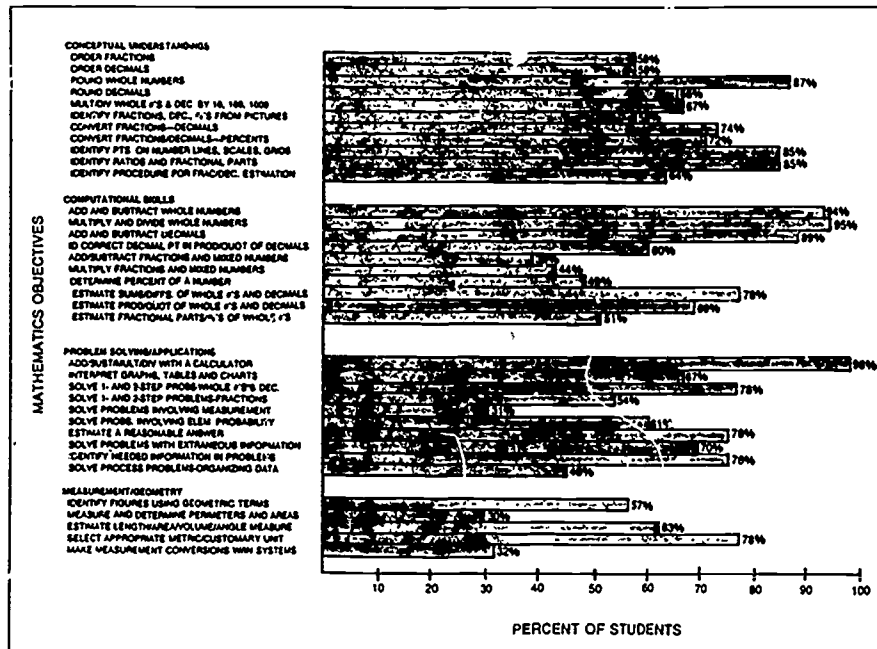
In writing, eighth grade students averaged 5.0 points on a scale of 2 through 8. The state's goal is that all students be able to produce an organized, well-supported piece of writing, that is, a score of 7 or 8. Chart 3 (p. 15) illustrates that 20 percent of the students produced an organized, well-supported piece of writing (a 7 or an 8 score), and an additional 39 percent produced a paper which is generally well organized (a 5 or a 6 score). Another large group, 25 percent, scored a 4, which is defined as a "minimally proficient piece of writing." A total of 17 percent of the students scored a 2 or a 3, which is below the remedial standard.

**MATHEMATICS:
AVERAGE NUMBER OF
OBJECTIVES MASTERED**



This bar chart illustrates the average number of mathematics objectives mastered, statewide.

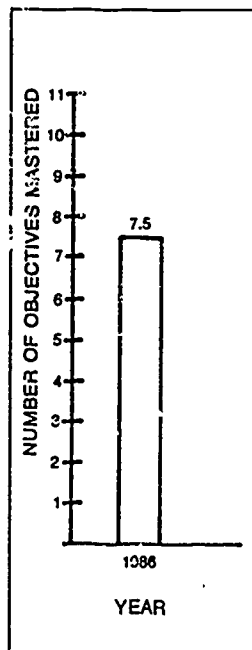
MATHEMATICS: PERCENT OF STUDENTS ACHIEVING MASTERY FOR EACH OBJECTIVE



This bar chart illustrates the percent of students, statewide, who mastered each of the 36 mathematics objectives.

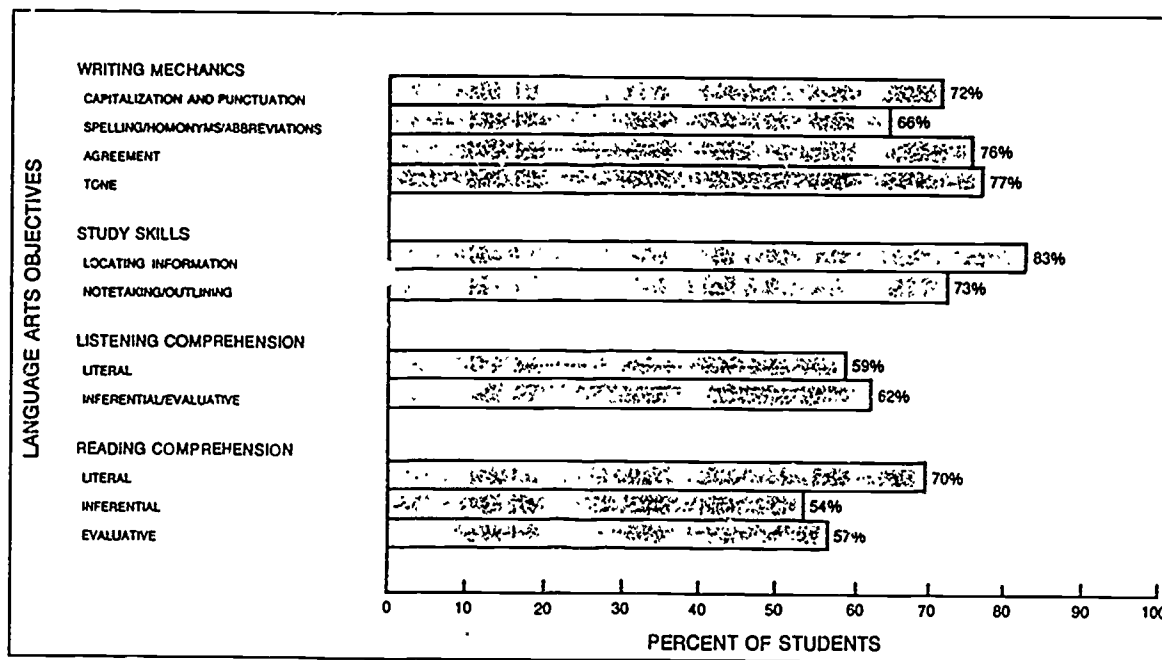
Chart 2
 Language Arts: Percent of Students
 Achieving Mastery For Each Objective

LANGUAGE ARTS:
 AVERAGE NUMBER OF
 OBJECTIVES MASTERED



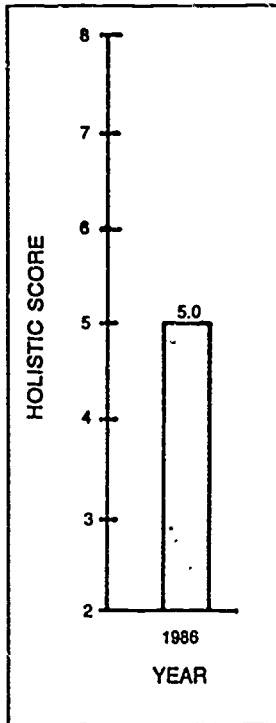
This bar chart illustrates the average number of language arts objectives mastered, statewide.

LANGUAGE ARTS: PERCENT OF STUDENTS ACHIEVING MASTERY FOR EACH OBJECTIVE



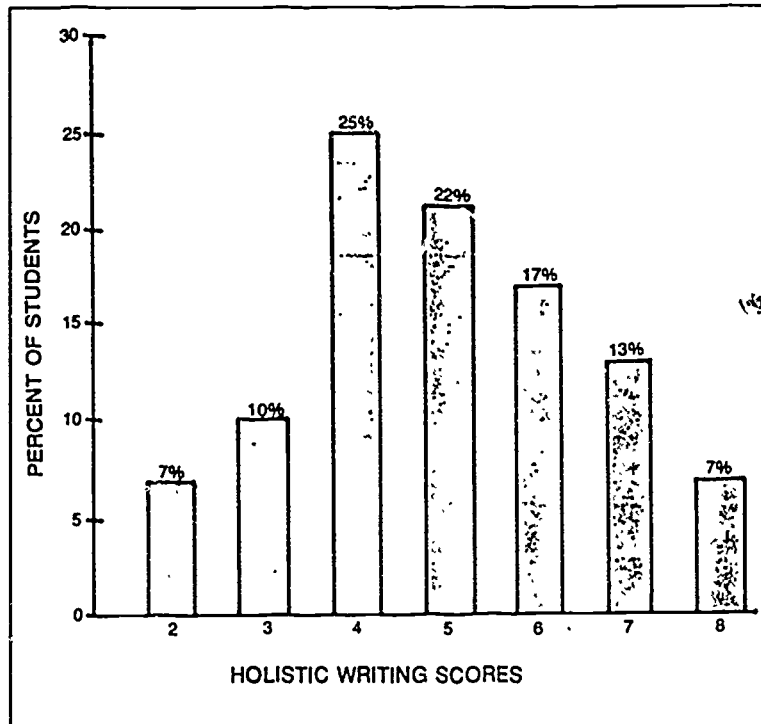
This bar chart illustrates the percent of students, statewide, who mastered each of the eleven language arts objectives.

WRITING SAMPLE:
AVERAGE HOLISTIC SCORE



This bar chart illustrates the average *holistic writing score* of students, statewide.

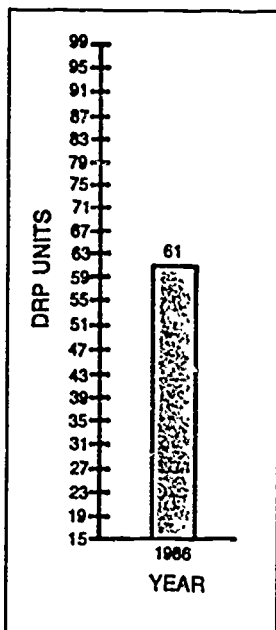
WRITING SAMPLE:
PERCENT OF STUDENTS AT EACH SCORE POINT



This bar chart illustrates the distribution of students who received each *holistic writing score*, statewide. Holistic writing scores are interpreted as follows: a student who scores 7 or 8 has produced a paper which is well written with developed supportive detail; a student who scores 5 or 6 has produced a paper which is generally well organized with supportive detail; a student who scores 4 is minimally proficient; and a student who scores 2 or 3 is in need of further diagnosis and possible remedial assistance.

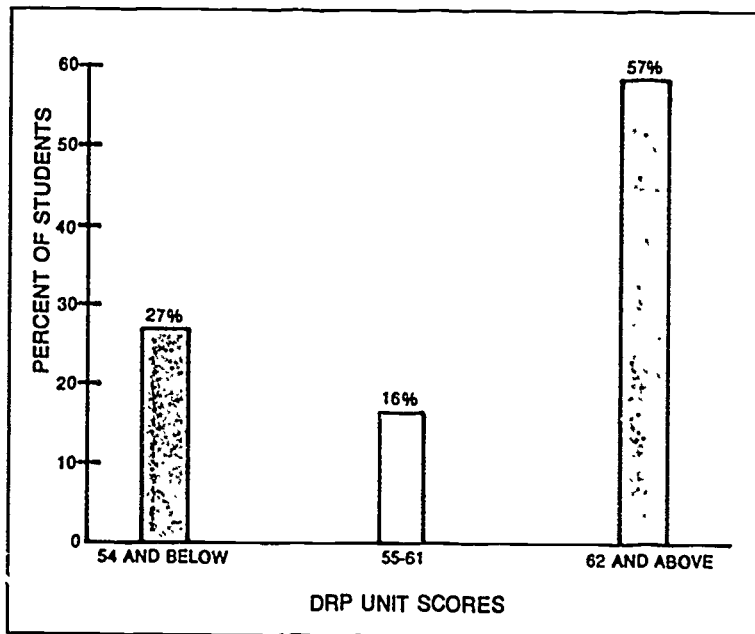
Chart 3
Writing Sample: Percent of Students at Each Score Point

DEGREES OF READING
POWER® (DRP)® :
AVERAGE DRP
UNIT SCORE



This bar chart illustrates the average DRP unit score of students, statewide.

DEGREES OF READING POWER® (DRP)® :
PERCENT OF STUDENTS AT SELECTED RANGES OF DRP UNIT SCORES



This bar chart illustrates the distribution of students, statewide, scoring in each of three *Degrees of Reading Power* (DRP) score categories. DRP score categories are interpreted as follows: a student who scores 62 DRP units or above can read, with high comprehension, materials which are typically used at grade 8 or above; a student who scores 55-61 units can read, with high comprehension, materials which are typically used below grade 8 but above the Remedial Standard; and a student who scores 54 DRP units or below is in need of further diagnosis and possible remedial assistance.

Chart 4
Degrees of Reading Power (DRP): Percent of Students
At Selected Ranges of DRP Unit Scores

In reading (Degrees of Reading Power Test), eighth grade students averaged 61 DRP units on a scale of 15 through 99. The state's goal is that all students be able to read with high comprehension materials typically used at the eighth grade or above, that is, at least 62 on the DRP scale. Chart 4 (p. 16) illustrates that 57 percent of the students scored at least 62 on the reading section, 16 percent scored between 55 and 61, and 27 percent scored below 55, which is the remedial standard. The average score of 61 suggests that Connecticut eighth graders typically can read, with high comprehension, materials normally used up to grade 8.

Test Results by District

Appendix H (p. 65) and Appendix I (p. 81) present a listing of the mathematics and language arts test results, respectively, for Connecticut school districts. School districts are listed alphabetically, followed by regional school districts. The Type of Community (TOC) designation in the second column indicates the group with which each district or school has been classified. A definition of the TOC classifications is provided in Appendix J (p. 89).

Because the most valid comparisons for district scores are longitudinal within each district, the State Department of Education advises against making school district comparisons. The following caution should also be noted:

- o It is not appropriate or meaningful to sum across the different tests and subtests because of differences in test length, mastery, and remedial standards. These comparisons are inappropriate since it is impossible to identify, solely on the basis of the above information, how the average student has performed in the districts being compared. Average scores and standard deviations provide more appropriate comparative information on how well the average student is performing, although many factors may affect the comparability of these statistics as well.

Participation Rate Results

Appendix K (p. 91) presents the number of eighth-grade students in each district and the percents of students who participated in the grade eight mastery testing during the Fall 1986 statewide administration. The alphabetical listing of districts provides the following information for each district:

Column 1	The name of the district.
Column 2	The total eighth-grade population at the start of mastery testing.
Column 3	The number of students eligible for testing.
Column 4	The percent of total population exempted from testing.
Columns 5-8	The percent of eligible students tested in each content area.

The results in Appendix K illustrate that participation rates by school district on the eighth-grade CMT were quite high, with only a few exceptions.

APPENDIX A

Grade Eight Mathematics Objectives

Grade Eight Mathematics Objectives

The 36 objectives of the eighth grade mathematics test are listed below. There are four test items for each objective.

CONCEPTUAL UNDERSTANDINGS (44)

1. Order fractions.
2. Order decimals.
3. Round whole numbers.
4. Round decimals to the nearest whole number, tenth, and hundredth.
5. Multiply and divide whole numbers and decimals by 10, 100, and 1000.
6. Identify fractions, decimals, and percents from pictorial representations.
7. Convert fractions to decimals and vice versa.
8. Convert fractions and decimals to percents and vice versa.
9. Identify points on number lines, scales, and grids.
10. Identify ratios and fractional parts from given data.
11. Identify an appropriate procedure for making estimates with decimals and fractions.

COMPUTATIONAL SKILLS (40)

12. Add and subtract whole numbers less than 10,000.
13. Multiply and divide 2- and 3-digit whole numbers by 1- and 2-digit numbers.
14. Add and subtract decimals (to hundredths) in horizontal form.
15. Identify the correct placement of the decimal point in multiplication and division of decimals.
16. Add and subtract fractions and mixed numbers.
17. Multiply fractions and mixed numbers.
18. Determine the percent of a number.
19. Estimate sums and differences of whole numbers and decimals including making change.
20. Estimate products and quotients of whole numbers and decimals.
21. Estimate fractional parts and percents of whole numbers and money amounts.

PROBLEM SOLVING/APPLICATIONS (with calculation available) (40)

22. Compute sums, differences, products, and quotients using a calculator.
23. Interpret graphs, tables and charts.
24. Solve 1- and 2-step problems involving whole numbers and decimals including averaging.
25. Solve 1- and 2-step problems involving fractions.
26. Solve problems involving measurement.
27. Solve problems involving elementary probability.
28. Estimate a reasonable answer to a given problem.
29. Solve problems with extraneous information.
30. Identify needed information in problem situations.
31. Solve process problems involving the organization of data.

MEASUREMENT/GEOMETRY (20)

32. Identify figures using geometric terms.
33. Measure and determine perimeters and areas.
34. Estimate lengths, areas, volumes, and angle measures.
35. Select appropriate metric or customary units and measures.
36. Make measurement conversions within systems.

Performance on all 36 math objectives are reported at the student, classroom, school, district and state levels.

(#) Number of items for each content area.

APPENDIX B

Grade Eight Language Arts Objectives

Grade Eight Language Arts Objectives

There are eleven language arts objectives and two holistic measures, one for reading and one for writing, within the eighth grade language arts test.

Writing Mechanics (39)

1. Capitalization and Punctuation (12)
2. Spelling (8)
3. Agreement (15)
4. Tone (4)

Study Skills (18)

5. Locating Information (12)
6. Notetaking and Outlining (4)

Listening Comprehension (20)

7. Literal (4)
8. Inferential & Evaluative (16)

Reading Comprehension (36)

9. Literal (8)
10. Inferential (14)
11. Evaluative (14)

Degrees of Reading Power (77)

Writing Sample (1)

Holistic scoring provided for all students. Analytic scoring provided for students who score below the remedial standard of 4 (on a scale of 2-8).

Performance on all eleven Language Arts objectives, the Degrees of Reading Power, and the Writing Sample is reported at the student, classroom, school, district and state levels.

(#)Number of items for each content area or objective.

APPENDIX C

Remedial (Grant) Standard-Setting Process

Remedial (Grant) Standard-Setting Process

Background

There are several acceptable strategies for setting standards on criterion-referenced tests. Each of the proposed methods has one or more unique characteristics. One common element to the various methods is that they all offer to the individuals who are setting the standards some process which reduces the arbitrariness of the resulting standard. Different methods accomplish this in different ways. All methods systematize the standard-setting process so that the result accurately reflects the collective informed judgment of those setting the standard.

Types of Standard-Setting Methods

Standard-setting methods can generally be categorized into three types: test question review, individual performance review and group performance review. Test question review methods specify a procedure for standard setters to ~~examine each test question~~ and make a judgment about that question. For example, standard setters might be asked to rate the difficulty or the importance of each question. These judgments are then combined mathematically to produce a standard. Individual performance review methods also require standard setters to make judgments, but the judgments are made on the basis of examining data that indicate how well individual students perform on test items. These data may be based on actual pilot test results or projected results using mathematical theories. In this method, additional student information, such as grades, may also be used to inform the standard setters. Group performance review methods provide for judgments to be made based on the performance of a reference group of students. That is, standard setters review the group performance and make a determination where the standard should be set based on the group results.

Selection of a Standard-Setting Method

Several factors affect the choice of a particular standard-setting method. The type of test is one consideration. For example, some methods are only appropriate for multiple choice questions or for single correct answer questions while other methods are more flexible. For example, time constraints are a consideration if student performance data are necessary. In this case, a pilot test must be conducted and the test results must be analyzed prior to setting the standards. Another consideration is the relative importance of the decisions that will be made on the basis of the standard. For example, a classroom test affecting only a few students would not require as stringent a procedure as would a statewide test determining whether a student is allowed to graduate from high school. Other relevant factors include the number of test items, permanence of the standard, purpose of the test, and the extent of available financial and other resources to support the standard-setting process.

On February 4, 1985, the Mastery Test Psychometrics Committee met to consider the issue of standard-setting procedures and voted unanimously to approve the following proposal.

A PROPOSAL FOR SETTING THE REMEDIAL STANDARDS ON THE CONNECTICUT MASTERY TESTS

1. Two standard-setting committees will be created: one for mathematics and one for reading and writing.
2. This description of a minimally proficient student will be given to each of the committees:

Imagine a student who is just proficient enough in reading, writing, or mathematics to successfully participate in his/her regular eighth-grade coursework.

- 3.A In mathematics, an adaptation of the Angoff procedure will be used. The committee will be provided with each item appearing on one form of the mathematics test. The committee will be given the following directions:

Consider a group of 100 of these students who are just proficient enough to be successful in regular eighth-grade coursework. How many of them would be expected to correctly answer each of the questions.

The committee will rate each item. The committee will then be given the opportunity to discuss their rating of each item. Sample pilot data will be presented. Committee members will be given the opportunity to adjust their item ratings. The item ratings will then be averaged in accordance with the Angoff procedure in order to produce a recommended test standard.

- 3.B In reading, the committee will review and discuss each passage of the Degrees of Reading Power (DRP) test. Student performance data will be presented. The committee will consider the reading difficulty that should be expected of a student at the grade level being tested. The committee members will identify the passage that has the appropriate level of reading difficulty consistent with the above description of a minimally proficient student.
- 3.C In writing, the committee will read four sample essays. These essays will have been prescored holistically (on a scale from 2 to 8) in order to rank the quality of the essays. Committee members will classify essays into one of three categories: 1) definitely NOT proficient, 2) borderline, and 3) definitely proficient. These classifications will be discussed in light of the holistic scores. The committee will then classify approximately twenty-five additional essays. The essay ratings will be discussed in the same manner as the original four essays. When all essays have been discussed, the essays which fell in the borderline category will be focused upon to determine the standard. The committee will determine where among the borderline essays, the standard should be established.
4. The standards recommended in step 3 will be presented to the Mastery Test Implementation Advisory Committee for discussion and action.

Connecticut's Strategy

Several steps were employed to create an acceptable and valid test standard for Connecticut tests. Initially, a separate standard-setting committee was convened for each test on which standards are to be set. Individuals were chosen to serve as members on the committee on the basis of their familiarity with the area being assessed and the nature of the examinees. One source of such members is the test content committees related to the project. For example, members of the Mathematics Committee were represented on the committee setting standards for the mathematics mastery test.

The actual procedures used to set standards were an adaptation of a method proposed by William Angoff (1970). This test question review method required members of a standard-setting committee to estimate the probability that a question would be correctly answered by examinees who possess no more than the minimally acceptable knowledge or skill in the areas being assessed. Standard setters then reviewed pilot test data for sample items as further evidence of the appropriateness of the judgments being made. The original probability estimates assigned to each test question were reviewed and adjustments made by the standard setters. The final individual item probabilities were summed to yield a suggested test standard for each member of the committee. The suggested standards were averaged across members of the committee to produce the recommended test standard.

The recommended test standard was presented to the Mastery Test Implementation Advisory Committee and the State Board of Education.

In mid-March, Mathematics and Language Arts Standard-Setting Committees met to set the remedial standards for the Grade Eight Mastery Test. The following information summarized the results of the standard-setting activities conducted by CSDE staff:

I. Mathematics (144 item test)

Using the procedures previously outlined, the standard setters rated each item and considered the pilot data. Committee members discussed items and were given the opportunity to adjust their initial ratings. The final ratings were averaged to produce a remedial standard. It is recommended that a raw score of 79 be the remedial mathematics standard. Below is a summary of the ratings.

<u>Procedure</u>	<u># Judges</u>	<u>Range %</u>	<u>Mean % Correct</u>	<u>Raw Score</u>
Angoff	20	25.7-67.7	54	78

II. Reading (Degrees of Reading Power, 77 item test)

Standard setters used two procedures to establish a remedial reading standard. First, they examined the passages in the Degrees of Reading Power (DRP) test, asking themselves which passage is too difficult for the student who is just proficient enough to successfully participate in eighth-grade coursework. Discussion occurred throughout this selection process.

Second, they examined textbooks which are typically used in grades 7 and 8 and selected those textbooks which a minimally proficient student would not be expected to read in order to successfully participate in eighth-grade coursework. Discussion occurred throughout this selection process.

The average readability values of the selected passages and textbooks and the pilot test data were then revealed to the standard setters. The standard setters discussed the readability values and the pilot test data and recommended the DRP unit score of 55 as the remedial standard. The standard was accepted by the State Board of Education at the 80% comprehension level. Below is a summary of the ratings.

<u>Procedure</u>	<u># Judges</u>	<u>Readability Range</u>	<u>Recommended Remedial Standard</u>
A. Test Passage Review	26	53-62 DRP Units	55 DRP Units
B. Textbook Review	26	48-60 DRP Units	

III. Writing (45 minute writing sample)

Using the procedure previously outlined, standard setters read and rated 21 essays written to a persuasive prompt and 21 essays written to an expository prompt. After discussions and final ratings, the holistic scores for the papers were revealed to the group. The committee then discussed the appropriate remedial writing standard in light of the degree to which their ratings matched the holistic scores. It was the recommendation of the committee that a holistic writing score of 4 be used as the remedial writing standard. Below is a summary of the ratings.

<u>PERSUASIVE PROMPT</u>			
<u>Rating After Discussion</u>			
<u>Holistic Score</u>	<u>Definitely NOT Proficient</u>	<u>Borderline</u>	<u>Definitely Proficient</u>
2	100%	0%	0%
3	69%	0%	31%
4	27%	1%	72%
5	0%	0%	100%
6	6%	0%	94%
7	1%	0%	99%
8	0%	0%	100%

<u>EXPOSITORY PROMPT</u>			
<u>Rating After Discussion</u>			
<u>Holistic Score</u>	<u>Definitely NOT Proficient</u>	<u>Borderline</u>	<u>Definitely Proficient</u>
2	100%	0%	0%
3	99%	0%	1%
4	17%	1%	82%
5	22%	0%	78%
6	0%	0%	100%
7	0%	0%	100%
8	0%	0%	100%

LANGUAGE ARTS STANDARD-SETTING COMMITTEE

Dell Britt, Newtown Public Schools
Fred Brucoli, New London Public Schools
Patricia Dobson, Stafford Public Schools
Donald Falcetti, Litchfield Public Schools
Bill Farr, Bolton Public Schools
James Foley, Waterbury Public Schools
Dorothy French, Litchfield Public Schools
Marguerite Fuller, Bridgeport Public Schools
Sara Godek, Stafford Public Schools
Nina Grecenko, Newtown Public Schools
Mary Haylon, Hartford Public Schools
Karen Karcheski, Danbury Public Schools
Jean Klein, Newtown Public Schools
Mark Kristoff, New London Public Schools
Thomas Lane, Old Saybrook Public Schools
Lucretia Leeves, Hartford Public Schools
Edward Moore, Danbury Public Schools
Mary Murray, Putnam Public Schools
Dick Nelson, Old Saybrook Public Schools
Olive S. Niles, East Hartford Public Schools
Anne L. Rash, Bolton Public Schools
Bernice Wagge, Waterbury Public Schools
Mary Wilson, Hartford Public Schools
Barbara Zamagni, Putnam Public Schools
Robert Kinder, CT State Department of Education
Mary Weinland, CT State Department of Education

MATHEMATICS STANDARD-SETTING COMMITTEE

Barbara Bailey, New Haven Public Schools
Pat Banning, Windham Public Schools
George Caouette, Manchester Public Schools
Pearl Caouette, Manchester Public Schools
Tony Ditrio, Norwalk Public Schools
Don Flis, West Hartford Public Schools
Marian Frascino, Norwalk Public Schools
Charles Framularo, Bridgeport Public Schools
Sheryl Hershonick, New Haven Public Schools
Mable McCarthy, Middletown Public Schools
Michele Nahas, Windham Public Schools
Judy Narveson, Farmington Public Schools
Mary Ann Papa, West Hartford Public Schools
Jim Pinto, Bloomfield Public Schools
Helen Prescott, Ashford Public Schools
Dolores Vecchiarelli, Westport Public Schools
Sylvia Webb, Middletown Public Schools
Frank Whittaker, Bridgeport Public Schools
Betsy Carter, CT State Department of Education
Steve Leinwand, CT State Department of Education

APPENDIX D

Marker Papers for Holistic Scoring

--	--	--	--	--

Anchor Set

When we had the elections for student council; there was about 6 boys and 1 girl name Amy. She could have been a good student council. But elected for Todd Chack and Adams. Both were first and then Adams. My other classmates wanted them two for student council. They thought they could judge them on their planning. I hope Todd and Adams are good councils elected for them because I think they good and responsible students. The elections that I'm talking about was in my homeroom class. But they told me that in Mrs. Van Neppes class Natalie and Tracy they are good councils too. I did not go for it because I didn't want to have responsibility. But I think my two classmates are good student councils. Also Mrs. Van Neppes's class my friend Tracy went for it, but since she's moving to Florida Saturday, they took her name off the board for the nomination. She would have been a good student council too.

Score Point: 1

There is clear evidence this student saw the prompt; however, the response is a discussion of an election. There is no support of 3 single candidate.

--	--	--	--	--

Classmates vote for Patty. She will make this class much happier than before. She will try to make this school go on more trips. And do more things we ever did before like go to all kinds of parks, like River side and get rid of Mrs. Duggs. And try to have the teachers give us less work. And try to have gym cut down to a smaller time like one half hour or twenty five min. and some of one hour.

Vote for Patty

Score Point: 1

This response is an attempt to respond to the task, but there is no sustained discourse. It reads like an outline of a speech. Additional clarification or some transitional linking is needed for a higher score.

Making the school a better place.

I nominate my best friend
Sandy for student council. I know
Sandy will do her best to help the school.

Sandy will help the school so the
classroom will do what is right. She will
try to make this school a better place to
be. She will help the not so fast learners get
special help. Try to get all of the teachers to
give no homework over the weekends. Try to
go on more trips. Sandy will try
to get all the issues to help the school to
be more fun and better place to be. I
thank you for your time and I hope you
elect Sandy for student council.

Score Point: 2

Although this paper has no more information than the previous
paper, it has the needed transitions which create sustained
discourse.

59657

He I think we should have
 a great student council
 this year because we
 should live up to the
 school's name. We should
 be proud and honored
 when our school is men-
 tioned. We should clean up our
 school and make it a better
 place that's why we should
 elect my friend Jason because
 his one of a kind, he
 would give or try to give
 to give his hardest more time
 on side and more time
 to eat our lunch. He will
 also help us have more
 fun this year. He will
 try to get more events
 and team work. He will
 get you involved. Jason will
 live up this school he'll
 get a late bus for people
 who take the bus for
 staying after for a project
 detention, etc. Well if I
 think that's about it you

wrong, he will take
 all your problems into
 consideration & myself
 just wanted you to know
 he care for you, the teacher
 and every other person out
 there supporting him. Vote
 him student council you
 won't regret it. Vote for
 Jason student council he
 care.

Score Point: 2

This response has a number of points. Most are vague, but

give his hardest and a late bus have some clarification.

Score Point: 2

There are a number of points. The trouble idea is clarified, as is the after school activities point. What the candidate can't do enhances the response but is no more than a list of specifics. The response needs additional details for a higher score.

Vote For Mike

I wish to nominate Mike. He will do the best to get someone out of trouble but, if it is severe he will punish them for it. Only 30 minutes and no detentions and a 1 day suspension if that bad.

He will make everyone like everyone in what we do. The whole class must be talkative to one another to an extent of course. There will also be after school activities for a gettogether like foot ball or just hanging around.

Thank you for your time and hope you vote him for school council and he will be giving advice to people who aren't doing so good with everyone. Now if he is voted he will not be able to change homework like make you have less or change school bus or get a cafeteria or have class that you like more than once. He's not the principle he can't do that.

So I hope you do pick him for school council

Thank you

Today we are going to vote for a student council representative. We want a person who will represent us as a group and do a good job. I can think of only one person who can do that job successfully and with pride. Clayton

Clayton has a good head on his shoulders. He can go straight to a problem, sort it through, and in the end the problem is solved to please everyone involved. He has proved that by solving little things that happen in the classroom. Now let him ~~be~~ be apart of the group that solves bigger problems like litter control or violence and vandals for the whole school. He wants to take your ideas and viewpoints of each problem and bring them to the rest of the representatives, and he will do his best to back up all the ideas so that each problem is solved to please everyone. He is working harder each day to make our school a better one.

Score Point: 3

This is a low "3." It is one main point--solve problems. This point has additional supporting detail. The response is fluent and controlled.

I would like to start my speech by telling you why I nominated Melissa. If she were elected she would try to get our school lockers. She would go about this by talking to teachers, principals, and the Superintendent of Schools. She would try to encourage the faculty to let us have more field trips by talking to teachers and principals on this issue. She would also try to get us more study or prep periods each week. She would also try to get teachers and principals to loosen up a bit on the detention and suspension systems. She does think these systems are very important for the school and its students. She thinks the teachers are a little too strict though. She will also try and have dances once a month if

possible. She is a good person with a lot of friends. She is competent, kind, generous, caring, funny, and just plain lovable. If you elected her and she had a problem, she would be there to listen and even help if she could. I thank you for your time and remember:

VOTE FOR MELISSA!

She's the one everyone needs for student council.

Score Point: 3

This response has a number of points. Clarification, however, is repetitious. There is some additional supporting details, and

the response is controlled.

I would like to nominate Sarah because she is smart, she has good ideas about we can do for fund raising and other activities. For fund raising ideas she has a carnival, planned, selling cookies or candy for school activities she has dances, food sales, trips. She can speak very well. She likes to have fun and she likes to see her friends having fun. When you ask questions she tries to answer them. Her answers are usually intelligent, humorous. I would like a lot of fun. Most of the time she is serious. She also thinks the lunch recess should be more fun. Instead of standing or sitting and talking. She thinks there should be games going on. If it is raining and you can't go outside she thinks there should be games going on inside the school. She also thinks there should be more time during lunch, so you don't have to gobble down your lunch. If we had more time we won't have to do that, we could eat slowly and peacefully. ~~She also thinks we should have more fun.~~ She has

ideas for the kids in the lower grades to have fun, too. She said we could have plays for them, sing-alongs, after-school activities. She says "While other kids are having fun, we are too. Because ^{while} we are making the plays or sing-alongs we are having fun, too." Note for Sarah she is great.

Score Point: 3

This response has numerous points -- some are clarified and some have supporting detail. It is a "3" because of the list-like quality, the repetition, and the lack of overall control.

--	--	--	--	--

In I'm sure you all know, Ann Egan has been nominated for our class representative. As Ann's campaign manager, I am going to discuss some issues that Ann feels are important to our class.

Clean up the classrooms. This school is very big, and the classrooms are often dirty. Ann does not think this is right and plans to bring it up before the student council. She proposes to form a committee to go down to the superintendent and request more janitors, or less lazy ones. However, Ann also feels that we should help keep our classrooms tidy by sponging off the counters, wiping desks, and washing the blackboard daily.

Decorating classrooms. After the classrooms have been cleaned, Ann thinks that there should be a decorating day when each student brings in posters, cartoons, and calendars. Pets in a small cage, such as gerbils, fish or guinea pigs will also be permitted. Ann ~~also~~ would also like plants to add a living touch.

More Trips. Ann feels that our trips are not sufficient. She will propose to the council ~~that~~ a ~~trip~~ plan. This includes trips to the aquarium, zoo, and natural history museum, and a sightseeing trip to Boston. She would also like to organize a ski trip to Canada, if people express an interest.

Parties. Parties in our class get pretty dull at times and Ann would like to ~~be~~ make that better. A week before the party ~~Ann~~ Ann will organize the party, ~~assigning~~ assigning jobs to people, such as food and music.

Newspaper. ^{page year book} This school has not had a newspaper or yearbook for a long ~~time~~ time and Ann wants to get these things started. The ~~newspaper~~ newspaper will contain news, cartoons, and stories submitted by each class.

Thank you for hearing me out. I hope you vote for Ann because she can do a lot for our school and our class.

Score Point: 4

This response has a number of points several of which have additional supporting detail. The response is organized and controlled.

Hi, Mr. Dave and I would like all of us to have a great year here at Junior High. We all know this school needs some major changes. These changes can't wait until our last year here, or after we leave. They have to be changed now. That is why I am nominating John for the student council. He will make a great representative for us. He can make these changes.

There are some questions that will always come up when you would like to represent people. The people want to know if you are the right person to do the job. Some of these questions are: Why does he want to do this? Does he have the experience? Are his grades good enough, and what will he do for us. These questions will be answered in the next few paragraphs.

He would like to be your representative for three major reasons. The first reason is he would like to have a future in politics. The second reason is he would like to help the student body. They have to have a leader. The third and most important reason is he thinks he can help the student body. In fact he knows he can help the student body. He made a change last year. It is important to have a leader with confidence. John has that.

Experience is also very important. If you

00000-00000-00000

don't know the system in the first place you can't change it. John has experience. He was a student council representative last year. He knows the system. I already brought out the fact that he had made a change last year. He made a longer amount of time between the bells. So he already has ticked the system. You can't ask for any more experience than that.

Everyone knows John gets good grades. He has over an A average. Not only is he smart, but he can use that information well. He got first prize in the Math fair last year in our school. His biggest accomplishment was second place in the state science fair last year. That's not too shabby. He is also in our talented and gifted program at the school and is on a debating team. Last year they went to the national debating contest and placed twenty-fourth in the nation.

John would like to make three major changes. The first one is to change the library system. It is too hard to get there in the morning. The second one is to make it easier for changes to be made, and the third one is to let the student body go to the student council meetings. They should have a say in the school government also.

Thank you for your time and vote for John. He is obviously the best you can get.

Score Point: 4

This response has a number of points, several of which have additional supporting detail. The response is organized and controlled.



APPENDIX E

Analytic Rating Guide and Marker Papers for Analytic Scoring

GRADE EIGHT ANALYTIC RATING GUIDE

FOCUS: How effectively does the writer unify the paper by a dominant topic?

- 1 = switches and/or drifts frequently from the dominant topic
- 2 = switches and/or drifts somewhat from the dominant topic
- 3 = stays on topic throughout the response

ORGANIZATION: Is there a plan that clearly governs the sequence from the beginning to the end of the response and is the plan effectively signaled?

- 1 = no discernible plan
- 2 = inferable plan and/or discernible sequence; some signals may be present
- 3 = controlled, logical sequence with a clear plan

SUPPORT/ELABORATION: To what extent is the narrative developed by details that describe and explain the narrative elements (character, action, and setting)?

- 1 = vague or sketchy details that add little to the clarity of the response or specific details but too few to be called list-like
- 2 = details that are clear and specific but are list-like, or uneven, or not developed
- 3 = well-developed details that enhance the clarity of the response

SENTENCE FORMATION: Are sentences correctly formed?

- 1 = many run-ons, "on-and-ons," fragments, and/or awkward constructions--may cause confusion
- 2 = some run-ons, "on-and-ons," fragments, and/or awkward constructions--may cause confusion
- 3 = few errors and/or awkward constructions--no confusion

MECHANICS: To what extent does the student use the conventions of standard written English (e.g. spelling, usage, capitalization, punctuation)?

- 1 = many errors
- 2 = some errors
- 3 = few errors

Analytic Training Set I

CONNECTICUT MASTERY TEST

GRADE 8

WRITING SAMPLE

--	--	--	--	--

I would like to nominat my good friend
 John because I think he will be a good
 representative for our class. He would make
 sure that we now what is going on in the
 student council and would bring up our ideas
 in the meetings. He would vote for more clubs
 and after school programs. please vote for John
 and make this year a good one.

Analytic Score Points

Focus: 3

Organization: 2

Support/Elaboration: 1

Sentence Formation: 3

Mechanics: 1

CONNECTICUT MASTERY TEST

GRADE 8

WRITING SAMPLE

5	9	6	8	8
---	---	---	---	---

Elect Perry for representative
 for student council. He will organize
 a committee for preventing apartheid.
 He is uniquely qualified to be
 representative because he can
 deal with this and many other issues
 effectively by getting volunteers
 to help him and advising people to
 help him.

Analytic Score Points

Focus: 3

Organization: 2

Support/Elaboration: 1

Sentence Formation: 3

Mechanics: 3

I represent my friend Cheryl,
 she is a smart girl, Cheryl is real
 good at doing pictures and painting pictures.
 Cheryl is a real good friend.
 she is there when you need her,
 she will help you when you need her.
 Cheryl is a brave and intelligence girl.

smart
 artist
 good friend
 intelligence
 brave

Analytic Score Points

Focus: 3
 Organization: 1
 Support/Elaboration: 1
 Sentence Formation: 3
 Mechanics: 2

my friend wanted
 to ~~appear~~ be elected a
 representative for student
 council and I thought she should be
 elected because she is
 smart, helps people, cares
 for people she hardly
 knows, listens to
 people, talks to
 them, that's why
 she should be
 elected a representative
 for student council.

Analytic Score Points

Focus: 3
 Organization: 2
 Support/Elaboration: 1
 Sentence Formation: 1
 Mechanics: 2



I would like to nominate Carrie to be student council. She is a great example to our school. Carrie helps the kids and teachers. She gets good grades and never gets into trouble.

I think that if she is nominated she will help us get new school equipment, have more activities planned, more dances and field trips arranged. We all like to have fun in school not just do work all day, so we should have activities planned in to

if Carrie is nominated I am sure that she will get all of these things for us.

Thank you.

Analytic Score Points

Focus: 3

Organization: 3

Support/Elaboration: 2

Sentence Formation: 3

Mechanics: 2

APPENDIX F

Sample Grade Eight Mastery Test Score Reports

- o Class Diagnostic Report
- Mathematics
- o School by Class Report
- Mathematics
- o District by School Report
- Mathematics
- o Class Diagnostic Report
- Language Arts
- o School by Class Report
- Language Arts
- o District by School Report
- Language Arts
- o Parent/Student Diagnostic Report

GRADE 8 FORM A

PAGE

TESTING DATE:
NUMBER OF STUDENTS TESTED:

NUMBER OF STUDENTS NEEDING
FURTHER DIAGNOSIS
IN MATHEMATICS:

NUMBER/PERCENT
OF STUDENTS
MASTERING EACH OBJECTIVE

MATHEMATICS OBJECTIVES TESTED	MASTERY CRITERIA # OF ITEMS CORRECT			
		CLASS	SCHOOL	DISTRICT
		# / %	# / %	# / %
CONCEPTUAL UNDERSTANDINGS				
1. ORDER FRACTIONS	3 OF 4			
2. ORDER DECIMALS	3 OF 4			
3. ROUND WHOLE NUMBERS	3 OF 4			
4. ROUND DECIMALS	3 OF 4			
5. MULT/DIV WHOLE #'S & DEC. BY 10, 100, 1000	3 OF 4			
6. IDENTIFY FRACTIONS, DEC., %'S FROM PICTURES	3 OF 4			
7. CONVERT FRACTIONS -- DECIMALS	3 OF 4			
8. CONVERT FRACTIONS/DECIMALS -- PERCENTS	3 OF 4			
9. IDENTIFY PTS. ON NUMBER LINES, SCALES, GRIDS	3 OF 4			
10. IDENTIFY RATIOS AND FRACTIONAL PARTS	3 OF 4			
11. IDENTIFY PROCEDURE FOR FRAC/DEC. ESTIMATION	3 OF 4			
COMPUTATIONAL SKILLS				
12. ADD AND SUBTRACT WHOLE NUMBERS	3 OF 4			
13. MULTIPLY AND DIVIDE WHOLE NUMBERS	3 OF 4			
14. ADD AND SUBTRACT DECIMALS	3 OF 4			
15. ID CORRECT DECIMAL PT. IN PROD/QUOT OF DECIMALS	3 OF 4			
16. ADD/SUBTRACT FRACTIONS AND MIXED NUMBERS	3 OF 4			
17. MULTIPLY FRACTIONS AND MIXED NUMBERS	3 OF 4			
18. DETERMINE PERCENT OF A NUMBER	3 OF 4			
19. ESTIMATE SUMS/DIFFS. OF WHOLE #'S AND DECIMALS	3 OF 4			
20. ESTIMATE PROD/QUOT OF WHOLE #'S AND DECIMALS	3 OF 4			
21. ESTIMATE FRACTIONAL PARTS/%'S OF WHOLE #'S	3 OF 4			

SEE MATHEMATICS PART 2 FOR OBJECTIVES 22-36 AND SUMMARY TOTALS.

*INDICATES A SCORE BELOW THE REMEDIAL STANDARD.
THIS STUDENT MUST RECEIVE FURTHER DIAGNOSIS.

COPYRIGHT © 1986 BY CONNECTICUT STATE BOARD OF EDUCATION
ALL RIGHTS RESERVED.
PRINTED IN THE UNITED STATES OF AMERICA.

GRADE 8 FORM A

PAGE

TESTING DATE:
NUMBER OF STUDENTS TESTED:

NUMBER OF STUDENTS NEEDING
FURTHER DIAGNOSIS
IN MATHEMATICS:

NUMBER/PERCENT
OF STUDENTS
MASTERING EACH OBJECTIVE

CLASS	SCHOOL	DISTRICT
# / %	# / %	# / %

MATHEMATICS OBJECTIVES TESTED	MASTERY CRITERIA # OF ITEMS CORRECT													NUMBER/PERCENT OF STUDENTS MASTERING EACH OBJECTIVE				
		CLASS			SCHOOL			DISTRICT			AVERAGE # OF OBJECTIVES MASTERED			NUMBER/PERCENT OF STUDENTS BELOW REMEDIAL STANDARD				
PROBLEM SOLVING/APPLICATIONS																		
22. ADD/SUBT/MULT/DIV WITH A CALCULATOR	3 OF 4																	
23. INTERPRET GRAPHS, TABLES AND CHARTS	3 OF 4																	
24. SOLVE 1- AND 2-STEP PROBS-WHOLE #'S & DEC.	2 OF 4																	
25. SOLVE 1- AND 2-STEP PROBLEMS - FRACTIONS	3 OF 4																	
26. SOLVE PROBLEMS INVOLVING MEASUREMENT	3 OF 4																	
27. SOLVE PROBS. INVOLVING ELEM. PROBABILITY	3 OF 4																	
28. ESTIMATE A REASONABLE ANSWER	3 OF 4																	
29. SOLVE PROBLEMS WITH EXTRANEIOUS INFORMATION	3 OF 4																	
30. IDENTIFY NEEDED INFORMATION IN PROBLEMS	3 OF 4																	
31. SOLVE PROCESS PROBLEMS - ORGANIZING DATA	3 OF 4																	
MEASUREMENT/GEOMETRY																		
32. IDENTIFY FIGURES USING GEOMETRIC TERMS	3 OF 4																	
33. MEASURE AND DETERMINE PERIMETERS AND AREAS	3 OF 4																	
34. ESTIMATE LENGTH/AREA/VOLUME/ANGLE MEASURE	3 OF 4																	
35. SELECT APPROPRIATE METRIC/CUSTOMARY UNIT	3 OF 4																	
36. MAKE MEASUREMENT CONVERSIONS W/IN SYSTEMS	3 OF 4																	
TOTAL NUMBER OF OBJECTIVES MASTERED																		
		NUMBER OF ITEMS CORRECT												NUMBER/PERCENT OF STUDENTS BELOW REMEDIAL STANDARD				
MATHEMATICS REMEDIAL STANDARD	78 OF 144 1"EMS CORR																	

*INDICATES A SCORE BELOW THE REMEDIAL STANDARD
THIS STUDENT MUST RECEIVE FURTHER DIAGNOSIS.

COPYRIGHT © 1986 BY CONNECTICUT STATE BOARD OF EDUCATION
ALL RIGHTS RESERVED.
PRINTED IN THE UNITED STATES OF AMERICA.

GRADE 8 FORM A

PAGE

TESTING DATE:

SCORES INDICATE NUMBER/PERCENT OF STUDENTS MASTERING EACH OBJECTIVE

											SCHOOL	DISTRICT
NUMBER OF STUDENTS TESTED												
MATHEMATICS OBJECTIVES TESTED	MASTERY CRITERIA	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
CONCEPTUAL UNDERSTANDINGS												
1. ORDER FRACTIONS	3 OF 4											
2. ORDER DECIMALS	3 OF 4											
3. ROUND WHOLE NUMBERS	3 OF 4											
4. ROUND DECIMALS	3 OF 4											
5. MULT/DIV WHOLE #'S & DEC. BY 10, 100, 1000	3 OF 4											
6. IDENTIFY FRACTIONS, DEC., %'S FROM PICTURES	3 OF 4											
7. CONVERT FRACTIONS -- DECIMALS	3 OF 4											
8. CONVERT FRACTIONS/DECIMALS -- PERCENTS	3 OF 4											
9. IDENTIFY PTS. ON NUMBER LINES, SCALES, GRIDS	3 OF 4											
10. IDENTIFY RATIOS AND FRACTIONAL PARTS	3 OF 4											
11. IDENTIFY PROCEDURE FOR FRAC/DEC. ESTIMATION	3 OF 4											
COMPUTATIONAL SKILLS												
12. ADD AND SUBTRACT WHOLE NUMBERS	3 OF 4											
13. MULTIPLY AND DIVIDE WHOLE NUMBERS	3 OF 4											
14. ADD AND SUBTRACT DECIMALS	3 OF 4											
15. ID CORRECT DECIMAL PT IN PROD/QUOT OF DECIMALS	3 OF 4											
16. ADD/SUBTRACT FRACTIONS AND MIXED NUMBERS	3 OF 4											
17. MULTIPLY FRACTIONS AND MIXED NUMBERS	3 OF 4											
18. DETERMINE PERCENT OF A NUMBER	3 OF 4											
19. ESTIMATE SUMS/DIFFS. OF WHOLE #'S AND DECIMALS	3 OF 4											
20. ESTIMATE PROD/QUOT OF WHOLE #'S AND DECIMALS	3 OF 4											
21. ESTIMATE FRACTIONAL PARTS/%'S OF WHOLE #'S	3 OF 4											

SEE MATHEMATICS PART 2 FOR OBJECTIVES 22-36 AND SUMMARY TOTALS.

*REMEDIAL STANDARD IS 78 OF 144 ITEMS CORRECT

COPYRIGHT © 1986 BY CONNECTICUT STATE BOARD OF EDUCATION ALL RIGHTS RESERVED PRINTED IN THE U.S.A.

0256A3



GRADE 8 FORM A

PAGE

TESTING DATE:

SCCRES INDICATE NUMBER/PERCENT OF STUDENTS MASTERING EACH OBJECTIVE

											SCHOOL	DISTRICT
NUMBER OF STUDENTS TESTED												
MATHEMATICS OBJECTIVES TESTED	MASTERY CRITERIA	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
PROBLEM SOLVING/APPLICATIONS												
22. ADD/SUBT/MULT/DIV WITH A CALCULATOR	3 OF 4											
23. INTERPRET GRAPHS, TABLES AND CHARTS	3 OF 4											
24. SOLVE 1- AND 2-STEP PROBS-WHOLE #'S & DEC.	3 OF 4											
25. SOLVE 1- AND 2-STEP PROBLEMS - FRACTIONS	3 OF 4											
26. SOLVE PROBLEMS INVOLVING MEASUREMENT	3 OF 4											
27. SOLVE PROBS. INVOLVING ELEM. PROBABILITY	3 OF 4											
28. ESTIMATE A REASONABLE ANSWER	3 OF 4											
28. SOLVE PROBLEMS WITH EXTRANEIOUS INFORMATION	3 OF 4											
30. IDENTIFY NEEDED INFORMATION IN PROBLEMS	3 OF 4											
31. SOLVE PROCESS PROBLEMS - ORGANIZING DATA	3 OF 4											
MEASUREMENT/GEOMETRY												
32. IDENTIFY FIGURES USING GEOMETRIC TERMS	3 OF 4											
33. MEASURE AND DETERMINE PERIMETERS AND AREAS	3 OF 4											
34. ESTIMATE LENGTH/AREA/VOLUME/ANGLE MEASURE	3 OF 4											
35. SELECT APPROPRIATE METRIC/CUSTOMARY UNIT	3 OF 4											
36. MAKE MEASUREMENT CONVERSIONS W/IN SYSTEMS	3 OF 4											
AVERAGE NUMBER OF OBJECTIVES MASTERED												
NUMBER/PERCENT OF STUDENTS BELOW "THE REMEDIAL STANDARD"												

*REMEDIAL STANDARD IS 78 OF 144 ITEMS CORRECT

COPYRIGHT © 1988 BY CONNECTICUT STATE BOARD OF EDUCATION, ALL RIGHTS RESERVED PRINTED IN THE U.S.A.

0300A3

GRADE 8 FORM A

PAGE

TESTING DATE:

SCORES INDICATE NUMBER/PERCENT OF STUDENTS MASTERING EACH OBJECTIVE

											DISTRICT	
NUMBER OF STUDENTS TESTED												
MATHEMATICS OBJECTIVES TESTED	MASTERY CRITERIA	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %		# / %
CONCEPTUAL UNDERSTANDINGS												
1. ORDER FRACTIONS	3 OF 4											
2. ORDER DECIMALS	3 OF 4											
3. ROUND WHOLE NUMBERS	3 OF 4											
4. ROUND DECIMALS	3 OF 4											
5. MULT/DIV WHOLE #'S & DEC. BY 10, 100, 1000	3 OF 4											
6. IDENTIFY FRACTIONS, DEC., %'S FROM PICTURES	3 OF 4											
7. CONVERT FRACTIONS -- DECIMALS	3 OF 4											
8. CONVERT FRACTIONS/DECIMALS -- PERCENTS	3 OF 4											
9. IDENTIFY PTS. ON NUMBER LINES, SCALES, GRIDS	3 OF 4											
10. IDENTIFY RATIOS AND FRACTIONAL PARTS	3 OF 4											
11. IDENTIFY PROCEDURE FOR FRAC/DEC. ESTIMATION	3 OF 4											
COMPUTATIONAL SKILLS												
12. ADD AND SUBTRACT WHOLE NUMBERS	3 OF 4											
13. MULTIPLY AND DIVIDE WHOLE NUMBERS	3 OF 4											
14. ADD AND SUBTRACT DECIMALS	3 OF 4											
15. ID CORRECT DECIMAL PT PROD/QUOT DECIMALS	3 OF 4											
16. ADD/SUBTRACT FRACTIONS AND MIXED NUMBERS	3 OF 4											
17. MULTIPLY FRACTIONS AND MIXED NUMBERS	3 OF 4											
18. DETERMINE PERCENT OF A NUMBER	3 OF 4											
19. ESTIMATE SUMS/DIFFS. OF WHOLE #'S AND DECIMALS	3 OF 4											
20. ESTIMATE PROD/QUOT OF WHOLE #'S AND DECIMALS	3 OF 4											
21. ESTIMATE FRACTIONAL PARTS/%'S OF WHOLE #'S	3 OF 4											

SEE MATHEMATICS PART 2 FOR OBJECTIVES 22-36 AND SUMMARY TOTALS.

*REMEDIAL STANDARD IS 78 OF 144 ITEMS CORRECT

COPYRIGHT © 1988 BY CONNECTICUT STATE BOARD OF EDUCATION. ALL RIGHTS RESERVED PRINTED IN THE U.S.A.

0302A3



GRADE 8 FORM A

PAGE

TESTING DATE:

SCORES INDICATE NUMBER/PERCENT OF STUDENTS MASTERING EACH OBJECTIVE

											DISTRICT	
NUMBER OF STUDENTS TESTED												
MATHEMATICS OBJECTIVES TESTED	MASTERY CRITERIA	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %		# / %
PROBLEM SOLVING/APPLICATIONS												
22. ADD/SUBT/MULT/DIV WITH A CALCULATOR	3 OF 4											
23. INTERPRET GRAPHS, TABLES AND CHARTS	3 OF 4											
24. SOLVE 1- AND 2-STEP PROBS-WHOLE #'S & DEC.	3 OF 4											
25. SOLVE 1- AND 2-STEP PROBLEMS - FRACTIONS	3 OF 4											
26. SOLVE PROBLEMS INVOLVING MEASUREMENT	3 OF 4											
27. SOLVE PROBS. INVOLVING ELEM. PROBABILITY	3 OF 4											
28. ESTIMATE A REASONABLE ANSWER	3 OF 4											
29. SOLVE PROBLEMS WITH EXTRANEOUS INFORMATION	3 OF 4											
30. IDENTIFY NEEDED INFORMATION IN PROBLEMS	3 OF 4											
31. SOLVE PROCESS PROBLEMS - ORGANIZING DATA	3 OF 4											
MEASUREMENT/GEOMETRY												
32. IDENTIFY FIGURES USING GEOMETRIC TERMS	3 OF 4											
33. MEASURE/DETERMINE PERIMETERS AND AREAS	3 OF 4											
34. ESTIMATE LENGTH/AREA/VOLUME/ANGLE MEASURE	3 OF 4											
35. SELECT APPROPRIATE METRIC/CUSTOMARY UNIT	3 OF 4											
36. MAKE MEASURE CONVERSIONS W/IN SYSTEMS	3 OF 4											
AVERAGE NUMBER OF OBJECTIVES MASTERED												
NUMBER/PERCENT OF STUDENTS BELOW THE REMEDIAL STANDARD												

*REMEDIAL STANDARD IS 78 OF 144 ITEMS CORRECT

COPYRIGHT © 1985 BY CONNECTICUT STATE BOARD OF EDUCATION. ALL RIGHTS RESERVED. PRINTED IN THE U.S.A.

0304A3

GRADE 8 FORM A

PAGE

TESTING DATE:
 NUMBER OF STUDENTS TESTED:
 NUMBER OF STUDENTS NEEDING FURTHER DIAGNOSIS
 IN WRITING:
 IN READING:

NUMBER/PERCENT OF STUDENTS MASTERING EACH OBJECTIVE

LANGUAGE ARTS OBJECTIVES TESTED	MASTERY CRITERIA # OF ITEMS CORRECT			
		CLASS	SCHOOL	DISTRICT
		# / %	# / %	# / %
WRITING MECHANICS				
1. CAPITALIZATION AND PUNCTUATION	9 OF 12			
2. SPELLING	6 OF 8			
3. AGREEMENT (VERB TENSE, SUBJECT/OBJECT/VERB, AND PRONOUN REFERENT)	11 OF 15			
4. TONE	3 OF 4			
STUDY SKILLS				
5. LOCATING INFORMATION	9 OF 12			
6. NOTETAKING AND OUTLINING	3 OF 4			
LISTENING COMPREHENSION				
7. LITERAL	3 OF 4			
8. INFERENCE & EVALUATIVE	12 OF 16			
READING COMPREHENSION				
9. LITERAL	6 OF 8			
10. INFERENCE	10 OF 14			
11. EVALUATIVE	10 OF 14			
TOTAL NUMBER OF OBJECTIVES MASTERED		AVERAGE # OF OBJECTIVES MASTERED		

HOLISTIC MEASURES OF WRITING AND READING	REMEDIAL STANDARDS	NUMBER/PERCENT OF STUDENTS BELOW REMEDIAL STANDARDS		
WRITING SAMPLE	4 OF 8			
ANALYTIC SCORING INFORMATION**				
FOCUS				
ORGANIZATION				
SUPPORT/ELABORATION				
MECHANICS				
SENTENCE FORMATION				
DEGREES OF READING POWER (DRP)®	55 DRP UNITS			

*INDICATES A SCORE BELOW THE REMEDIAL STANDARD. THIS STUDENT MUST RECEIVE FURTHER DIAGNOSIS
 **ANALYTIC SCORING INFORMATION IS GIVEN ONLY FOR THOSE STUDENTS WHO SCORED BELOW THE REMEDIAL STANDARD.
 1=NEEDS REMEDIAL ASSISTANCE 2=BORDERLINE PERFORMANCE 3=SATISFACTORY PERFORMANCE

GRADE 8 FORM A

PAGE

TESTING DATE:

SCORES INDICATE NUMBER/PERCENT OF STUDENTS MASTERING EACH OBJECTIVE

											SCHOOL	DISTRICT
NUMBER OF STUDENTS TESTED												
LANGUAGE ARTS OBJECTIVES TESTED	MASTERY CRITERIA	#1%	#1%	#1%	#1%	#1%	#1%	#1%	#1%	#1%	#1%	#1%
WRITING MECHANICS												
1. CAPITALIZATION AND PUNCTUATION	9 OF 12											
2. SPELLING	6 OF 8											
3. AGREEMENT (VERB TENSE, SUBJECT/OBJ/VERB, AND PRONOUN REFERENT)	11 OF 15											
4. TONE	3 OF 4											
STUDY SKILLS												
5. LOCATING INFORMATION	9 OF 12											
6. NOTETAKING AND OUTLINING	3 OF 4											
LISTENING COMPREHENSION												
7. LITERAL	3 OF 4											
8. INFERENCE & EVALUATIVE	12 OF 16											
READING COMPREHENSION												
9. LITERAL	6 OF 8											
10. INFERENCE	10 OF 14											
11. EVALUATIVE	10 OF 14											

HOLISTIC MEASURES OF WRITING AND READING #1% OF STUDENTS AT STATED LEVEL

WRITING SAMPLE NUMBER/PERCENT PRODUCING MATERIAL THAT IS:	HOLISTIC SCORE	#1%	#1%	#1%	#1%	#1%	#1%	#1%	#1%	#1%	#1%	#1%
WELL WRITTEN WITH DEVELOPED SUPPORTIVE DETAIL	7 OR 8											
GENERALLY WELL ORGANIZED WITH SUPPORTIVE DETAIL	5 OR 6											
MINIMALLY PROFICIENT	4											
BELOW THE REMEDIAL STANDARD*	2 OR 3											

DEGREES OF READING POWER (DRP) # NUMBER/PERCENT OF STUDENTS:	DRP UNIT SCORE	#1%	#1%	#1%	#1%	#1%	#1%	#1%	#1%	#1%	#1%	#1%
AT OR ABOVE THE READING GOAL FOR BEGINNING EIGHTH GRADERS	62+											
BELOW THE READING GOAL FOR BEGINNING EIGHTH GRADERS BUT ABOVE THE REMEDIAL STANDARD	55 TO 61											
BELOW THE REMEDIAL STANDARD**	BELOW 55											

AVERAGE SCORES

AVERAGE NUMBER OF OBJECTIVES MASTERED IN LANGUAGE ARTS												
AVERAGE HOLISTIC WRITING SCORE												
AVERAGE DRP UNIT SCORE												

COPYRIGHT © 1985 BY CONNECTICUT STATE BOARD OF EDUCATION
ALL RIGHTS RESERVED.
PRINTED IN THE UNITED STATES OF AMERICA.

*REMEDIAL STANDARD IS 4 FOR WRITING.
**REMEDIAL STANDARD IS 55 DRP UNITS FOR READING



GRADE 8 FORM A

PAGE

TESTING DATE:

SCORES INDICATE NUMBER/PERCENT OF STUDENTS MASTERING EACH OBJECTIVE

											DISTRICT	
NUMBER OF STUDENTS TESTED												
LANGUAGE ARTS OBJECTIVES TESTED	MASTERY CRITERIA	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
WRITING MECHANICS												
1. CAPITALIZATION AND PUNCTUATION	9 OF 12											
2. SPELLING	6 OF 8											
3. AGREEMENT (VERB TENSE, SUBJECT/OBJ/VERB. AND PRONOUN REFERENT)	11 OF 15											
4. TONE	3 OF 4											
STUDY SKILLS												
5. LOCATING INFORMATION	9 OF 12											
6. NOTETAKING AND OUTLINING	3 OF 4											
LISTENING COMPREHENSION												
7. LITERAL	3 OF 4											
8. INFERENCE & EVALUATIVE	12 OF 16											
READING COMPREHENSION												
9. LITERAL	6 OF 8											
10. INFERENCE	10 OF 14											
11. EVALUATIVE	10 OF 14											

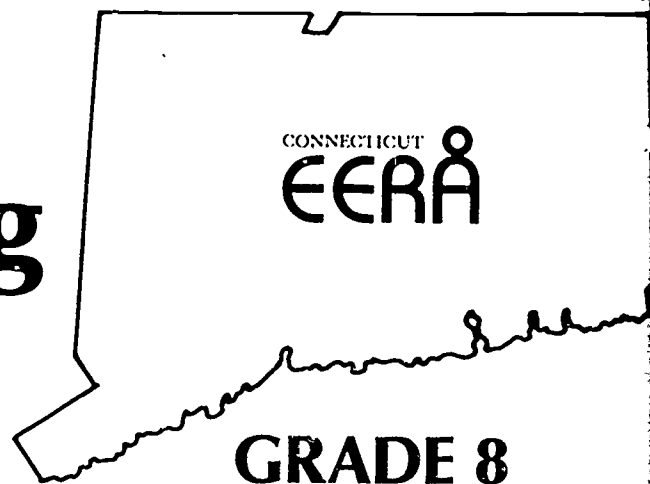
HOLISTIC MEASURES OF WRITING AND READING											# / % OF STUDENTS AT STATED LEVEL	
WRITING SAMPLE												
NUMBER/PERCENT PRODUCING MATERIAL THAT IS:												
WELL WRITTEN WITH DEVELOPED SUPPORTIVE DETAIL											7 OR 8	
GENERALLY WELL ORGANIZED WITH SUPPORTIVE DETAIL											5 OR 6	
MINIMALLY PROFICIENT											4	
BELOW THE REMEDIAL STANDARD*											2 OR 3	
DEGREES OF READING POWER (DRP) #												
NUMBER/PERCENT OF STUDENTS:												
AT OR ABOVE THE READING GOAL FOR BEGINNING EIGHT GRADERS											62+	
BELOW THE READING GOAL FOR BEGINNING EIGHT GRADERS BUT ABOVE THE REMEDIAL STANDARD											55 TO 61	
BELOW THE REMEDIAL STANDARD**											BELOW 55	

AVERAGE SCORES												
AVERAGE NUMBER OF OBJECTIVES MASTERED IN LANGUAGE ARTS												
AVERAGE HOLISTIC WRITING SCORE												
AVERAGE DRP UNIT SCORE												

COPYRIGHT © 1986 BY CONNECTICUT STATE BOARD OF EDUCATION
ALL RIGHTS RESERVED. PRINTED IN THE U.S.A.

*REMEDIAL STANDARD IS 4 FOR WRITING.
**REMEDIAL STANDARD IS 55 DRP UNITS FOR READING

Connecticut Mastery Testing Program



PARENT/STUDENT DIAGNOSTIC REPORT

Your child's scores on the Connecticut Mastery Test are reported inside.

For a description of the Connecticut Mastery Testing Program, see the back cover of this folder.

For general information about your local district's testing program, please contact your superintendent of schools.

For further information on the Connecticut Mastery Testing Program, contact: Connecticut State Department of Education, Office of Research and Evaluation, Box 2219, Hartford, Connecticut 06145, (203) 566-4001 or 4008

MATHEMATICS

STUDENT OBJECTIVES ANALYSIS FOR

GRADE: _____ SCHOOL _____
 FORM: _____ DISTRICT _____
 TEACHER: _____ TESTING DATE _____

CONNECTICUT
 MASTERY TESTING
 PROGRAM



THE PSYCHOLOGICAL CORPORATION
 HARCOURT BRACE JOVANOVICH PUBLISHERS



GRADE 8 REPORT PART 1

OBJECTIVES TESTED	MASTERY CRITERIA	
	NUMBER OF ITEMS CORRECT	STUDENT SCORE
CONCEPTUAL UNDERSTANDINGS		
1. Order fractions	3 of 4	
2. Order decimals	3 of 4	
3. Round whole numbers	3 of 4	
4. Round decimals to the nearest whole number, tenth and hundredth	3 of 4	
5. Multiply and divide whole numbers and decimals by 10, 100 and 1000	3 of 4	
6. Identify fractions, decimals and percents from pictorial representations	3 of 4	
7. Convert fractions to decimals and vice versa	3 of 4	
8. Convert fractions and decimals to percents and vice versa	3 of 4	
9. Identify points on number line, scales and grids	3 of 4	
10. Identify ratios and fractional parts from given data	3 of 4	
11. Identify an appropriate procedure for making estimates with decimals and fractions	3 of 4	
COMPUTATIONAL SKILLS		
12. Add and subtract whole numbers less than 10,000	3 of 4	
13. Multiply and divide 2- and 3-digit whole numbers by 1- and 2-digit numbers	3 of 4	
14. Add and subtract decimals (to hundredths) in horizontal form	3 of 4	
15. Identify the correct placement of the decimal point in multiplication and division of decimals	3 of 4	
16. Add and subtract fractions and mixed numbers	3 of 4	
17. Multiply fractions and mixed numbers	3 of 4	
18. Determine the percent of a number	3 of 4	
19. Estimate sums and differences of whole numbers and decimals including making change	3 of 4	
20. Estimate products and quotients of whole numbers and decimals	3 of 4	
21. Estimate fractional parts and percents of whole numbers and money amounts	3 of 4	

OBJECTIVES TESTED	MASTERY CRITERIA	
	NUMBER OF ITEMS CORRECT	STUDENT SCORE
PROBLEM SOLVING/APPLICATIONS		
22. Compute sums, differences, products and quotients using a calculator	3 of 4	
23. Interpret graphs, tables and charts	3 of 4	
24. Solve 1- and 2-step problems involving whole numbers and decimals including averaging	3 of 4	
25. Solve 1- and 2-step problems involving fractions	3 of 4	
26. Solve problems involving measurement	3 of 4	
27. Solve problems involving elementary probability	3 of 4	
28. Estimate a reasonable answer to a given problem†	3 of 4	
29. Solve problems with extraneous information	3 of 4	
30. Identify needed information in problem situations	3 of 4	
31. Solve process problems involving the organization of data	3 of 4	
MEASUREMENT/GEOMETRY (with calculator available)		
32. Identify figures using geometric terms	3 of 4	
33. Measure and determine perimeters and areas	3 of 4	
34. Estimate lengths, areas, volumes and angle measures	3 of 4	
35. Select appropriate metric or customary units and measures	3 of 4	
36. Make measurement conversions within systems	3 of 4	

†without calculator available

TOTAL NUMBER OF OBJECTIVES MASTERED (out of 36)	
NUMBER OF ITEMS CORRECT (out of 144)	(Remedial Standard is 78 of 144 items correct)

LANGUAGE ARTS

STUDENT OBJECTIVES ANALYSIS FOR

GRADE: _____ SCHOOL _____
 FORM: _____ DISTRICT _____
 TEACHER: _____ TESTING DATE _____

CONNECTICUT
 MASTERY TESTING
 PROGRAM



THE PSYCHOLOGICAL CORPORATION
 HARCOURT BRACE JOVANOVICH PUBLISHERS



GRADE 8 REPORT PART 2

OBJECTIVES TESTED	MASTERY CRITERIA	STUDENT SCORE
	NUMBER OF ITEMS CORRECT	
WRITING MECHANICS 1. Capitalization & Punctuation 2. Spelling 3. Agreement (vcrb tense, subject-object-verb, and pronoun referents) 4. Tone	9 of 12 6 of 8 11 of 15 3 of 4	
STUDY SKILLS 5. Locating Information (schedules, maps, indexes, glossaries, dictionaries) 6. Notetaking and Outlining	9 of 12 3 of 4	
LISTENING COMPREHENSION 7. Literal (understands the meanings of ideas clearly stated by a speaker) 8. Inferential & Evaluative (understands the meanings of ideas not clearly stated, but implied, by a speaker and is able to make critical judgments about them)	3 of 4 12 of 16	
READING COMPREHENSION 9. Literal (understands the meanings of ideas clearly stated within a passage) 10. Inferential (understands the meanings of ideas not stated, but implied, within a passage) 11. Evaluative (able to make critical judgments about statements and inferences within a passage)	6 of 8 10 of 14 10 of 14	

TOTAL NUMBER OF OBJECTIVES MASTERED (out of 11)

WRITING SAMPLE	STUDENT SCORE
Holistic Writing Score	
Remedial Standard is 4 of 8	

DEGREES OF READING POWERS (DRP) TM	STUDENT SCORE
DRP Units	
Remedial Standard is 55 DRP Units Reading Goal is 62 DRP Units	

Degrees of Reading Power and DRP are trademarks owned by the College Entrance Examination Board



PARENT/STUDENT DIAGNOSTIC REPORT

Dear Parent:

Inside you will find the results of the Connecticut Mastery Test administered to your child earlier this fall. The test results help to show you and the school district's professional staff how well your child is performing on those skills identified by the State of Connecticut as important for students entering eighth grade to have mastered.

These tests are designed to determine the specific skill levels of students. The test results will be used to:

- provide your school with information for use in assessing the progress of individual students over time;
- provide your school with information based on which improvements in the general instructional program can be made, and
- provide information on appropriate basic skills remedial assistance for students so indicated.

Mastery testing will occur each fall in grades four, six, and eight.

If you have any questions about these test results please ask your child's teacher(s). The teacher(s) will share with you other observations and recommendations based on experience in working with your son or daughter during the last several months.

Description of the Test

Mathematics: The mathematics test assesses thirty-six (36) specific objectives in four general areas of: (1) Conceptual Understandings; (2) Computational Skills; (3) Problem Solving/Applications; and (4) Measurement/Geometry. Test items evaluate a student's ability to: order fractions and decimals; round whole numbers and decimals; make conversions among fractions, decimals and percents, compute with whole numbers, decimals and fractions; estimate with whole numbers, decimals and fractions, solve 1- and 2-step problems involving whole numbers, decimals, fractions, measurement and elementary probability (with a calculator available); estimate a reasonable answer to a problem; solve problems with extraneous information and identify needed information in problem situations; measure and/or estimate lengths, areas, volumes and angle measures; make measurement conversions; and select appropriate measurement units.

Language Arts: The language arts test covers two general areas: Reading/Listening Comprehension and Writing/Study Skills. There are eleven (11) objectives and two holistic measures of reading and writing.

The content of Reading/Listening Comprehension consists of narrative, expository, and persuasive passages on a variety of topics measuring a student's reading and listening ability in: (1) Literal Comprehension; (2) Inferential or Interpretive Comprehension; and (3) Evaluative or Critical Comprehension. Audio tapes are used to assess a student's listening comprehension ability. Also used is the "Degrees of Reading Power" (DRP) Test which includes eleven (11) passages and seventy-seven (77) test items. It is designed to measure a student's ability to understand nonfiction English prose on a graduated scale of reading difficulty.

The content of Writing/Study Skill; consists of three components. First, writing skills are directly assessed. A student is asked to write on a designated topic. The writing is judged on the student's demonstrated ability to convey information in a coherent and organized fashion. Second, the test assesses the mechanics of good writing, which are defined as: (1) Capitalization and Punctuation, (2) Spelling, (3) Agreement; and (4) Tone. Finally the test assesses Study Skills, which have been defined as Locating Information (schedules, maps, index references, and dictionary usage) and Outlining and Notetaking. This part of the test measures a student's ability to find and use information from listed sources, and to make notes from audio tapes.

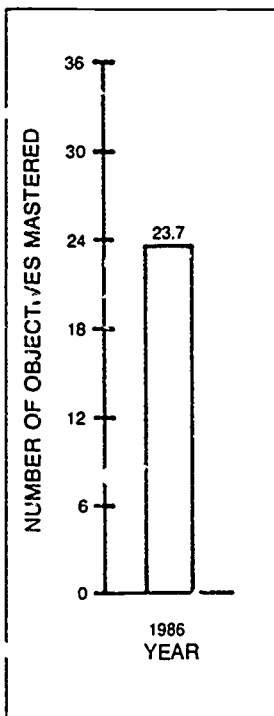
83

APPENDIX G

Number of Objectives Mastered

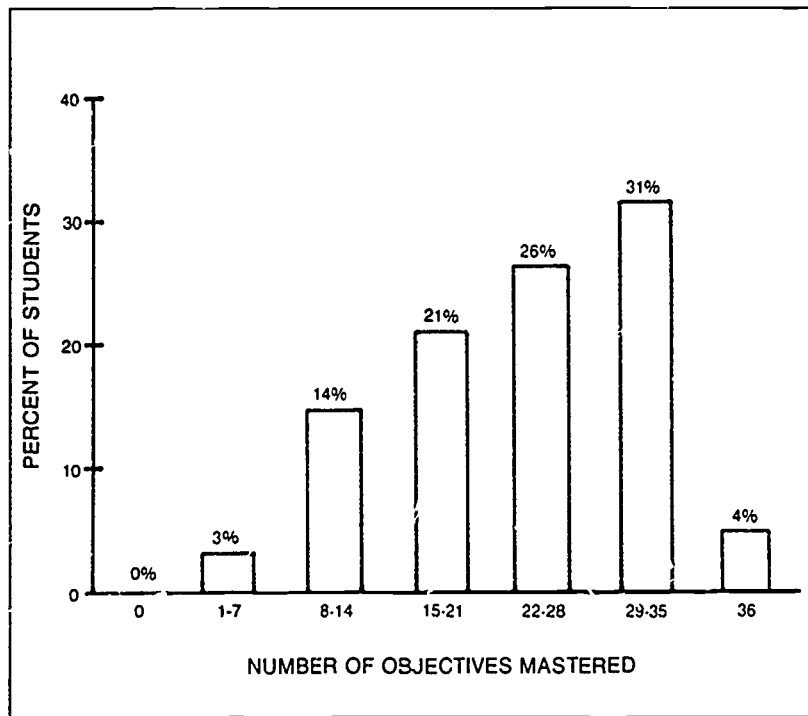
- o Mathematics
- o Language Arts

**MATHEMATICS:
AVERAGE NUMBER OF
OBJECTIVES MASTERED**



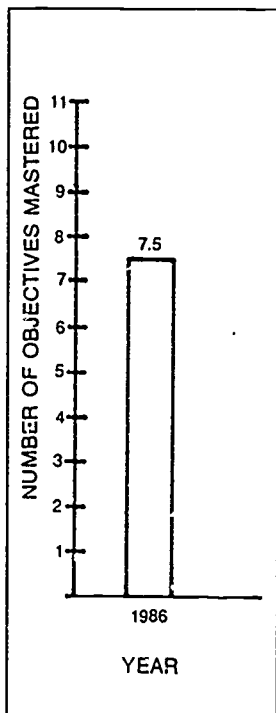
This bar chart illustrates the average number of mathematics objectives mastered, statewide, in 1986.

**MATHEMATICS:
PERCENT OF STUDENTS ACHIEVING MASTERY BY
NUMBER OF OBJECTIVES MASTERED**



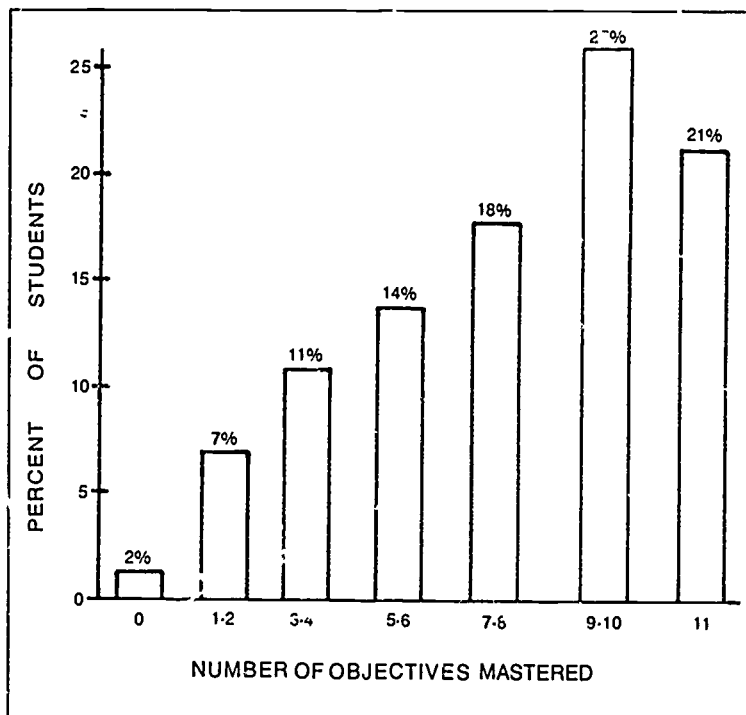
This bar chart illustrates the distribution of students, statewide, who mastered mathematics objectives within each of the seven score categories.

LANGUAGE ARTS:
AVERAGE NUMBER OF
OBJECTIVES MASTERED



This bar chart illustrates the average number of *language arts objectives* mastered, statewide.

LANGUAGE ARTS:
PERCENT OF STUDENTS ACHIEVING MASTERY BY
NUMBER OF OBJECTIVES MASTERED



This bar chart illustrates the distribution of students, statewide, who mastered objectives within each of the seven score groupings.

Appendix H
State by District Report - October 1986
Grade Eight Mathematics Test Results

STATE BY DISTRICT REPORT

GRADE 8

MATHEMATICS 1 OF 2

CONNECTICUT MASTERY TESTING PROGRAM

OBJECTIVES TESTED

CONCEPTUAL UNDERSTANDINGS

COMPUTATIONAL SKILLS

TOTAL MATHEMATICS

PAGE 1

DATE TESTED: 10-86

Mastery Criteria for each objective is
3 of the 4 items correct
Remedial Standard is 78
of the 144 items correct

order fractions
order decimals
round whole numbers
round decimals to nearest $\frac{1}{2}$
multiply whole $\frac{1}{2}$'s by $\frac{1}{2}$
convert $\frac{1}{2}$'s to $\frac{1}{10}$, $\frac{1}{100}$, $\frac{1}{1000}$
convert $\frac{1}{10}$, $\frac{1}{100}$, $\frac{1}{1000}$ to $\frac{1}{2}$
convert $\frac{1}{2}$ to $\frac{1}{10}$, $\frac{1}{100}$, $\frac{1}{1000}$
id points on number lines, scales, grids
id ratios and $\frac{1}{2}$ to $\frac{1}{10}$, vice versa
add and subtract fractions, scales, grids
multiply and divide whole $\frac{1}{2}$'s
add and subtract whole $\frac{1}{2}$'s
add and subtract decimals
multiply and divide whole $\frac{1}{2}$'s
multiply and divide decimals
determine percent of a number
estimate percent of mixed numbers
estimate percent of a number
estimate percent of whole $\frac{1}{2}$'s and dec
estimate percent of whole $\frac{1}{2}$'s and dec
Average Number of Objectives Mastered
Percent of Student Needing Further Diagnosis

DISTRICT	# OF STUDENTS TESTED	TOC	SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																									
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
ANSONIA	127	5	46	56	88	55	59	49	75	77	86	95	53	95	93	28	55	37	35	48	75	67	49	22.6	14			
ASHFORD	46	6	83	93	93	89	85	74	96	78	97	96	96	93	96	91	72	57	33	54	93	76	52	27.9	2			
AVON	150	4	80	75	89	83	85	79	93	89	92	97	85	95	97	92	77	64	64	69	90	79	74	29.7	3			
BERLIN	161	4	57	70	91	81	68	64	75	73	89	89	68	94	98	89	47	24	30	46	80	70	53	23.6	13			
BETHEL	191	4	66	72	94	83	76	68	88	75	93	88	77	96	97	96	77	71	76	67	90	85	65	27.5	6			
BLOOMFIELD	170	2	59	51	88	54	64	53	67	65	84	89	61	96	94	93	53	36	44	45	73	62	52	22.5	16			
BOLTON	45	4	78	82	91	80	73	67	91	71	100	91	82	98	100	96	60	40	36	44	91	87	52	27.0	2			
BOZRAH	18	5	72	61	94	72	72	67	72	67	100	100	61	100	100	94	67	56	78	72	72	72	26.8	11				
BRANFORD	232	4	62	68	91	81	74	61	83	75	94	91	72	97	98	93	73	53	58	52	89	77	53	25.9	9			
BRIDGEPORT	1,027	1	36	37	73	33	50	30	56	67	71	74	35	92	91	82	51	17	28	30	55	49	32	17.2	41			
BRISTOL	573	3	51	51	85	49	60	52	72	69	81	81	56	95	94	83	52	33	38	44	72	63	49	21.8	22			
BROOKFIELD	190	4	72	76	95	76	78	73	82	75	94	92	72	91	94	93	50	57	64	53	87	71	59	27.1	9			
BROOKLYN	89	6	58	49	88	46	62	52	61	63	81	84	43	97	96	78	53	30	46	42	70	49	40	21.7	27			
CANAAN	11	6	36	91	91	73	45	55	64	55	91	100	73	100	91	100	73	36	45	27	82	73	36	22.8	0			
CANTERBURY	67	6	75	69	88	60	87	82	91	91	96	93	76	99	99	94	67	52	75	64	82	69	61	27.5	3			
CANTON	75	4	81	64	93	75	81	77	87	88	92	99	77	99	99	95	65	55	59	71	83	79	73	28.4	4			
CHESHIRE	323	2	76	82	95	88	77	80	90	85	96	94	81	97	97	94	71	54	58	65	90	86	68	28.5	4			
CLINTON	161	5	68	71	91	68	76	75	88	83	88	91	73	95	93	90	61	60	66	67	85	72	61	26.4	8			
COLCHESTER	108	5	50	62	87	62	62	57	70	69	82	81	69	96	96	87	59	36	32	47	69	61	49	23.1	21			
COLUMBIA	39	5	54	51	82	77	74	56	79	82	85	87	62	92	92	97	64	41	59	56	79	74	49	24.8	5			
CORNWALL	6	6	100	100	83	100	100	83	100	100	100	100	83	100	100	100	83	100	83	83	100	100	83	33.5	0			
COVENTRY	126	4	56	56	87	66	67	63	75	67	87	86	69	84	90	87	46	40	40	58	81	67	52	23.5	18			
CROMWELL	97	4	69	69	89	81	73	67	85	72	95	90	72	96	97	89	15	57	72	55	80	77	56	26.1	9			
DANBURY	555	3	49	50	85	63	60	52	60	68	84	81	53	92	91	88	52	28	30	43	72	65	45	22.0	23			
DARIEN	205	2	82	76	93	85	90	89	95	84	97	93	84	98	99	95	79	70	73	65	94	80	70	30.0	1			
DERBY	95	5	29	33	81	51	55	42	61	51	85	82	32	94	96	81	52	16	29	27	73	56	39	19.9	26			
EASTFORD	10	6	60	30	80	100	60	100	80	80	90	80	100	100	90	60	30	30	50	100	70	30	25.5	0	0			
EAST GRANBY	51	4	80	78	94	88	78	75	84	71	94	90	82	92	98	88	65	49	53	61	26	88	69	27.4	4			



STATE BY DISTRICT REPORT

GRADE 8

MATHEMATICS 2 OF 2

CONNECTICUT MASTERY TESTING PROGRAM

PAGE 1

DATE TESTED: 10-86

Mastery Criteria for each objective is 3 of the 4 items correct
Remedial Standard is 78 of the 144 items correct.

OBJECTIVES TESTED										
PROBLEM SOLVING AND APPLICATIONS				MEASUREMENT/ GEOMETRY				TOTAL MATHEMATICS		
1	2	3	4	1	2	3	4	1	2	3
10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31

DISTRICT	# OF STUDENTS TESTED	TOC	SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																									
ANSONIA	127	5	99	67	78	47	31	54	79	69	71	37	48	24	57	87	28									22.6	14	
ASHFORD	46	6	100	72	85	65	59	89	87	78	80	70	65	48	70	85	46										27.9	2
AVON	150	4	100	79	91	78	73	81	89	88	89	68	89	64	83	89	68										29.7	3
BERLIN	161	4	99	65	84	51	24	63	74	75	80	41	59	23	71	83	19										23.6	13
BETHEL	191	4	99	73	90	72	36	72	85	80	85	60	71	40	69	85	34										27.5	6
BLOOMFIELD	170	2	100	67	78	56	26	64	73	66	77	42	42	25	56	72	27										22.5	16
BOLTON	45	4	100	82	91	53	49	64	93	82	84	58	82	29	76	91	42										27.0	2
BOZRAH	18	5	100	61	89	73	47	94	83	76	76	37	61	56	72	100	22										26.8	11
BRANFORD	232	4	98	73	83	60	31	64	86	76	81	52	69	36	66	84	35										25.9	9
BRIDGEPORT	1,027	1	97	56	49	38	10	31	56	47	58	26	32	16	37	65	12										17.2	41
BRISTOL	573	3	97	61	73	49	24	54	75	67	74	36	47	24	58	82	24										21.8	22
BROOKFIELD	150	4	99	71	92	66	54	71	81	82	86	53	74	43	76	79	57										27.1	9
BROOKLYN	89	6	97	60	70	40	22	67	70	76	77	49	69	28	59	80	23										21.7	27
CANAAN	11	6	100	55	91	45	27	45	91	73	55	55	82	9	55	64	0										22.8	0
CANTERBURY	67	6	100	75	88	84	36	89	84	85	87	54	67	37	81	93	33										27.5	3
CANTON	75	4	97	79	92	71	52	88	87	79	95	59	71	53	85	85	53										28.4	4
CHESHIRE	323	2	99	74	92	77	53	78	88	84	87	65	74	36	80	86	54										28.5	4
CLINTON	161	5	99	69	90	64	32	77	81	74	77	44	66	47	73	89	31										26.4	8
COLCHESTER	108	5	97	75	79	50	31	69	71	69	76	42	58	29	60	87	31										23.1	21
COLUMBIA	39	5	100	67	92	49	38	69	85	74	85	51	56	33	62	90	36										24.8	5
CORNWALL	6	6	100	83	100	83	67	100	100	100	100	83	100	83	83	100	83	33.5									0	0
COVENTRY	126	4	98	67	83	53	36	60	76	71	76	40	52	36	63	80	32										23.5	18
CROMWELL	97	4	99	78	85	66	35	74	77	78	79	46	59	40	59	85	40										26.1	9
DANBURY	555	3	97	66	71	41	26	59	73	66	69	42	49	27	57	76	28										22.0	23
DARBY	205	2	100	74	97	76	62	80	94	87	89	68	80	65	87	89	63										30.0	1
DERBY	95	5	94	63	81	29	17	56	75	63	66	38	69	16	52	77	24										19.9	26
EASTFORD	10	6	100	70	90	50	70	60	80	70	90	60	60	0	70	90	40										25.5	0
EAST GRANBY	51	4	100	61	94	80	45	69	88	78	75	65	78	49	67	86	43										27.4	4

© 1986 Connecticut State Board of Education. All rights reserved. Printed in the United States of America



STATE BY DISTRICT REPORT

CONNECTICUT MASTERY TESTING PROGRAM

GRADE 8

MATHEMATICS 1 OF 2

DATE TESTED: 10-86	OBJECTIVES TESTED		TOTAL MATHEMATICS	PAGE 2
	CONCEPTUAL UNDERSTANDINGS	COMPUTATIONAL SKILLS		
Mastery Criteria for each objective is 3 of the 4 items correct Remedial Standard is 78 of the 144 items correct	order fractions	add and subtract whole #s	Average Number of Objectives Mastered Percent of Students Needing Further Diagnosis	
	round decimals	multiply and divide whole numbers		
	round whole numbers	add and subtract mixed numbers		
	multiply decimals to nearest .x, .x, .xx	multiply and divide mixed numbers		
	convert fractions to decimal	add and subtract mixed numbers		
	convert dec. % from percent	add and subtract mixed numbers		
	convert % from percent	add and subtract mixed numbers		
	add and subtract mixed numbers	add and subtract mixed numbers		
	add and subtract mixed numbers	add and subtract mixed numbers		
	add and subtract mixed numbers	add and subtract mixed numbers		
	add and subtract mixed numbers	add and subtract mixed numbers		
	add and subtract mixed numbers	add and subtract mixed numbers		
	add and subtract mixed numbers	add and subtract mixed numbers		
	add and subtract mixed numbers	add and subtract mixed numbers		

DISTRICT	# OF STUDENTS TESTED	TOC	SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																						
EAST HAVEN	167	2	46	45	86	46	47	48	51	59	83	78	56	93	95	84	43	30	26	46	75	59	45	20.8	24
EAST LYME	184	4	64	83	91	90	86	66	89	67	89	89	84	89	93	93	65	48	48	49	91	77	60	26.4	7
EASTON	78	4	72	69	94	85	92	77	92	91	90	92	91	97	99	94	81	65	78	65	94	90	60	29.5	3
EAST KINGSOR	87	4	57	41	92	40	60	55	62	63	90	90	60	91	97	86	43	24	15	33	75	61	30	21.7	19
ELLINGTON	114	4	73	83	92	91	83	68	90	78	98	93	75	97	98	96	74	41	43	50	89	81	59	26.6	3
ENFIELD	459	3	50	58	88	56	62	56	68	64	85	83	61	95	96	89	59	31	39	39	70	62	48	22.7	22
FAIRFIELD	406	2	72	63	93	74	74	71	81	72	92	91	78	95	94	88	62	46	44	55	82	73	59	25.7	10
FARMINGTON	161	4	78	79	96	91	80	79	96	86	94	94	85	97	99	99	77	74	76	66	94	85	70	29.2	1
FRANKLIN	28	5	57	71	79	79	57	54	86	64	86	79	71	86	89	89	50	32	71	32	82	57	54	24.1	11
GLASTONBURY	328	4	78	86	93	80	87	80	80	87	94	93	82	92	95	95	60	55	59	69	90	75	70	28.9	4
GRANBY	111	4	57	60	95	86	73	68	78	77	90	85	69	95	95	95	61	30	32	51	87	77	58	24.7	9
GREENWICH	434	2	75	70	90	78	83	77	87	80	91	93	75	96	97	93	62	54	58	67	85	75	63	27.4	9
GRISHOLD	102	4	49	81	92	90	74	52	77	69	88	90	70	93	94	95	59	28	34	35	85	79	43	24.0	9
GROTON	367	3	55	56	81	52	64	54	68	70	80	80	60	94	94	90	62	45	52	40	75	66	49	22.5	21
GUILFORD	246	4	69	70	94	80	72	74	84	72	91	87	81	93	97	87	59	40	43	50	88	77	53	25.9	9
HAMDEN	340	2	56	47	87	56	62	55	66	63	83	81	60	93	89	82	49	31	38	41	74	59	43	21.9	25
HARTFORD	1,304	1	33	27	76	34	44	22	47	62	66	70	37	95	92	85	48	22	26	28	55	52	28	16.5	46
HARTLAND	14	6	57	57	93	79	93	71	79	93	100	100	64	100	100	71	79	64	79	64	79	93	79	28.2	0
KENT	36	6	75	75	92	92	86	67	92	94	92	100	92	94	100	100	69	36	36	69	92	81	69	27.8	3
KILLINGLY	182	6	55	54	86	69	59	50	60	62	83	78	60	91	91	78	42	23	36	34	73	59	43	21.5	22
LEBANON	80	6	50	55	81	48	53	53	65	61	85	83	48	95	90	88	53	25	26	35	69	54	55	21.3	2
LEDYARD	229	4	59	64	91	83	73	65	77	75	88	91	68	93	97	91	63	49	48	49	86	71	56	25.7	
LISBON	50	4	62	38	90	60	72	66	78	76	84	96	66	98	98	94	56	54	72	42	74	70	50	24.3	16
LITCHFIELD	77	6	61	86	87	81	75	74	87	86	91	88	65	92	91	87	65	66	71	77	86	77	65	27.4	9
MADISON	213	5	68	78	93	91	74	73	88	82	92	90	83	94	99	96	70	51	56	63	93	85	63	27.8	4



STATE BY DISTRICT REPORT

CONNECTICUT MASTERY TESTING PROGRAM

GRADE 8

MATHEMATICS 2 OF 2

OBJECTIVES TESTED		TOTAL MATHEMATICS		PAGE 2															
						PROBLEM SOLVING AND APPLICATIONS	MEASUREMENT/ GEOMETRY												
<p>DATE TESTED: 10-86</p> <p>Mastery Criteria for each objective is 3 of the 4 items correct. Remedial Standard is 78 of the 144 items correct</p>		1	2	Average Number of Objectives Mastered		Percent of Students Needing Further Diagnosis													
		3	4	Conversion within measurement system															
		4	5	Pick appropriate volume units & measure															
		5	6	Estimate/determine perimeter/area															
		6	7	Measure/determine volume/surface area															
		7	8	Identify figures in problem situations															
		8	9	Measure/locate info in problem situations															
		9	10	Identify/locate info in problem situations															
		10	11	Use precise info in problem situations															
		11	12	Use precise info in problem situations															
		12	13	Use precise info in problem situations															
		13	14	Use precise info in problem situations															
		14	15	Use precise info in problem situations															
		15	16	Use precise info in problem situations															
DISTRICT	# OF STUDENTS TESTED	TOC	SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																
EAST HADDAM	70	5	99	61	78	44	27	53	78	69	71	60	29	64	79	24	22.4	17	
EAST HAMPTON	105	5	97	70	86	49	33	75	85	81	79	57	68	20	69	89	50	24.9	8
EAST HARTFORD	352	2	99	70	72	49	24	56	77	68	74	48	48	24	61	85	28	23.2	16
EAST HAVEN	167	2	98	64	70	44	13	57	74	63	77	47	44	24	54	85	20	20.8	24
EAST LYME	184	4	98	68	90	62	42	72	82	83	88	51	54	24	74	84	47	26.4	7
EASTON	78	4	100	78	91	77	55	82	90	84	90	64	85	51	68	87	76	29.5	3
EAST WINDSOR	87	4	98	69	71	39	26	57	74	72	82	48	57	20	63	80	33	21.7	19
ELLINGTON	114	4	100	69	90	61	37	64	86	82	90	48	58	29	75	82	36	26.6	3
ENFIELD	459	3	96	65	74	50	29	58	77	65	71	38	54	29	63	77	32	22.7	22
FAIRFIELD	406	2	99	75	83	62	35	73	79	74	82	53	63	40	74	81	33	25.7	10
FARMINGTON	161	4	99	80	96	78	39	84	89	84	90	64	75	43	72	91	35	29.2	1
FRANKLIN	28	5	96	61	96	82	21	82	86	75	86	61	43	29	68	82	21	24.1	11
GLASTONBURY	329	4	99	79	93	73	55	81	87	84	90	58	79	57	80	86	60	28.9	4
GRANBY	111	4	96	70	77	50	34	71	80	67	77	45	54	37	73	81	31	24.7	9
GREENWICH	434	2	99	79	89	69	41	80	84	83	85	62	69	44	79	85	39	27.4	9
GRISWOLD	102	4	97	69	37	54	33	56	74	64	80	43	45	15	63	87	44	24.0	9
GROTON	367	3	98	61	70	58	24	49	74	68	71	38	57	28	60	79	20	22.5	21
GUILFORD	246	4	99	70	86	62	39	72	84	77	84	55	71	32	72	87	36	25.9	9
HANDEN	340	2	98	68	71	45	25	57	73	67	72	38	58	22	59	78	37	21.9	25
HARTFORD	1,304	1	97	51	45	34	11	29	52	46	55	28	30	13	34	56	15	16.5	46
HARTLAND	14	6	100	86	93	71	50	64	100	93	93	64	86	43	71	79	36	28.2	0
KENT	36	6	97	83	83	47	53	69	81	83	84	58	89	33	81	86	44	27.8	3
KILLINGLY	182	6	96	60	72	40	29	44	75	63	69	41	60	29	54	77	35	21.5	22
LEBANON	80	6	100	62	71	49	16	65	75	65	76	44	49	14	62	82	15	21.3	25
LEDYARD	229	4	99	67	86	60	48	65	82	73	89	48	61	41	76	81	59	25.7	9
LISBON	50	4	98	68	86	54	34	64	72	78	82	48	62	12	70	86	10	24.3	16
LITCHFIELD	77	6	96	82	79	65	40	75	81	83	77	62	74	48	77	86	60	27.4	9
MADISON	213	5	100	66	92	75	47	81	83	82	88	60	67	44	82	87	40	27.8	4

© 1986 Connecticut State Board of Education. All rights reserved. Printed in the United States of America



STATE BY DISTRICT REPORT

GRADE 8

MATHEMATICS 1 OF 2

CONNECTICUT MASTERY TESTING PROGRAM

DATE TESTED: 11-86 Mastery Criteria for each objective is 3 of the 4 items correct Remedial Standard is 78 of the 144 items correct	OBJECTIVES TESTED														PAGE 3								
	CONCEPTUAL UNDERSTANDINGS				COMPUTATIONAL SKILLS				TOTAL MATHEMATICS														
order fractions	round whole numbers	round decimals	multiply whole numbers	1d frac. dec. %	convert frac. % from picture	convert frac. % from 10, 100, 1000	1d points on number lines	1d frac. dec. to %	1d points on number lines, scales, grids	add and subtract whole #s	add and subtract frac. parts from data	1d procedure for frac/dec estimation	add and subtract whole #s	add/subt frac. and mixed numbers	multiply and divide whole numbers	determine percent of a number	est. sum/diff. of whole #s and dec	est. prod/quot of whole #s and dec	est. frac. parts / % of whole #s and dec	Average Number of Objectives Mastered	Percent of Student's Objectives Mastered	Percent of Student's Objectives Mastered	Percent of Student's Objectives Mastered

DISTRICT	# OF STUDENTS TESTED	TOC	SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																						
MANCHESTER	485	3	58	55	88	58	67	63	78	76	88	86	62	93	94	89	62	46	55	52	78	68	55	24.3	13
MANSFIELD	108	6	70	70	89	77	63	78	83	78	92	89	76	94	94	88	50	43	42	69	86	68	65	26.1	11
MERIDEN	488	3	55	52	86	67	64	58	71	72	84	86	61	92	94	87	59	32	39	45	79	67	45	22.4	21
MIDDLETOWN	363	3	53	47	86	53	63	49	66	71	85	81	55	93	94	90	61	22	36	34	73	66	37	21.6	23
HILFORD	459	3	61	47	85	46	65	59	72	70	92	87	62	94	93	87	52	40	45	50	76	72	54	23.8	11
MONROE	257	4	59	64	88	79	73	63	82	75	92	78	71	94	95	93	70	37	45	46	82	76	48	24.7	11
MONTVILLE	223	4	60	47	91	62	67	53	80	71	87	93	66	97	96	87	61	36	40	46	77	69	43	23.8	14
NAUGATUCK	316	2	44	52	89	70	67	45	64	64	87	88	53	96	95	88	60	29	43	44	75	67	46	22.0	19
NEW BRITAIN	412	3	37	51	83	67	55	37	62	62	75	78	46	92	94	83	59	23	26	3	64	57	31	19.1	30
NEW CANAAN	216	2	79	75	91	82	81	79	90	87	91	90	81	97	96	96	69	68	83	67	92	85	71	28.7	8
NEW FAIRFIELD	202	4	59	76	90	88	77	73	89	82	90	91	79	92	96	87	66	48	48	61	84	72	54	26.4	8
NEW HAVEN	1,014	1	39	41	72	41	47	26	54	61	58	65	46	92	90	35	48	18	23	24	58	50	27	16.8	44
NEWINGTON	296	2	72	64	94	71	71	67	83	78	89	92	76	96	97	94	65	52	55	59	85	78	60	26.3	6
NEW LONDON	263	3	42	48	80	48	58	38	67	71	77	76	52	94	96	92	63	33	47	50	69	61	51	20.8	25
NEW MILFORD	286	5	67	59	92	76	72	67	84	76	90	91	66	95	98	94	58	41	47	53	88	70	54	25.2	9
NEWTOWN	265	5	68	75	92	85	75	76	89	84	92	93	80	95	95	94	62	41	53	68	88	82	65	27.1	5
NORTH BRANFORD	149	4	66	56	91	73	62	64	77	79	87	81	77	91	91	86	58	38	32	60	82	72	52	24.7	15
NORTH CANAAN	38	6	61	71	84	74	68	61	79	82	92	97	63	97	92	92	79	34	37	47	76	74	53	25.0	8
NORTH HAVEN	212	2	78	70	88	68	73	72	79	74	92	90	74	96	96	90	58	50	53	54	86	71	61	25.2	12
NORTH STONINGTON	65	5	71	58	94	68	72	66	82	72	97	94	72	94	97	88	45	38	38	62	78	68	54	25.4	5
NORMALK	657	3	52	45	84	56	59	48	65	71	77	83	56	93	92	88	53	32	48	41	68	60	38	21.5	25
NORMICH	363	3	47	52	83	71	60	50	65	70	86	80	64	94	96	91	61	31	27	42	69	64	45	21.9	20
OLD SAYBROOK	106	5	71	62	88	82	85	60	79	75	91	92	75	94	95	94	62	46	50	61	81	79	53	26.2	6
OXFORD	85	5	67	78	98	96	66	69	88	73	89	92	75	92	98	96	67	42	20	48	88	78	54	26.2	5
PLAINFIELD	165	6	50	48	87	46	55	56	62	63	85	80	47	92	88	88	44	36	45	38	66	62	41	21.0	28
PLAINVILLE	177	4	60	63	88	66	71	55	77	67	88	85	66	93	91	90	59	37	37	51	80	73	52	23.9	15
PLYMOUTH	162	2	51	55	91	55	68	56	68	68	91	81	67	93	96	88	50	39	34	41	73	68	48	22.6	20
POMFRET	32	6	69	63	91	78	75	69	81	84	91	91	72	97	97	97	81	50	75	59	91	91	47	26.7	6



STATE BY DISTRICT REPORT
GRADE 8

CONNECTICUT MASTERY TESTING PROGRAM

MATHEMATICS 2 OF 2

PAGE 3

DATE TESTED: 10-86

Mastery Criteria for each objective is
3 of the 4 items correct
Remedial Standard is 78
of the 144 items correct

OBJECTIVES TESTED											
PROBLEM SOLVING AND APPLICATIONS				MEASUREMENT/GEOMETRY				TOTAL MATHEMATICS			
add/sub/div/mult/div with calculator	interpret graphs, tables, charts	solve 1-2-step prob-prob-whole #'s and %	solve 1-2-step prob-prob-whole #'s and %	estimate & solve involving measurement	to needed info in problem situations	identify figures using geometric terms	measure/determine volume/area	pick appropriate volume/area measure	conversion within measurement system	Average Number of Objectives Mastered	Percent of Students Needing Further Diagnosis

DISTRICT	# OF STUDENTS TESTED	TOC	SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																
			99	97	85	62	39	76	86	80	81	58	71	34			71	77	39
MANCHESTER	485	3	99	67	81	59	30	67	76	69	78	52	63	33	71	81	33	24.3	13
MANSFIELD	108	6	98	77	85	62	39	76	86	80	81	58	71	34	71	77	39	26.1	11
MERIDEN	488	3	98	63	76	47	29	55	73	63	76	40	49	27	51	69	30	22.4	21
MIDDLETOWN	363	3	98	66	69	42	25	54	65	67	68	39	60	25	60	75	27	21.6	23
MILFORD	459	3	100	66	76	55	30	68	83	72	83	54	71	25	68	81	32	23.8	11
MONROE	257	4	99	69	90	50	33	62	77	72	78	45	66	32	65	85	37	24.7	11
MONTVILLE	223	4	100	66	87	62	32	61	74	76	80	43	54	26	64	86	39	23.8	14
NAUGATUCK	316	2	99	61	75	48	21	54	67	70	72	43	43	23	61	80	22	22.0	19
NEW BRITAIN	412	3	98	47	62	36	15	46	58	53	66	26	36	13	43	71	19	19.1	30
NEW CANAAN	216	2	98	82	89	74	48	74	85	84	82	70	79	46	75	90	44	28.7	8
NEW FAIRFIELD	202	4	98	68	92	62	40	73	81	80	83	55	59	36	75	88	44	26.4	8
NEW HAVEN	1,014	1	95	59	48	31	11	33	53	45	54	21	32	12	37	51	14	16.8	44
NEWINGTON	296	2	99	72	88	66	30	75	83	79	86	60	78	28	76	81	30	26.3	6
NEW LONDON	163	3	99	61	70	46	18	42	63	67	67	36	45	20	47	66	20	20.8	25
NEW MILFORD	286	5	99	69	84	60	36	66	84	75	83	49	57	26	69	82	38	25.2	9
NEWTON	265	5	99	72	91	67	42	77	83	81	83	58	65	41	76	86	35	27.1	5
NORTH BRANFORD	149	4	97	68	79	52	36	67	85	65	79	58	67	40	65	87	43	24.7	15
NORTH CANAAN	38	6	100	61	79	61	39	50	79	82	74	55	97	32	61	84	32	25.0	8
NORTH HAVEN	212	2	98	70	87	61	37	69	77	70	81	53	42	34	63	82	25	25.2	12
NORTH STONINGTON	65	5	100	78	91	40	51	66	77	77	75	58	69	38	80	81	49	25.4	5
NORMALX	657	3	98	60	70	46	26	57	63	60	67	40	47	29	55	67	32	21.3	25
NORWICH	363	3	98	65	74	43	22	55	75	65	71	38	48	21	57	75	28	21.9	20
OLD SAYBROOK	106	5	97	63	89	62	42	63	85	74	78	43	53	45	78	86	53	26.2	6
OXFORD	85	5	100	73	92	58	42	67	88	78	76	41	81	29	76	87	54	26.2	5
PLAINFIELD	165	6	98	51	71	43	22	55	75	57	69	44	58	18	54	79	22	21.0	29
PLAINVILLE	177	4	100	69	85	50	35	53	77	75	80	49	63	24	66	82	31	23.9	15
PLYMOUTH	162	2	97	61	73	51	30	54	81	64	79	44	57	14	69	73	31	22.6	20
POMFRET	32	6	100	72	94	66	50	69	84	75	88	31	75	22	72	94	28	26.7	6

© 1986 Connecticut State Board of Education. All rights reserved. Printed in the United States of America

0312A3



STATE BY DISTRICT REPORT
GRADE 8

CONNECTICUT MASTERY TESTING PROGRAM

MATHEMATICS 1 OF 2

DATE TESTED: 10-86	OBJECTIVES TESTED		TOTAL MATHEMATICS	PAGE 4
	CONCEPTUAL UNDERSTANDINGS	COMPUTATIONAL SKILLS		
Mastery Criteria for each objective is 3 of the 4 items correct. Remedial Standard is 78 of the 144 items correct.	order fractions	add and subtract whole #s	Average Number of Objectives Mastered	Percent of Students Needing Further Diagnosis
	order decimals	multiply and divide whole numbers		
	round whole numbers	add and subtract whole #s		
	round decimals	multiply and divide whole numbers		
	multiply whole numbers	add and subtract whole #s		
	multiply decimals to nearest .x, .xx	add and subtract whole #s		
	convert frac. % to fraction	add and subtract whole #s		
	convert frac. % to decimal	add and subtract whole #s		
	convert frac. % to percent	add and subtract whole #s		
	convert frac. % to decimal	add and subtract whole #s		
	convert frac. % to percent	add and subtract whole #s		
	convert frac. % to decimal	add and subtract whole #s		
	convert frac. % to percent	add and subtract whole #s		
	convert frac. % to decimal	add and subtract whole #s		
convert frac. % to percent	add and subtract whole #s			

DISTRICT	# OF STUDENTS TESTED	TOC	SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																						
PORTLAND	93	5	72	67	94	89	77	70	84	75	92	92	81	91	95	94	71	47	46	58	87	76	61	27.3	8
PRESTON	60	4	65	53	90	72	73	63	85	70	95	90	57	93	95	92	60	20	40	45	82	65	40	24.7	10
PUTNAM	89	6	70	58	94	73	66	64	88	88	85	92	78	79	89	88	69	58	57	58	73	69	49	23.9	4
REDDING	113	5	88	85	94	83	93	75	94	88	93	94	88	96	100	97	75	75	72	74	95	78	62	30.0	0
RIDGEFIELD	306	5	73	76	92	86	79	78	90	88	93	95	84	94	97	94	71	60	64	71	89	79	66	28.2	5
ROCKY HILL	126	4	71	71	96	77	80	69	79	87	93	90	75	98	98	96	71	53	65	67	86	75	63	27.1	6
SALEM	42	5	62	67	81	74	62	57	74	76	88	81	62	95	90	83	50	33	36	43	74	64	45	23.5	14
SALISBURY	21	6	52	57	100	81	81	48	81	67	95	90	90	86	100	90	48	29	14	33	76	62	33	23.3	0
SEYHOUR	138	5	45	50	78	63	69	51	74	70	91	88	64	96	96	77	57	33	41	50	72	73	48	22.3	20
SHARON	15	6	60	53	60	47	52	47	73	73	80	87	67	100	100	93	73	27	27	40	66	73	40	22.8	20
SHELTON	314	3	58	62	88	72	69	57	74	65	86	85	62	95	95	89	64	41	50	45	79	71	52	23.9	13
SHERMAN	21	6	52	43	81	48	71	52	71	81	71	86	52	86	95	86	57	62	71	38	86	62	52	23.6	24
SIMSBURY	316	4	76	79	91	85	84	84	93	85	96	98	89	96	99	96	72	58	74	75	93	83	70	29.4	2
SOMERS	87	4	77	62	91	77	82	79	87	83	91	94	84	95	97	90	77	51	61	69	83	83	67	27.6	7
SOUTHINGTON	473	3	60	53	93	68	69	63	77	75	89	86	73	97	97	87	66	45	48	52	83	81	56	24.8	13
SOUTH MINDSOR	249	2	66	51	84	67	71	65	80	72	89	90	63	96	96	90	60	48	43	50	83	66	59	24.6	12
SPRAGUE	27	4	63	52	100	59	70	63	89	85	96	85	78	93	89	89	63	37	41	67	81	78	56	24.3	4
STAFFORD	112	5	71	82	95	88	71	72	94	93	98	92	81	96	98	95	69	49	50	66	89	85	63	27.4	3
STAMFORD	659	1	52	48	79	53	60	50	64	68	80	80	57	93	94	85	54	33	35	42	72	64	46	21.5	30
STERLING	31	6	55	65	94	61	71	55	74	68	90	87	48	100	90	87	55	39	32	32	77	61	52	22.2	16
STONINGTON	156	4	75	80	96	79	84	72	85	80	94	89	85	96	97	92	76	41	49	68	87	81	64	27.4	8
STRATFORD	435	2	62	58	86	61	70	64	78	77	85	90	70	92	96	93	65	45	55	57	78	71	58	24.8	13
SUFFIELD	125	4	56	58	93	72	66	68	83	73	86	90	61	94	99	94	64	42	36	57	86	71	61	25.0	9
THOMASTON	84	4	49	60	83	63	64	37	62	60	82	71	52	93	89	83	50	25	33	40	73	62	48	21.5	27
THOMPSON	107	6	61	75	94	77	83	63	88	88	88	91	82	98	96	92	71	46	45	65	81	84	60	26.4	8
TOLLAND	147	5	72	62	88	71	83	73	88	84	95	93	74	99	96	91	72	54	64	63	90	71	61	26.9	7
TORRINGTON	236	3	68	73	96	80	71	62	81	71	88	91	71	98	98	95	73	52	55	58	85	80	60	26.2	7
TRUMBULL	349	2	60	65	89	73	75	70	87	81	91	92	69	96	97	95	69	59	64	63	85	77	58	26.9	6



STATE BY DISTRICT REPORT

GRADE 3

MATHEMATICS 2 OF 2

CONNECTICUT MASTERY TESTING PROGRAM

PAGE 4

OBJECTIVES TESTED

PROBLEM SOLVING AND APPLICATIONS

MEASUREMENT/
GEOMETRY

TOTAL
MATHEMATICS

DATE TESTED: 10-84

Mastery Criteria for each objective is
3 of the 4 items correct
Remedial Standard is 78
of the 144 items correct.

1. solve problems involving measurement
 2. estimate & reasonable measurement
 3. solve problems involving measurement
 4. use a compass to draw
 5. use a protractor to draw
 6. use a ruler to draw
 7. use a compass to draw
 8. use a protractor to draw
 9. use a ruler to draw
 10. use a compass to draw
 11. use a protractor to draw
 12. use a ruler to draw
 13. use a compass to draw
 14. use a protractor to draw
 15. use a ruler to draw
 16. use a compass to draw
 17. use a protractor to draw
 18. use a ruler to draw
 19. use a compass to draw
 20. use a protractor to draw
 21. use a ruler to draw
 22. use a compass to draw
 23. use a protractor to draw
 24. use a ruler to draw
 25. use a compass to draw
 26. use a protractor to draw
 27. use a ruler to draw
 28. use a compass to draw
 29. use a protractor to draw
 30. use a ruler to draw
 31. use a compass to draw
 32. use a protractor to draw
 33. use a ruler to draw
 34. use a compass to draw
 35. use a protractor to draw
 36. use a ruler to draw
 37. use a compass to draw
 38. use a protractor to draw
 39. use a ruler to draw
 40. use a compass to draw
 41. use a protractor to draw
 42. use a ruler to draw
 43. use a compass to draw
 44. use a protractor to draw
 45. use a ruler to draw
 46. use a compass to draw
 47. use a protractor to draw
 48. use a ruler to draw
 49. use a compass to draw
 50. use a protractor to draw
 51. use a ruler to draw
 52. use a compass to draw
 53. use a protractor to draw
 54. use a ruler to draw
 55. use a compass to draw
 56. use a protractor to draw
 57. use a ruler to draw
 58. use a compass to draw
 59. use a protractor to draw
 60. use a ruler to draw
 61. use a compass to draw
 62. use a protractor to draw
 63. use a ruler to draw
 64. use a compass to draw
 65. use a protractor to draw
 66. use a ruler to draw
 67. use a compass to draw
 68. use a protractor to draw
 69. use a ruler to draw
 70. use a compass to draw
 71. use a protractor to draw
 72. use a ruler to draw
 73. use a compass to draw
 74. use a protractor to draw
 75. use a ruler to draw
 76. use a compass to draw
 77. use a protractor to draw
 78. use a ruler to draw
 79. use a compass to draw
 80. use a protractor to draw
 81. use a ruler to draw
 82. use a compass to draw
 83. use a protractor to draw
 84. use a ruler to draw
 85. use a compass to draw
 86. use a protractor to draw
 87. use a ruler to draw
 88. use a compass to draw
 89. use a protractor to draw
 90. use a ruler to draw
 91. use a compass to draw
 92. use a protractor to draw
 93. use a ruler to draw
 94. use a compass to draw
 95. use a protractor to draw
 96. use a ruler to draw
 97. use a compass to draw
 98. use a protractor to draw
 99. use a ruler to draw
 100. use a compass to draw
 101. use a protractor to draw
 102. use a ruler to draw
 103. use a compass to draw
 104. use a protractor to draw
 105. use a ruler to draw
 106. use a compass to draw
 107. use a protractor to draw
 108. use a ruler to draw
 109. use a compass to draw
 110. use a protractor to draw
 111. use a ruler to draw
 112. use a compass to draw
 113. use a protractor to draw
 114. use a ruler to draw
 115. use a compass to draw
 116. use a protractor to draw
 117. use a ruler to draw
 118. use a compass to draw
 119. use a protractor to draw
 120. use a ruler to draw
 121. use a compass to draw
 122. use a protractor to draw
 123. use a ruler to draw
 124. use a compass to draw
 125. use a protractor to draw
 126. use a ruler to draw
 127. use a compass to draw
 128. use a protractor to draw
 129. use a ruler to draw
 130. use a compass to draw
 131. use a protractor to draw
 132. use a ruler to draw
 133. use a compass to draw
 134. use a protractor to draw
 135. use a ruler to draw
 136. use a compass to draw
 137. use a protractor to draw
 138. use a ruler to draw
 139. use a compass to draw
 140. use a protractor to draw
 141. use a ruler to draw
 142. use a compass to draw
 143. use a protractor to draw
 144. use a ruler to draw

DISTRICT	# OF STUDENTS TESTED	TOC	SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																
			1	2	3	4	5	6	7	8	9	10	11	12	13	14			
PORTLAND	93	5	99	72	87	69	59	68	80	80	84	54	87	41	73	88	68	27.3	8
PRESTON	60	4	98	60	85	63	40	57	88	85	83	45	50	30	78	94	42	24.7	10
PUTNAM	89	6	100	57	78	44	24	65	71	57	69	34	63	15	53	83	33	23.9	4
REDDING	113	5	99	83	91	77	62	85	91	88	91	69	70	57	81	94	58	30.0	0
RIDGEFIELD	306	5	100	77	92	73	41	77	83	83	85	60	72	45	78	85	41	28.2	5
ROCKY HILL	126	4	98	71	84	69	38	78	78	78	64	58	54	47	75	89	43	27.1	6
SALEM	42	5	100	79	84	50	29	71	88	64	81	50	62	31	64	90	10	23.5	14
SALISBURY	21	6	100	90	81	43	10	62	95	71	95	41	43	29	57	81	14	23.3	0
SEYMOUR	138	5	99	59	75	51	25	50	75	69	78	34	44	22	54	74	25	22.3	20
SHARON	15	6	100	60	80	53	27	73	80	73	93	53	60	47	60	73	13	22.8	20
SHELTON	314	3	99	67	83	59	29	62	81	72	80	51	48	31	59	81	23	23.9	13
SHERMAN	21	6	99	81	90	57	38	52	84	74	67	43	62	43	52	81	33	23.6	24
SIMSBUARY	316	4	99	80	95	71	42	94	89	89	87	69	88	53	82	89	35	29.4	2
SOMERS	87	4	98	78	92	64	33	69	90	77	84	52	90	51	89	85	32	27.6	7
SOUTHINGTON	473	3	99	69	83	57	34	62	82	78	78	49	67	23	73	74	34	24.8	12
SOUTH WINDSOR	249	2	100	65	85	65	38	64	79	77	81	53	51	29	72	78	38	24.6	12
SPRAGUE	27	4	100	78	89	48	18	70	85	81	74	44	30	11	78	78	19	24.3	4
STAFFORD	112	5	100	71	90	61	38	84	88	70	84	47	69	38	64	88	42	27.4	3
STAMFORD	659	1	98	65	70	49	29	51	67	62	73	42	50	26	57	74	28	21.5	30
STERLING	31	6	100	58	58	55	29	52	71	68	65	52	55	13	39	84	26	22.2	16
STONINGTON	156	4	99	78	87	64	47	77	88	74	83	62	60	34	78	84	47	27.4	8
STRATFORD	435	2	99	71	84	62	38	60	77	71	81	49	57	34	68	82	39	24.8	13
SUFFIELD	125	4	98	69	87	53	38	68	79	78	85	50	51	34	73	87	39	25.0	9
THOMASTON	84	4	93	54	79	43	27	60	70	67	74	32	52	35	42	81	30	21.5	27
THOMPSON	107	6	99	72	84	57	38	77	77	81	79	48	70	29	67	84	42	26.4	3
TOLLAND	147	5	99	82	83	61	44	63	84	77	73	52	79	41	73	84	50	26.9	7
TORRINGTON	251	3	99	75	90	65	40	64	83	77	85	46	59	38	68	83	35	26.2	7
TRUMBULL	349	2	99	79	87	63	37	74	85	81	84	58	81	41	74	87	41	26.9	6



STATE BY DISTRICT REPORT
GRADE 8

CONNECTICUT MASTERY TESTING PROGRAM

MATHEMATICS 1 OF 2

		OBJECTIVES TESTED																TOTAL MATHEMATICS		PAGE 5						
		CONCEPTUAL UNDERSTANDINGS								COMPUTATIONAL SKILLS																
DISTRICT		# OF STUDENTS TESTED	TOC	SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																						
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16			17	18	19	20	
UNION		5	6	80	80	100	80	60	80	100	100	80	100	100	100	80	60	20	80	100	100	80	29.6	20		
VERNON		334	3	68	62	90	64	69	62	76	67	86	85	67	95	92	91	58	40	44	50	78	71	55	24.5	12
VOLUNTOHN		22	6	59	64	86	91	73	86	95	100	100	73	86	95	82	68	59	45	59	100	91	55	27.5	5	
WALLINGFORD		437	3	61	49	92	67	67	62	78	66	87	89	71	94	96	86	57	40	47	41	83	77	48	23.8	12
WATERBURY		929	1	35	32	78	46	49	33	47	51	68	72	40	93	92	83	42	22	20	30	61	51	34	17.6	41
WATERFORD		199	4	68	64	90	80	74	67	85	80	90	91	70	97	97	93	68	35	51	59	83	73	55	25.8	10
WATERTOWN		208	2	63	70	91	74	67	58	78	69	92	84	67	95	97	95	73	43	56	52	87	68	54	24.7	9
WESTBROOK		58	6	67	48	91	78	78	62	91	78	97	88	67	91	95	88	45	31	29	45	78	69	62	25.3	13
WEST HARTFORD		561	2	73	69	89	75	79	76	88	77	89	93	79	96	97	92	71	56	61	68	89	83	67	27.8	7
WEST HAVEN		364	2	67	70	89	81	73	64	88	82	92	92	74	95	98	92	74	53	59	68	85	79	61	25.9	8
WESTON		141	5	70	84	97	91	83	74	89	86	90	94	87	96	94	94	75	43	55	61	88	78	64	27.6	4
WESTPORT		265	3	76	72	93	80	81	75	87	81	92	93	82	96	94	90	67	59	61	68	91	83	70	28.1	6
WETHERSFIELD		215	2	66	68	89	75	73	69	82	69	93	89	66	94	94	94	62	54	52	58	85	73	58	25.6	10
WILLINGTON		63	5	68	60	97	79	78	60	71	79	94	94	75	87	100	89	56	40	43	65	79	76	60	25.6	8
MILTON		212	4	74	74	90	90	76	80	92	85	92	91	75	95	98	94	69	67	82	67	91	78	73	28.4	5
MINCHESTER		125	6	55	57	83	67	68	58	72	74	86	81	70	95	98	91	52	24	25	44	81	74	51	23.2	15
MINDHAM		198	6	57	43	72	46	48	37	54	54	76	70	52	92	80	78	35	13	9	28	65	51	31	18.2	38
MINDSOR		266	2	63	54	92	64	67	66	79	80	89	91	65	94	93	89	64	40	46	55	76	70	55	24.6	14
MINDSOR LOCKS		122	4	57	61	84	75	71	56	79	64	82	89	60	95	96	90	73	34	36	46	77	71	55	23.6	18
MOLCOTT		170	2	68	56	94	53	76	57	69	70	92	88	70	97	98	94	56	51	47	44	89	74	51	24.7	12
MOOSTOCK		62	6	49	46	87	61	61	61	59	62	90	84	69	89	92	89	40	15	11	40	84	53	50	22.6	13
REGIONAL NO. 4		134	6	54	68	80	57	75	62	77	73	92	81	66	94	97	90	62	43	49	53	79	74	59	24.9	13
REGIONAL NO. 5		307	4	65	65	89	72	74	71	83	79	90	90	72	94	94	91	64	48	53	60	86	75	64	26.4	9
REGIONAL NO. 6		54	6	67	67	93	85	78	72	91	87	91	93	73	93	94	93	65	54	67	54	83	65	46	26.2	2
REGIONAL NO. 7		110	6	73	67	97	73	74	75	93	82	91	96	79	95	99	95	69	47	48	68	90	75	65	27.5	2
REGIONAL NO. 8		204	5	64	61	88	73	68	63	84	82	90	88	65	93	94	88	61	35	42	55	81	66	61	24.9	13
REGIONAL NO. 10		167	5	48	58	87	70	70	57	71	55	92	86	66	93	93	85	56	37	34	47	78	64	50	22.9	17
REGIONAL NO. 11		60	6	62	60	88	63	72	60	77	65	80	87	57	92	95	80	45	28	27	38	82	62	52	23.6	17

DATE TESTED: 10-86

Mastery Criteria for each objective is
3 of the 4 items correct
Remedial Standard is 78
of the 144 items correct

STATE BY DISTRICT REPORT
GRADE 8

CONNECTICUT MASTERY TESTING PROGRAM

MATHEMATICS 2 OF 2

OBJECTIVES TESTED		PAGE 5																			
		PROBLEM SOLVING AND APPLICATIONS				MEASUREMENT/ GEOMETRY				TOTAL MATHEMATICS											
DATE TESTED: 10-86		Mastery Criteria for each objective is 3 of the 4 items correct Remedial Standard is 78 of the 144 items correct.																			
		solve problems involving measurement				estimate a reasonable answer				solve problems involving measurement				estimate a reasonable answer							
DISTRICT		# OF STUDENTS TESTED		TOC		SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE															
		UNION		5	6	100	80	80	60	100	100	80	80	80	80	80	40	80	100	60	29.6
VERNON		334	3	99	68	84	56	35	65	78	73	80	56	55	38	73	80	41	24.5	12	
VOLUNTOY		22	6	100	77	91	68	45	73	82	91	86	50	82	50	82	91	23	27.5	5	
MALLINGFORD		437	3	98	69	79	57	24	59	81	74	75	54	59	21	62	81	21	23.8	12	
WATERBURY		929	1	97	56	58	36	13	37	64	57	61	29	27	10	40	59	16	17.6	41	
WATERFORD		199	4	99	76	88	61	45	65	83	77	79	52	57	40	63	85	42	25.8	10	
WATERTOWN		208	2	99	71	81	60	30	66	80	72	83	44	55	20	63	84	28	24.7	9	
NESTBROOK		58	6	100	79	95	66	39	79	79	86	77	57	73	27	66	86	48	25.3	13	
NEST HARTFORD		561	2	99	79	90	72	42	78	86	82	87	62	77	48	81	86	40	27.8	7	
NEST HAVEN		364	2	98	82	82	64	28	66	80	66	77	51	60	27	60	79	31	25.9	8	
NESTON		141	5	99	79	89	62	43	73	82	82	86	53	72	47	72	89	41	27.6	4	
NESTPORT		265	3	99	82	94	68	46	84	83	84	89	62	74	43	75	85	40	28.1	6	
METHERSFIELD		215	2	100	67	84	64	32	80	77	77	79	51	64	36	70	83	33	25.6	10	
HILLINGTON		63	5	98	70	78	57	35	76	87	70	95	56	60	32	78	97	22	25.6	8	
HILTON		212	4	99	79	92	73	44	77	84	86	88	60	79	39	75	85	43	28.4	5	
WINCHESTER		125	6	99	71	79	48	23	61	82	70	74	55	60	14	70	76	23	23.2	15	
KINDHAM		198	6	97	55	61	29	21	44	62	55	60	30	44	16	51	70	26	18.2	38	
KINDSOR		266	2	99	74	86	60	40	64	73	74	79	46	62	32	66	77	41	24.6	14	
KINDSOR LOCKS		122	4	97	68	85	52	26	68	70	76	77	45	57	24	70	75	25	23.6	18	
MOLCOTT		170	2	100	73	84	59	34	59	84	76	82	61	47	24	69	85	42	24.7	12	
MOODSTOCK		62	6	100	66	77	45	29	76	77	71	74	61	63	32	81	87	23	22.6	13	
REGIONAL NO. 4		134	6	100	73	81	45	36	69	81	78	87	54	71	39	72	89	36	24.9	13	
REGIONAL NO. 5		307	4	100	72	88	64	49	72	85	77	81	58	72	34	77	88	47	26.4	9	
REGIONAL NO. 6		54	6	100	70	89	65	31	80	78	76	81	54	63	35	69	87	33	26.2	2	
REGIONAL NO. 7		110	6	100	71	95	61	50	74	86	77	90	43	82	40	85	88	55	27.5	2	
REGIONAL NO. 8		204	5	99	63	82	55	43	71	77	72	79	47	72	33	69	82	47	24.9	13	
REGIONAL NO. 10		167	5	99	59	80	47	25	59	77	70	78	41	53	28	64	83	23	22.9	17	
REGIONAL NO. 11		60	6	100	65	85	50	42	63	78	73	80	48	77	30	70	85	47	23.6	17	

STATE BY DISTRICT REPORT
GRADE 8

CONNECTICUT MASTERY TESTING PROGRAM

MATHEMATICS 1 OF 2

		OBJECTIVES TESTED																				TOTAL MATHEMATICS		PAGE 6			
		CONCEPTUAL UNDERSTANDINGS										COMPUTATIONAL SKILLS															
DATE TESTED: 10-86		1. identify the parts of a number 2. compare and order whole numbers 3. round whole numbers 4. multiply and divide whole numbers 5. add and subtract whole numbers 6. multiply and divide whole numbers 7. determine percent of a number 8. find sum/diff of a number 9. find prod/quot of whole #'s and dec 10. add/sub frac parts / % of whole #'s and dec 11. add/sub frac parts / % of whole #'s and dec 12. multiply/divide mixed numbers 13. determine percent of mixed numbers 14. find sum/diff of mixed numbers 15. find prod/quot of mixed numbers 16. add/sub frac parts / % of whole #'s and dec 17. multiply/divide mixed numbers 18. determine percent of mixed numbers 19. find sum/diff of mixed numbers 20. find prod/quot of mixed numbers																				Average Number of Objectives Mastered		Percent of Students Needing Further Diagnosis			
		Mastery Criteria for each objective is 3 of the 4 items correct Remedial Standard is 78 of the 144 items correct.																									
DISTRICT		# OF STUDENTS TESTED	TOC	SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																							
REGIONAL NO. 12	69	6	72	54	97	72	71	81	80	74	90	88	71	97	99	90	52	39	41	51	80	72	57	26.0	6		
REGIONAL NO. 13	306	5	56	66	86	80	75	70	84	74	92	90	63	94	98	92	68	34	28	70	89	72	67	25.2	10		
REGIONAL NO. 14	106	4	56	75	92	92	74	68	85	75	91	91	81	97	98	93	63	37	39	57	89	84	53	25.6	8		
REGIONAL NO. 15	218	4	67	72	93	81	73	73	87	72	94	91	80	95	98	93	65	44	44	55	88	83	59	26.0	7		
REGIONAL NO. 16	130	4	48	52	85	59	59	56	78	71	92	88	58	93	93	78	46	16	15	50	67	55	52	21.8	18		
REGIONAL NO. 17	161	6	69	59	94	71	74	62	81	71	87	90	69	92	98	93	66	37	35	48	84	70	54	25.4	14		
REGIONAL NO. 18	83	6	63	58	95	84	82	67	65	70	90	92	63	92	99	98	70	41	53	59	76	78	52	25.7	8		



STATE BY DISTRICT REPORT
GRADE 8

CONNECTICUT MASTERY TESTING PROGRAM

MATHEMATICS 2 OF 2

OBJECTIVES TESTED		TOTAL MATHEMATICS		PAGE 6															
						PROBLEM SOLVING AND APPLICATIONS	MEASUREMENT/GEOMETRY												
<p>DATE TESTED: 10-86</p> <p>Mastery Criteria for each objective is 3 of the 4 items correct Remedial Standard is 78 of the 144 items correct</p>		<p>Percent of Students Needing Further Diagnosis</p>		<p>Average Number of Objectives Mastered</p>															
						conversion within measurement system													
						pick approp metric/unit & measure													
						measure/determine perimeter/area													
						at length area volume/surface													
						measure/determine perimeter/area													
						at length area volume/surface													
						identify figures using geometric terms													
						measure/determine perimeter/area													
						at length area volume/surface													
DISTRICT	# OF STUDENTS TESTED	TOC	SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																
REGIONAL NO. 12	69	6	97	71	96	52	45	77	83	86	88	61	77	39	64	87	54	26.0	6
REGIONAL NO. 13	106	5	100	74	89	62	27	68	87	79	78	46	63	26	72	73	29	25.2	10
REGIONAL NO. 14	106	4	99	70	86	47	37	63	81	80	77	51	58	28	72	89	36	25.6	8
REGIONAL NO. 15	216	4	99	66	89	57	32	67	84	74	83	54	61	33	71	83	33	26.0	7
REGIONAL NO. 16	130	4	96	65	81	45	24	65	76	66	75	42	49	18	57	84	25	21.8	18
REGIONAL NO. 17	161	6	96	66	86	58	35	69	83	75	85	50	68	48	71	92	42	25.4	14
REGIONAL NO. 18	83	6	99	66	93	67	33	65	81	75	87	46	75	40	77	86	37	25.7	8



STATE BY DISTRICT REPORT

GRADE 8

MATHEMATICS 1 OF 2

CONNECTICUT MASTERY TESTING PROGRAM

OBJECTIVES TESTED		TOTAL MATHEMATICS	PAGE 7
CONCEPTUAL UNDERSTANDINGS	COMPUTATIONAL SKILLS		
understand order fractions round decimals round whole numbers multiply decimals divide decimals convert whole numbers to tenths, hundredths convert tenths, hundredths to whole numbers convert fractions to decimal convert decimal to fraction add, subtract, multiply, divide whole numbers add, subtract, multiply, divide mixed numbers convert mixed numbers to improper fractions convert improper fractions to mixed numbers find the least common denominator add, subtract fractions multiply fractions divide fractions estimate products and quotients estimate the sum, difference, product, and quotient determine percent of a number find the percent of a number determine the percent of a number convert percent to fraction, decimal convert fraction, decimal to percent	add and subtract whole numbers add and subtract mixed numbers multiply and divide whole numbers multiply and divide mixed numbers add and subtract fractions multiply and divide fractions find the least common denominator add, subtract fractions multiply and divide fractions convert mixed numbers to improper fractions convert improper fractions to mixed numbers find the least common denominator add, subtract fractions multiply and divide fractions estimate products and quotients estimate the sum, difference, product, and quotient determine percent of a number find the percent of a number determine the percent of a number convert percent to fraction, decimal convert fraction, decimal to percent		Percent of Students Meeting Further Diagnostic Average Number of Objectives Mastered % of whole #s and dec and frac parts

DATE TESTED: 10-86

Mastery Criteria for each objective is 3 of the 4 items correct
Remedial Standard is 78 of the 144 items correct

DISTRICT	# OF STUDENTS TESTED	TOC	SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																													
TOC 1 TOTAL	4,933		38	36	75	40	49	30	53	62	70	71	42	93	92	84	48	21	26	30	59	53	32	17.6	42							
TOC 2 TOTAL	6,416		66	63	90	70	72	66	81	75	89	90	70	95	96	91	64	48	53	57	83	73	58	25.4	11							
TOC 3 TOTAL	7,403		55	53	87	61	64	55	72	70	84	84	61	94	94	88	59	36	43	45	76	68	48	22.9	18							
TOC 4 TOTAL	6,291		66	69	91	79	75	49	84	77	91	90	75	94	96	92	65	46	51	57	86	76	59	26.2	9							
TOC 5 TOTAL	3,403		64	66	90	77	73	67	83	78	91	91	72	95	96	91	63	44	48	58	84	73	58	25.7	9							
TOC 6 TOTAL	2,386		61	60	88	66	68	61	76	73	87	86	66	93	94	88	56	37	40	49	78	67	51	24.0	15							
STATE TOTAL	30,832		58	58	87	66	67	58	74	72	85	85	64	94	95	89	60	39	44	49	78	69	51	23.7	17							



STATE BY DISTRICT REPORT
GRADE 8

CONNECTICUT MASTERY TESTING PROGRAM

MATHEMATICS 2 OF 2

OBJECTIVES TESTED		TOTAL MATHEMATICS		PAGE 7															
						PROBLEM SOLVING AND APPLICATIONS	MEASUREMENT/GEOMETRY												
DATE TESTED: 10-86 Mastery Criteria for each objective is 3 of the 4 items correct Remedial Standard is 78 of the 144 items correct.	100% (supplies with calculator)	100% (supplies with calculator)	100% (supplies with calculator)	100% (supplies with calculator)	100% (supplies with calculator)	100% (supplies with calculator)													
	100% (supplies with calculator)	100% (supplies with calculator)	100% (supplies with calculator)	100% (supplies with calculator)	100% (supplies with calculator)	100% (supplies with calculator)													
DISTRICT	# OF STUDENTS TESTED	TOC	SCORES INDICATE THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																
TOC 1 TOTAL	4,933		97	58	52	37	13	35	57	50	59	28	33	15	40	60	14	17.6	42
TOC 2 TOTAL	6,416		99	73	84	62	35	68	80	75	81	53	62	34	70	83	36	25.4	11
TOC 3 TOTAL	7,403		98	65	76	51	28	59	74	68	74	44	55	27	61	77	29	22.9	18
TOC 4 TOTAL	6,291		99	72	88	62	40	70	82	78	83	53	66	37	72	85	41	26.2	9
TOC 5 TOTAL	3,403		99	70	86	60	38	70	82	76	81	50	65	35	71	85	38	25.7	9
TOC 6 TOTAL	2,386		98	67	80	52	33	65	78	72	77	49	66	30	66	83	35	24.0	15
STATE TOTAL	30,832		98	67	78	54	31	61	76	70	76	46	57	30	63	78	32	23.7	17

© 1986 Connecticut State Board of Education. All rights reserved. Printed in the United States of America

0112A3



APPENDIX I

State by District Report - October 1986

Grade Eight Language Arts Test Results

STATE BY DISTRICT REPORT
GRADE 8

CONNECTICUT MASTERY TESTING PROGRAM

LANGUAGE ARTS

DATE TESTED: 10-86		OBJECTIVES TESTED										TOTAL LANGUAGE ARTS	DEGREES OF READING POWER (DRP)	WRITING SAMPLE								PAGE 1						
		WRITING MECHANICS		LOCATING INFORMATION		LISTENING COMPREHENSION		READING COMPREHENSION						WRITING SAMPLE														
		Capitalization & punctuation	Spelling/homonyms/abbreviations	Loca	Locating Information	Literal	Inferential and evaluative	Literal	Inferential	Literal	Inferential			evaluative	Average Number of Objectives Mastered	Below 55	67+	Average DRP Score	% of Students Needing Further Diagnosis	2	3		4	5	6	7	8	Average Holistic Score
MASTERY CRITERIA (# CORRECT/ # POSSIBLE)		9/12	6/8	11/15	3/4	9/12	3/4	3/4	12/18	6/8	10/14	10/14																
DISTRICT	# OF STUDENTS TESTED	TC	SCORES REPRESENT THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																									
ALSONIA	127	5	74	68	74	80	84	77	51	64	67	44	45	7.3	30	17	53	61	30	12	10	38	16	12	9	4	4.8	23
ASHFORD	46	6	85	76	83	80	91	76	74	83	78	50	59	8.3	17	17	65	64	17	0	0	24	26	22	17	11	5.7	0
AVON	150	4	88	81	93	89	94	89	76	79	88	77	83	9.4	12	11	77	68	12	2	3	11	25	27	22	9	5.8	5
BERLIN	161	4	81	74	84	83	92	80	58	76	77	59	61	8.3	16	17	66	64	16	6	11	39	16	18	7	3	4.4	17
BETHEL	191	4	82	73	86	85	92	87	69	76	80	69	69	8.7	15	15	70	65	15	1	2	17	24	21	21	14	5.8	3
BLOOMFIELD	170	2	58	70	72	78	80	67	54	66	70	51	57	7.2	31	18	50	58	31	7	9	22	22	15	15	10	5.3	14
BOLTON	45	4	84	73	91	89	86	89	69	76	78	76	64	8.8	20	7	73	65	20	2	7	22	27	27	11	4	5.2	9
BOZRAH	18	5	83	67	94	61	83	67	61	67	72	50	78	7.8	22	11	67	64	22	0	0	34	28	28	6	0	5.0	0
BRANFORD	233	4	81	71	84	82	86	83	67	66	75	60	66	8.2	26	11	64	62	26	3	2	16	20	24	19	1	5.8	5
BRIDGEPORT	1,030	1	54	52	54	61	66	54	43	32	52	24	28	5.3	54	18	28	53	54	9	17	28	22	13	7	3	4.4	27
BRISTOL	575	3	75	65	77	78	79	73	54	62	65	51	55	7.3	24	20	56	61	24	9	14	26	21	13	14	4	4.7	22
BROOKFIELD	190	4	84	75	85	79	88	80	72	79	80	69	71	8.6	18	13	69	64	18	5	9	24	20	17	10	7	5.0	14
BROOKLYN	89	6	69	64	78	75	76	55	44	52	66	45	45	6.7	38	19	43	58	38	2	8	25	2	25	13	0	5.0	10
CANAAN	11	6	82	73	100	100	91	82	82	45	73	55	82	8.6	0	36	64	65	0	0	9	18	36	9	9	18	5.9	9
CANTERBURY	67	6	90	73	87	75	88	82	79	73	78	69	69	8.6	25	9	66	63	25	2	3	29	15	24	9	18	5.6	9
CANTON	75	4	87	83	93	89	100	85	80	83	87	87	72	9.5	4	11	85	70	4	5	4	23	17	25	19	7	5.4	9
CHESHIRE	323	2	85	85	92	84	95	85	79	86	87	76	74	9.3	10	10	80	69	10	2	7	14	16	22	19	19	5.8	9
CLINTON	161	5	88	69	84	84	88	79	75	75	74	60	63	8.4	23	17	60	61	23	9	14	28	20	19	8	2	4.4	23
COLCHESTER	108	5	65	78	78	77	81	69	64	61	67	59	62	7.6	21	14	65	63	21	6	5	19	19	24	16	13	5.5	10
COLUMBIA	39	5	77	64	85	87	90	85	62	82	74	59	59	8.4	21	15	64	63	21	0	11	14	20	29	11	14	5.8	11
CORNHILL	6	6	100	100	100	100	100	100	100	100	100	100	100	11.0	0	0	100	75	0	0	17	0	17	33	30	0	5.7	17
COVENTRY	126	4	79	68	83	79	85	81	53	67	70	60	60	7.8	18	22	60	63	10	5	4	15	18	10	25	14	8.7	4
CROMWELL	97	4	84	71	81	78	86	76	58	69	74	61	65	8.1	23	13	64	61	23	5	13	36	16	21	4	4	4.4	19
DANBURY	563	3	65	61	69	72	82	70	54	56	62	46	45	6.9	35	17	48	58	35	9	12	21	26	17	9	6	4.8	21
DARTEN	205	2	87	82	96	86	94	82	81	80	81	75	84	9.3	9	12	78	68	9	2	2	22	32	17	16	10	5.9	4
DERBY	95	5	65	69	72	64	80	62	56	48	72	39	39	6.7	42	17	41	56	42	6	8	23	20	14	18	11	5.2	15
EASTFORD	10	6	100	50	90	80	80	80	70	70	70	30	50	7.7	20	50	30	62	20	0	0	20	60	0	20	0	5.2	0
EAST GRANBY	51	4	82	73	82	82	88	71	78	82	78	57	65	8.4	18	8	75	65	10	0	8	12	28	20	10	16	5.9	8

STATE BY DISTRICT REPORT
GRADE 8

CONNECTICUT MASTERY TESTING PROGRAM

LANGUAGE ARTS

DATE TESTED: 10-86	OBJECTIVES TESTED												TOTAL LANGUAGE ARTS	DEGREES OF READING POWER (DRP)	WRITING SAMPLE								PAGE 2					
	WRITING MECHANICS		LOCATING INFORMATION		LISTENING COMPREHENSION		READING COMPREHENSION				Average Number of Objectives Mastered	Below 55			55-61	62+	Average DRP Score	% of Students Needing Further Diagnosis										
	capitalization & punctuation	spelling/homonyms/abbreviations	spelling	ions	locating information	underlining and outlining	literal	inferential and evaluative	literal	inferential								evaluative	2	3	4	5	6	7	8	Average Holistic Score	% of Students Needing Further Diagnosis	
MASTERY CRITERIA (# CORRECT/ # POSSIBLE)		9/12	6/8	11/15	3/4	9/12	3/4	3/4	12/18	6/8	10/14	10/14																
DISTRICT	# OF STUDENTS TESTED	TOC	SCORES REPRESENT THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																									
EAST HADDAM	71	5	83	70	79	72	79	73	62	68	73	63	65	7.9	24	17	59	63	24	1	8	27	27	14	15	7	5.2	10
EAST HAMPTON	104	5	86	62	90	83	88	77	70	75	71	65	72	8.4	25	19	56	61	25	7	21	26	24	17	5	0	4.4	28
EAST HARTFORD	348	2	69	62	73	76	84	70	52	63	68	51	51	7.3	19	22	49	59	29	6	13	31	22	18	7	3	4.6	20
EAST HAVEN	167	2	64	63	74	74	79	63	58	59	62	37	46	6.8	34	17	49	58	34	16	12	31	20	17	8	2	4.5	22
EAST LYME	185	4	80	72	86	85	93	84	62	68	83	75	77	8.7	19	14	68	64	19	5	6	23	25	18	16	6	5.2	11
EASTON	77	4	75	87	87	86	92	78	66	71	82	73	77	8.7	16	16	68	65	16	0	4	21	22	22	16	16	5.7	4
EAST HINDSOR	87	4	65	60	81	67	87	71	52	55	71	51	52	7.1	21	25	54	61	21	9	6	29	32	15	6	2	4.6	15
ELLINGTON	114	4	85	82	85	90	97	84	76	75	82	68	69	8.9	7	16	77	68	7	2	6	21	19	18	24	10	5.6	8
ENFIELD	459	3	68	63	80	79	83	73	53	60	65	51	50	7.3	28	14	58	60	28	7	15	28	24	15	8	2	4.6	23
FAIRFIELD	398	2	84	75	87	87	91	85	66	80	81	70	71	8.8	17	17	66	64	17	2	7	18	25	20	18	10	5.5	9
FARMINGTON	162	4	77	78	91	90	98	90	68	72	90	82	75	9.1	6	11	33	69	6	1	1	15	12	22	25	24	6.2	2
FRANKLIN	28	5	75	71	79	64	96	82	54	71	75	50	54	7.7	21	25	54	61	21	0	4	0	22	19	22	33	6.6	4
GLASTONBURY	327	4	88	71	92	85	94	84	74	84	85	80	82	9.2	9	13	78	69	9	1	3	19	20	17	25	15	5.8	4
GRANBY	112	4	76	69	86	79	94	85	67	71	79	71	72	8.5	12	13	76	67	12	4	9	29	17	19	14	9	5.2	13
GREENWICH	434	2	80	77	87	84	89	82	69	76	82	71	73	8.7	16	11	73	65	16	2	4	19	19	27	18	10	5.6	7
GRISHOLD	102	4	78	56	70	71	80	72	52	51	71	43	53	7.0	38	17	45	58	38	15	21	20	27	9	9	0	4.2	34
GROTON	368	3	76	65	75	74	83	73	57	61	76	54	52	7.5	29	15	55	60	29	12	11	33	18	14	8	3	4.5	24
GUILFORD	246	4	83	73	87	82	88	80	70	71	77	67	69	8.5	15	15	70	64	15	2	3	22	23	23	14	11	5.5	5
HAMDEN	341	2	65	67	76	72	82	70	51	54	72	56	62	7.3	31	21	48	58	31	7	9	27	22	15	10	10	5.0	16
HARTFORD	1,504	1	45	46	43	60	66	47	41	32	46	21	27	4.7	55	18	27	52	55	15	20	28	19	10	7	2	4.2	35
HARTLAND	14	6	93	71	100	79	93	86	79	100	93	71	71	9.4	14	14	71	67	14	7	29	25	14	7	7	4	4.2	36
KENT	37	6	86	84	83	89	100	89	84	62	83	86	81	9.3	8	11	81	76	8	0	0	6	14	20	33	19	6.2	0
KILLINGLY	182	6	69	60	72	71	74	65	55	55	67	42	53	6.8	30	14	56	60	30	9	17	36	13	15	6	3	4.4	27
LEBANON	80	6	69	61	71	75	75	73	59	59	68	49	56	7.2	32	15	53	59	32	6	10	25	23	13	17	5	5.0	17
LEDYARD	229	4	78	75	76	83	90	78	69	79	73	64	67	8.3	28	14	59	61	28	4	6	24	22	18	16	8	5.2	12
LISBON	50	4	80	78	84	86	92	68	56	70	74	60	66	8.1	20	16	64	63	20	0	14	30	14	16	10	8	5.2	14
LITCHFIELD	78	6	70	57	78	78	87	89	64	69	76	62	64	8.0	23	14	63	62	23	11	5	30	18	16	12	8	4.9	16
MADISON	213	5	90	83	92	88	88	85	76	80	81	71	74	9.1	15	12	72	67	15	1	3	19	30	21	18	9	5.6	4

STATE BY DISTRICT REPORT

GRADE 8

CONNECTICUT MASTERY TESTING PROGRAM

LANGUAGE ARTS

DATE TESTED: 10-86	OBJECTIVES TESTED											TOTAL LANGUAGE ARTS	DEGREES OF READING POWER (ORP)	WRITING SAMPLE								PAGE 3						
	WRITING MECHANICS		LOCATING INFORMATION		LISTENING COMPREHENSION		READING COMPREHENSION			Average Number of Objectives Mastered	Below 55			55-61	62+	Average DRP Score	% of Students Needing Further Diagnosis	2	3	4	5		6	7	8	Average Hall-alk Score	% of Students Needing Further Diagnosis	
	Capitalization & punctuation	Spelling/homonyms/abbreviations	agreement	tone	locating information	notetaking and outlining	literal	inferential and evaluative	literal																			inferential
MASTERY CRITERIA (# CORRECT/ # POSSIBLE)		9/12	6/8	11/15	3/4	9/12	3/4	3/4	12/18	6/8	10/14	10/14																
DISTRICT	# OF STUDENTS TESTED	TOC	SCORES REPRESENT THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																									
MANCHESTER	485	3	77	65	78	82	84	79	61	63	67	54	59	7.7	28	13	59	61	28	6	7	30	23	16	11	6	4.9	13
MANSFIELD	108	6	70	64	77	76	85	79	72	75	80	72	76	8.3	18	11	71	67	18	6	5	13	15	21	21	20	5.8	10
MERIDEN	490	3	69	64	70	74	79	70	52	56	69	49	56	7.1	22	18	60	62	22	8	12	32	20	14	10	4	4.6	20
MIDDLETOWN	362	3	67	57	70	74	79	65	49	54	67	44	47	6.7	41	19	40	57	41	9	10	33	18	14	14	3	4.7	19
MILFORD	459	3	74	69	77	83	87	76	65	71	74	54	55	7.9	21	18	61	63	21	4	11	20	22	19	16	8	5.2	15
MONROE	258	4	87	74	86	80	84	72	63	67	72	58	59	8.0	16	21	64	64	16	4	6	23	25	17	16	9	5.2	11
MONTVILLE	223	4	69	66	84	80	92	81	60	73	70	55	55	7.9	25	17	59	62	25	2	9	28	22	24	10	6	5.1	11
NAUGATUCK	315	2	65	64	75	79	85	73	44	49	70	39	46	6.9	33	18	49	58	33	4	11	28	24	19	9	5	4.9	15
NEW BRITAIN	416	3	57	53	55	64	76	64	48	35	55	33	39	5.8	40	20	40	57	40	14	20	33	18	9	5	1	4.1	34
NEW CANAAN	216	2	83	80	87	81	90	84	72	86	81	75	74	8.9	17	8	75	67	17	2	3	13	16	30	19	17	5.9	6
NEW FAIRFIELD	202	4	82	75	82	78	87	73	72	74	80	60	67	8.3	20	14	66	63	20	3	3	16	31	27	12	7	5.4	6
NEW HAVEN	1,021	1	46	49	44	54	64	41	39	27	47	23	24	4.6	62	16	22	50	62	22	20	28	17	8	3	1	3.0	42
NEWINGTON	296	2	86	75	87	86	94	85	73	74	85	72	71	8.9	11	11	77	68	11	4	9	17	22	23	17	8	5.3	13
NEW LONDON	163	3	70	65	66	72	75	57	50	46	63	44	51	6.6	45	25	30	56	45	11	15	25	22	11	9	7	4.8	24
NEW MILFORD	287	5	83	74	86	89	92	81	60	64	78	63	64	8.3	17	13	70	64	17	3	10	31	23	15	14	5	5.0	12
NEWTON	266	5	81	71	88	83	93	81	70	79	81	73	74	8.7	14	15	71	67	14	2	5	25	31	18	10	8	5.2	8
NORTH BRANFORD	148	4	72	68	82	79	88	84	62	55	74	56	59	7.8	24	16	60	62	24	15	13	27	23	12	7	3	4.4	28
NORTH CANAAN	38	6	76	71	82	76	87	84	63	63	71	55	74	8.0	13	16	71	64	13	0	13	39	21	16	5	5	4.8	12
NORTH HAVEN	212	2	75	73	79	80	87	72	59	67	70	53	53	7.7	18	28	55	62	18	8	13	33	19	18	6	3	4.6	21
NORTH STONINGTON	65	5	72	65	86	77	88	74	65	72	66	68	66	8.0	26	18	55	63	26	5	6	17	25	22	13	13	5.4	11
NORWALK	659	3	61	59	66	71	71	60	47	43	62	40	44	6.2	40	17	38	55	46	10	13	24	23	14	10	5	4.7	23
NORWICH	365	3	73	58	76	75	89	76	54	59	68	55	57	7.4	29	15	56	60	29	0	11	30	23	14	11	3	4.7	19
OLD SAYBROOK	105	5	80	74	84	89	88	76	65	70	70	65	64	8.2	17	19	64	63	17	10	10	29	18	20	11	3	4.7	19
OXFORD	85	5	88	81	89	71	87	80	67	72	86	65	61	8.5	19	13	68	65	19	0	6	24	31	19	16	5	5.3	6
PLAINFIELD	165	6	62	53	71	68	78	62	47	56	51	31	38	6.2	36	22	42	58	36	3	10	27	18	20	12	9	5.1	13
PLAINVILLE	177	4	63	58	75	74	79	63	53	53	66	47	56	6.9	30	20	50	58	30	6	22	26	25	11	6	3	4.4	28
PLYMOUTH	162	2	61	59	75	78	80	67	51	55	72	41	46	6.9	33	18	49	59	33	4	7	30	25	16	13	4	4.9	12
POMFRET	32	6	81	69	94	78	94	84	69	84	78	66	69	8.7	13	13	75	67	13	3	6	13	25	16	19	19	5.8	9



STATE BY DISTRICT REPORT
GRADE 8

CONNECTICUT MASTERY TESTING PROGRAM

LANGUAGE ARTS

DATE TESTED: 10-86			OBJECTIVES TESTED										TOTAL LANGUAGE ARTS	DEGREES OF READING POWER (DRP)	WRITING SAMPLE								PAGE 4					
			WRITING MECHANICS		LOCATING INFORMATION		LISTENING COMPREHENSION		READING COMPREHENSION						WRITING SAMPLE													
			capitalization & punctuation	spelling/homonyms/abbreviations	tone	locating information	notetaking and outlining	literal	inferential and evaluative	literal	inferential	evaluative			Average Number of Objectives Mastered	Below SS	55-61	62+	Average DRP Score	% of Students Needing Further Diagnosis	1	2		3	4	5	6	7
MASTERY CRITERIA (# CORRECT/ # POSSIBLE)			8/12	6/8	11/15	3/4	9/12	3/4	3/4	12/16	6/8	10/14	10/14															
DISTRICT	# OF STUDENTS TESTED	TOC	SCORES REPRESENT THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																									
PORTLAND	93	5	78	73	86	82	87	84	67	73	76	70	76	8.5	16	13	71	65	16	4	4	17	26	30	11	7	5.3	9
PRESTON	60	4	83	70	85	73	87	75	68	75	70	60	72	8.2	18	18	63	63	10	0	7	20	23	15	13	13	5.2	10
PUTIAH	89	6	66	53	73	77	77	72	55	45	60	37	48	6.7	37	12	21	58	37	14	31	21	15	6	8	5	4.1	45
REDDING	113	5	90	83	92	82	93	86	80	84	88	76	78	9.3	8	13	79	69	8	0	0	7	19	29	34	12	6.2	0
RIDGEFIELD	306	5	82	79	90	85	93	88	72	84	82	78	79	9.1	14	17	69	65	14	2	5	21	25	19	18	11	5.9	3
ROCKY HILL	126	4	75	71	87	83	91	83	77	75	83	68	71	8.6	16	13	71	67	16	4	2	15	21	25	22	11	5.7	6
SALEM	42	5	76	64	83	76	85	80	69	69	83	55	67	8.1	19	17	64	61	19	2	2	14	19	29	21	12	5.8	4
SALISBURY	21	6	81	76	81	81	81	67	67	86	67	62	76	8.2	10	24	67	64	10	0	0	24	43	14	10	10	5.4	0
SEYMOUR	138	5	74	72	80	72	83	75	53	63	79	57	64	7.7	20	17	64	62	20	4	11	18	21	13	25	8	5.3	14
SHARON	15	6	60	80	93	87	80	73	40	73	80	67	60	7.9	13	13	73	63	13	7	7	20	0	33	20	13	5.4	13
SHELTON	314	3	80	71	83	80	82	75	61	64	73	53	55	7.8	11	19	70	65	11	5	8	29	23	19	12	4	4.9	13
SHERMAN	21	6	95	52	86	90	86	86	71	67	81	71	67	8.5	19	19	62	63	19	0	5	0	10	29	38	19	6.8	4
SIMSBURY	316	4	89	84	88	79	97	85	78	87	92	80	84	9.5	6	8	86	70	6	1	4	20	22	25	21	9	5.8	4
SOMERS	87	4	91	79	94	87	89	84	66	85	84	78	80	9.2	12	13	76	68	12	1	3	23	18	25	20	9	5.8	4
SOUTHINGTON	473	3	76	69	80	81	89	77	64	68	74	55	63	8.0	23	17	60	62	23	4	11	25	26	16	12	7	5.0	11
SOUTH WINDSOR	249	2	74	71	78	81	83	71	65	75	75	59	61	7.9	27	16	57	61	27	4	7	33	19	22	9	6	5.0	11
SPRAGUE	27	4	89	78	89	89	96	89	81	67	74	59	74	8.9	14	15	67	62	19	7	15	15	22	19	15	7	5.0	21
STAFFORD	112	5	79	58	88	87	96	78	64	67	75	64	64	8.2	15	23	61	63	15	9	9	18	26	24	10	4	4.9	18
STAMFORD	661	1	61	61	68	70	73	66	53	52	61	48	50	6.6	37	14	50	58	37	8	11	30	20	13	11	7	4.8	19
STERLING	31	6	53	45	60	67	77	53	35	39	55	29	32	5.4	42	13	45	56	42	13	29	42	10	6	0	0	3.7	42
STONINGTON	153	4	78	78	85	82	95	85	60	70	81	69	65	8.5	18	17	65	63	18	5	10	24	26	20	11	5	5.0	11
STRATFORD	435	2	76	70	80	84	89	78	59	66	78	54	63	8.0	13	12	75	67	13	3	8	23	20	21	17	7	5.1	13
SUFFIELD	125	4	82	75	88	86	92	85	68	71	78	62	70	8.6	10	20	66	63	14	2	4	20	28	24	16	7	5.4	7
THOMASTON	84	4	69	55	72	70	76	76	58	64	63	51	54	7.1	39	7	54	58	39	5	13	15	28	17	13	9	5.1	18
THOMPSON	107	6	76	70	83	78	80	71	57	67	73	59	58	7.7	11	22	66	65	11	4	0	25	21	25	17	8	5.8	4
TOLLAND	147	5	82	81	86	80	88	82	67	76	82	74	73	8.7	17	12	71	64	17	3	13	20	23	21	13	8	5.2	14
TORRINGTON	237	3	81	78	85	79	91	77	60	68	76	57	56	8.1	17	15	68	64	17	6	10	24	27	14	10	9	5.0	16
TRUMBULL	350	2	78	79	85	84	90	76	70	72	74	65	65	8.4	19	15	65	64	19	5	12	22	28	17	11	5	4.9	17

© 1986 Connecticut State Board of Education All rights reserved Printed in U.S.A.



STATE BY DISTRICT REPORT
GRADE 8

LANGUAGE ARTS

CONNECTICUT MASTERY TESTING PROGRAM

DATE TESTED: 10-86		OBJECTIVES TESTED										TOTAL LANGUAGE ARTS	DEGREES OF READING POWER (DRP)			WRITING SAMPLE								PAGE 5				
		WRITING MECHANICS		LOCATING INFORMATION		LISTENING COMPREHENSION		READING COMPREHENSION					Average Number of Objectives Mastered	Below SS	55-61	62+	% of Students Meeting Further Diagnosis								Average Holistic Score	% of Students Meeting Further Diagnosis		
		capitalization & punctuation	spelling/omonyms/abbreviations	spelling	tone	locating information	note-taking and outlining	literal	inferential and evaluative	literal	inferential						evaluative	2	3	4	5	6	7	8				
MASTERY CRITERIA (# CORRECT/ # POSSIBLE)		9/12	6/8	11/15	3/4	9/12	3/4	3/4	12/18	6/8	10/14	10/14																
DISTRICT	# OF STUDENTS TESTED	TOC	SCORES REPRESENT THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																									
UNION	5	6	85	100	80	80	80	80	80	100	80	80	80	9.2	20	0	80	72	20	0	0	20	0	0	40	40	6.8	0
VERNON	335	3	78	68	82	75	83	77	57	66	70	62	61	7.8	26	16	58	60	26	6	7	19	18	19	22	9	5.4	12
VOLLANTON	22	6	91	68	82	82	100	91	64	82	86	64	86	9.0	5	10	77	69	5	0	0	9	27	27	23	14	6.0	0
HALLINGFORD	438	3	82	69	83	81	87	78	60	71	75	59	59	8.1	19	14	67	64	19	3	6	21	26	24	15	5	5.3	9
MATERBURY	923	1	54	48	60	65	70	53	46	41	58	32	37	5.7	42	15	42	54	42	12	20	30	19	10	7	2	4.2	32
MATERBURY	199	4	73	70	80	84	85	80	67	69	73	62	66	8.1	19	17	64	63	19	2	11	26	30	16	13	7	4.2	13
MATERBURY	206	2	83	70	84	84	90	74	50	66	79	69	63	8.1	20	15	65	63	20	5	8	26	28	11	14	6	5.0	13
MATERBURY	58	6	66	59	81	74	78	74	76	64	71	48	52	7.4	29	10	60	59	25	3	9	22	22	16	22	5	5.3	12
MATERBURY	561	2	76	77	86	85	91	81	70	76	77	67	71	8.6	15	10	75	67	15	6	11	22	20	21	12	8	5.1	16
MATERBURY	363	2	78	69	78	81	92	79	56	56	70	50	47	7.6	31	18	52	59	31	10	15	26	27	12	8	3	4.5	24
MATERBURY	141	5	82	79	91	86	92	86	72	75	79	72	74	8.9	13	14	74	67	15	1	4	21	26	21	17	11	5.6	5
MATERBURY	265	3	81	71	86	87	90	82	66	77	83	73	73	8.7	18	11	71	64	18	2	8	23	21	21	17	7	5.3	10
MATERBURY	216	2	86	72	82	75	88	79	65	65	75	68	71	8.3	21	10	68	63	21	3	6	22	27	23	11	8	5.3	8
MATERBURY	63	5	76	60	94	78	95	81	68	75	83	81	78	8.7	11	5	84	69	11	0	2	17	24	22	24	11	5.6	2
MATERBURY	212	4	84	79	89	81	90	88	70	79	83	75	75	8.9	14	13	73	65	14	1	8	25	22	20	17	7	5.3	9
MATERBURY	125	6	70	69	80	76	88	72	67	67	73	54	53	7.7	17	15	68	63	17	9	6	37	20	12	11	6	4.8	15
MATERBURY	200	6	43	50	64	69	72	60	50	47	53	35	38	5.8	49	16	35	53	49	21	21	27	14	13	3	2	3.4	42
MATERBURY	266	2	65	65	72	82	88	78	62	68	75	59	58	7.7	24	18	58	62	24	4	10	21	17	15	20	13	5.4	14
MATERBURY	122	4	79	69	79	74	82	71	58	66	75	61	56	7.7	25	12	63	62	25	2	17	23	24	17	10	3	4.8	6
MATERBURY	170	2	88	68	82	78	92	88	64	66	80	60	67	8.3	20	17	63	63	20	1	3	18	25	20	24	9	5.7	4
MATERBURY	62	6	76	74	82	81	87	85	76	81	82	74	77	8.8	15	23	63	64	15	6	11	18	27	21	13	3	5.0	18
MATERBURY	134	6	83	75	87	77	86	72	65	67	72	57	69	8.1	20	12	60	63	28	4	6	24	22	18	19	7	5.4	10
MATERBURY	307	4	86	76	88	81	87	83	67	70	79	69	71	8.6	21	13	66	63	21	3	6	16	14	19	26	16	5.8	8
MATERBURY	54	6	81	61	83	76	89	80	61	65	76	52	57	7.8	13	13	74	67	13	4	19	40	23	6	8	2	4.4	23
MATERBURY	110	6	84	68	82	88	93	83	71	73	80	73	75	8.7	10	13	77	67	10	1	7	16	26	27	15	6	5.4	8
MATERBURY	204	5	78	72	80	75	84	78	70	73	70	57	60	8.0	28	12	59	59	28	2	7	23	30	18	14	8	5.2	13
MATERBURY	167	5	66	71	77	77	82	78	61	78	67	53	53	7.7	29	19	53	59	25	7	7	27	19	18	16	8	5.1	9
MATERBURY	60	6	67	50	78	72	82	78	55	57	63	60	57	7.2	32	17	52	60	32	7	7	27	30	22	3	5	4.8	12

STATE BY DISTRICT REPORT
GRADE 8

CONNECTICUT MASTERY TESTING PROGRAM

LANGUAGE ARTS

DATE TESTED: 10-86		OBJECTIVES TESTED											TOTAL LANGUAGE ARTS	DEGREES OF READING POWER (DRP)	WRITING SAMPLE								PAGE 6					
		WRITING MECHANICS		LOCATING INFORMATION		LISTENING COMPREHENSION		READING COMPREHENSION			Average Number of Objectives Mastered	Below SS			SS-1	SS+	Average DRP Score	% of Students Needing Further Diagnosis										
		Capitalization & Punctuation	Spelling/phonograph/abbreviations	Spelling	Form	Locating Information	Relating and outlining	Literal	Inferential and evaluative	Literal								Inferential	Evaluative	1	2	3	4	5	6	7	8	Average Holistic Score
MASTERY CRITERIA (# CORRECT/ # POSSIBLE)		8/12	6/8	11/15	3/4	8/12	3/4	3/4	12/18	6/8	10/14	10/14																
DISTRICT	# OF STUDENTS TESTED	TOC	SCORES REPRESENT THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																									
REGIONAL NO. 12	69	6	86	75	86	83	96	93	71	78	86	62	81	9.0	10	10	80	69	10	3	12	9	30	22	14	10	5.4	14
REGIONAL NO. 13	106	5	80	62	72	77	91	75	72	72	79	67	67	8.1	15	20	65	64	15	3	4	16	22	25	25	6	5.6	7
REGIONAL NO. 14	106	4	77	73	83	85	91	77	77	55	70	63	70	8.2	15	10	75	65	15	2	4	20	27	22	16	9	5.5	6
REGIONAL NO. 15	218	4	76	75	87	83	94	85	67	70	83	68	72	8.6	14	13	73	67	14	1	0	15	18	21	27	17	6.1	3
REGIONAL NO. 16	130	4	70	62	83	75	83	68	57	67	67	52	50	7.3	36	10	54	59	36	9	14	26	18	16	16	2	4.7	22
REGIONAL NO. 17	161	6	73	65	89	78	83	73	65	66	73	57	69	7.9	16	19	66	64	16	1	10	24	27	17	18	4	5.2	11
REGIONAL NO. 18	83	6	72	77	88	73	89	76	65	67	67	54	64	7.9	17	16	67	65	17	1	5	22	20	23	22	7	5.5	6

STATE BY DISTRICT REPORT
GRADE 8

CONNECTICUT MASTERY TESTING PROGRAM

LANGUAGE ARTS

DATE TESTED: 10-86		OBJECTIVES TESTED										TOTAL LANGUAGE ARTS	DEGREES OF READING POWER (DRP)*		WRITING SAMPLE									PAGE 7				
		WRITING MECHANICS		LOCATING INFORMATION		LISTENING COMPREHENSION		READING COMPREHENSION		Average Number of Objectives Mastered	Below SS		55-61	62+	Average DRP Score	% of Students Needing Further Diagnosis												
		capitalization & punctuation	spelling/punctuation/abbreviations	agreement	tone	locating information	note-taking and outlining	literal	inferential and evaluative							literal	inferential	evaluative	1	2	3	4	5		6	7	8	Average Holistic Score
MASTERY CRITERIA (# CORRECT/ # POSSIBLE)		8/12	6/8	11/15	3/4	8/12	3/4	3/4	12/18	6/8	10/14	10/14																
DISTRICT	# OF STUDENTS TESTED	TOC	SCORES REPRESENT THE PERCENT OF STUDENTS MASTERING EACH OBJECTIVE																									
TOC 1 TOTAL	4,939		51	50	52	61	67	51	43	36	52	28	32	5.3	51	17	32	53	51	14	18	29	19	10	7	3	4.2	32
TOC 2 TOTAL	6,403		76	72	82	81	88	78	63	69	76	61	63	8.1	21	15	14	63	21	5	9	23	73	19	13	8	5.1	14
TOC 3 TOTAL	7,426		72	64	75	77	83	72	56	59	68	51	54	7.3	28	17	55	60	28	7	11	26	22	16	12	5	4.8	19
TOC 4 TOTAL	6,293		80	73	85	82	90	81	66	72	78	66	68	8.4	18	14	68	64	18	4	7	22	22	20	17	9	5.2	10
TOC 5 TOTAL	3,404		80	73	85	81	88	80	67	73	76	65	67	8.3	19	15	65	63	19	4	7	22	24	19	15	8	5.2	11
TOC 6 TOTAL	2,390		71	64	79	76	83	73	62	64	70	53	59	7.6	24	16	60	62	24	6	10	25	21	18	13	7	5.0	16
STATE TOTAL	30,855		72	66	76	77	83	73	59	62	70	54	57	7.5	27	16	57	61	27	7	10	25	22	17	13	7	5.0	17

© 1986 Connecticut State Board of Education. All rights reserved. Printed in U.S.A.

0329A3

* DRP TOTALS DO NOT INCLUDE WEST HAVEN DATA.

APPENDIX J

Type of Community Classifications

TYPE OF COMMUNITY

- TOC 1 = LARGE CITY - a town with a population of more than 100,000.
- TOC 2 = FRINGE CITY - a town contiguous with a large city, and with a population over 10,000.
- TOC 3 = MEDIUM CITY - a town with a population between 25,000 and 100,000 and not a Fringe City.
- TOC 4 = SMALL TOWN (Suburban) - a town within an SMSA* with a population of less than 25,000, not a Fringe City.
- TOC 5 = SMALL TOWN (Emerging Suburban) - a town with a population of less than 25,000 included in what was a proposed 1980 SMSA but not included in a 1970 SMSA.
- TOC 6 = SMALL TOWN (Rural) - a town not included in an SMSA, with a population of less than 25,000.

*Standard Metropolitan Statistical Area

APPENDIX K

Student Participation Rates

PARTICIPATION RATES FOR EIGHTH-GRADE STUDENTS BY DISTRICT
SCHOOL YEAR 1986-1987

DISTRICT	TOTAL EIGHTH-GRADE POPULATION	STUDENTS ELIGIBLE FOR TESTING	PERCENT OF STUDENT POP EXEMPT FROM TESTING	PERCENT OF ELIGIBLE STUDENTS TESTED			
				MATHEMATICS	LANGUAGE ARTS	WRITING	READING
ANSONIA	132	127	3.8	98.4	98.4	100.0	99.2
ASHFORD	47	46	2.1	100.0	100.0	100.0	100.0
AVON	151	150	0.7	100.0	100.0	100.0	100.0
BERLIN	171	165	3.5	97.0	97.0	97.6	97.6
BETHEL	201	185	8.0	100.0	100.0	100.0	100.0
BLOOMFIELD	173	167	3.5	100.0	100.0	100.0	100.0
BOLTON	47	45	4.3	100.0	97.8	100.0	100.0
BOZRAH	18	18	0.0	100.0	100.0	100.0	100.0
BRANFORD	237	235	0.8	94.9	95.3	99.6	94.5
BRIDGEPORT	1206	1080	10.4	92.7	90.8	94.1	93.1
BRISTOL	562	562	0.0	99.6	100.0	100.0	100.0
BROOKFIELD	193	191	1.0	98.4	99.5	99.5	99.5
BROOKLYN	91	91	0.0	96.7	97.8	97.8	97.8
CANAAN	12	11	8.3	100.0	100.0	100.0	100.0
CANTERBURY	68	67	1.5	100.0	100.0	100.0	100.0
CANTON	76	73	3.9	100.0	100.0	100.0	100.0
CHESHIRE	334	328	1.8	98.5	98.5	98.5	98.5
CLINTON	178	161	9.6	98.8	98.8	100.0	99.4
COLCHESTER	115	108	6.1	100.0	100.0	100.0	100.0
COLUMBIA	40	39	2.5	100.0	100.0	89.7	100.0
CORNWALL	8	6	25.0	100.0	100.0	100.0	100.0
COVENTRY	125	122	2.4	100.0	100.0	100.0	100.0
CROMWELL	99	92	7.1	100.0	100.0	100.0	100.0
DANBURY	621	561	9.7	93.4	95.0	100.0	97.5
DARLEN	223	205	8.1	100.0	99.5	100.0	99.5
DERBY	101	99	2.0	96.0	96.0	97.0	96.0
EASTFORD	12	10	16.7	100.0	100.0	100.0	100.0
EAST GRANBY	50	50	0.0	100.0	100.0	100.0	100.0
EAST HADDAM	74	73	1.4	95.9	97.3	97.3	97.3
EAST HAMPTON	117	105	10.3	99.0	98.1	99.0	99.0
EAST HARTFORD	390	359	7.9	96.4	91.9	99.4	94.2
EAST HAVEN	196	169	13.8	98.8	98.8	100.0	98.8
EAST LYME	185	185	0.0	98.4	98.9	98.9	98.9
EASTON	84	77	8.3	100.0	98.7	100.0	98.7
EAST WINDSOR	91	86	5.5	100.0	98.8	100.0	98.8
ELLINGTON	126	114	9.5	100.0	100.0	100.0	100.0
ENFIELD	479	469	2.1	94.2	94.5	99.6	97.2
FAIRFIELD	428	411	4.0	98.1	92.5	95.6	96.1
FARMINGTON	167	162	3.0	99.4	99.4	99.4	99.4
FRANKLIN	28	28	0.0	100.0	100.0	100.0	100.0
GLASTONBURY	346	330	4.6	99.4	98.8	97.1	98.5
GRANBY	116	113	2.6	98.2	99.1	99.1	99.1
GREENWICH	444	425	4.3	100.0	100.0	100.0	100.0
GRISWOLD	107	102	4.7	99.0	99.0	100.0	100.0
GROTON	392	385	1.8	94.5	94.3	94.5	94.3
GUILFORD	148	143	3.4	100.0	100.0	100.0	100.0
HAMDEN	339	339	0.0	97.9	96.8	99.4	99.7
HARTFORD	1551	1305	15.9	97.9	95.6	100.0	97.9
HARTLAND	14	14	0.0	100.0	100.0	100.0	100.0
KENT	40	37	7.5	97.3	97.3	97.3	100.0
KILLINGLY	200	187	6.5	96.3	96.8	100.0	96.8
LEBANON	81	79	2.5	100.0	100.0	100.0	100.0

PARTICIPATION RATES FOR EIGHTH-GRADE STUDENTS BY DISTRICT
SCHOOL YEAR 1986-1987

DISTRICT	TOTAL EIGHTH-GRADE POPULATION	STUDENTS ELIGIBLE FOR TESTING	PERCENT OF STUDENT POP. EXEMPT FROM TESTING	PERCENT OF ELIGIBLE STUDENTS TESTED				
				MATHEMATICS	LANGUAGE ARTS	WRITING	READING	
LEDYARD	232	229	1.3	100.0	100.0	100.0	100.0	
LISBON	53	49	7.5	100.0	100.0	100.0	100.0	
LITCHFIELD	79	78	1.3	98.7	96.2	98.7	100.0	
MADISON	228	215	5.7	97.7	98.6	98.6	97.7	
MANCHESTER	504	486	3.6	98.8	97.1	98.8	97.3	
MANSFIELD	111	108	2.7	97.2	97.2	100.0	98.1	
MERIDEN	561	499	11.1	96.6	96.8	99.4	97.2	
MIDDLETOWN	374	363	2.9	98.6	97.8	100.0	99.2	
MILFORD	463	463	0.0	97.8	98.3	99.1	98.5	
MOHROE	258	255	1.2	100.0	100.0	100.0	100.0	
MONTVILLE	243	223	8.2	99.6	99.1	100.0	99.6	
MAUGATUCK	335	319	4.8	97.8	98.1	99.4	98.1	
NEW BRITAIN	515	419	18.6	95.0	95.0	100.0	97.4	
NEW CANAAN	219	216	1.4	99.1	99.5	100.0	100.0	
NEW FAIRFIELD	208	204	1.9	98.5	99.0	99.0	99.0	
NEW HAVEN	1121	1026	8.5	95.1	93.7	97.4	97.1	
NEWINGTON	297	288	3.0	100.0	100.0	100.0	100.0	
NEW LONDON	196	162	17.3	100.0	99.4	100.0	100.0	
NEW MILFORD	310	288	7.1	99.3	99.0	99.7	99.7	
NEWTOWN	272	263	3.3	98.1	98.5	100.0	99.2	
NORTH BRANFORD	153	149	2.6	100.0	98.0	99.3	98.7	
NORTH CANAAN	42	38	9.5	100.0	100.0	100.0	100.0	
NORTH HAVEN	219	212	3.2	100.0	98.1	100.0	97.6	
NORTH STONINGTON	66	66	0.0	93.5	98.5	100.0	98.5	
NORWALK	685	663	3.2	97.0	96.4	99.4	97.7	
NORWICH	383	366	4.4	96.7	95.9	100.0	97.3	
OLD SAYBROOK	106	105	0.9	100.0	100.0	100.0	100.0	
OXFORD	85	85	0.0	100.0	100.0	100.0	100.0	
PLAINFIELD	182	165	9.3	100.0	100.0	100.0	100.0	
PLAINVILLE	182	180	1.1	98.3	98.3	100.0	100.0	
PLYMOUTH	172	163	5.2	98.8	98.8	98.9	98.3	
POMFRET	32	32	0.0	98.8	98.8	99.4	99.4	
PORTLAND	94	94	0.0	100.0	100.0	100.0	100.0	
PRESTON	60	60	0.0	98.9	98.9	97.9	98.9	
PUTNAM	94	90	4.3	100.0	100.0	100.0	100.0	
REDDING	120	113	5.8	98.9	96.7	96.7	98.9	
RIDGEFIELD	306	306	0.0	100.0	98.2	100.0	100.0	
ROCKY HILL	127	126	0.8	100.0	100.0	99.7	100.0	
SALEM	44	42	4.5	100.0	100.0	100.0	100.0	
SALISBURY	25	21	16.0	100.0	97.6	100.0	100.0	
SEYMOUR	138	138	0.0	100.0	100.0	100.0	100.0	
SHARON	16	15	6.3	99.3	100.0	100.0	100.0	
SHELTON	342	314	8.2	100.0	100.0	100.0	100.0	
SHERMAN	21	21	0.0	96.8	95.9	99.7	99.0	
SIMSBURY	321	317	0.0	100.0	100.0	100.0	100.0	
SOMERS	81	88	1.2	98.4	98.7	99.7	99.4	
SOUTHINGTON	475	470	3.3	98.9	98.9	100.0	97.7	
SOUTH WINDSOR	249	249	0.0	100.0	100.0	100.0	100.0	
SPRAGUE	28	27	0.0	99.6	99.6	99.6	100.0	
STAFFORD	120	112	3.6	100.0	100.0	100.0	100.0	
STAMFORD	773	662	6.7	99.1	99.1	100.0	99.1	
STERLING	31	31	0.0	98.3	98.5	100.0	98.8	
STONINGTON	169	158	6.5	100.0	96.8	100.0	100.0	
				98.7	98.7	98.7	98.7	

PARTICIPATION RATES FOR EIGHTH-GRADE STUDENTS BY DISTRICT
SCHOOL YEAR 1986-1987

DISTRICT	TOTAL EIGHTH-GRADE POPULATION	STUDENTS ELIGIBLE FOR TESTING	PERCENT OF STUDENT POP EXEMPT FROM TESTING	PERCENT OF ELIGIBLE STUDENTS TESTED			
				MATHEMATICS	LANGUAGE ARTS	WRITING	READING
STRATFORD	465	435	6.5	99.3	99.5	99.8	99.8
SUFFIELD	127	125	1.6	99.2	100.0	99.2	100.0
THOMASTON	85	85	0.0	98.8	97.6	98.8	97.6
THOMPSON	117	107	8.5	99.1	99.1	99.1	100.0
TOLLAND	147	147	0.0	100.0	100.0	100.0	100.0
TORRINGTON	263	238	9.5	98.3	97.1	98.3	98.7
TRUMBULL	353	350	0.8	99.7	99.7	100.0	100.0
UNION	5	5	0.0	100.0	100.0	100.0	100.0
VERNON	340	339	0.3	97.6	98.2	98.8	98.8
VOLUNTONN	26	24	7.7	91.7	91.7	91.7	91.7
WALLINGFORD	463	438	5.4	98.9	98.6	99.8	99.3
WATERBURY	1003	952	5.1	89.9	89.5	95.4	94.4
WATERFORD	206	199	3.4	99.5	99.5	99.5	100.0
WATERTOWN	226	208	8.0	98.6	96.5	96.6	99.0
WESTBROOK	58	52	10.3	100.0	100.0	100.0	100.0
WEST HARTFORD	573	563	2.3	99.1	99.3	100.0	99.6
WEST HAVEN	438	373	14.8	93.8	92.5	99.5	95.7
WESTON	141	141	0.0	100.0	100.0	100.0	99.3
WESTPORT	285	265	7.0	98.9	98.9	100.0	98.9
WETHERSFIELD	222	216	2.7	99.5	98.6	99.5	99.5
WILLINGTON	65	63	3.1	100.0	100.0	100.0	100.0
WILTON	212	212	0.0	100.0	99.1	100.0	99.5
WINCHESTER	131	126	3.8	97.6	96.0	100.0	97.6
WINDHAM	236	214	9.3	89.7	90.2	94.4	92.1
WINDSOR	269	268	0.4	99.3	99.3	99.6	99.3
WINDSOR LOCKS	115	113	1.7	100.0	100.0	100.0	100.0
WOLCOTT	172	171	0.6	98.8	98.2	99.4	98.8
WOODSTOCK	62	62	0.0	98.4	100.0	100.0	100.0
REGION IV	139	134	3.6	100.0	100.0	100.0	100.0
REGION V	307	307	0.0	100.0	100.0	100.0	100.0
REGION VI	65	54	16.9	100.0	100.0	100.0	100.0
REGION VII	123	110	10.6	100.0	100.0	100.0	100.0
REGION VIII	204	204	0.0	99.5	99.0	99.5	99.0
REGION X	170	167	1.8	99.4	100.0	100.0	100.0
REGION XI	60	60	0.0	100.0	100.0	100.0	100.0
REGION XII	72	69	4.2	100.0	100.0	100.0	100.0
REGION XIII	108	103	4.6	100.0	100.0	100.0	100.0
REGION XIV	111	106	4.5	100.0	100.0	100.0	100.0
REGION XV	231	221	4.3	98.6	98.2	98.6	98.6
REGION XVI	137	130	5.1	100.0	100.0	100.0	100.0
REGION XVII	172	160	7.0	100.0	100.0	100.0	100.0
REGION XVIII	85	83	2.4	100.0	100.0	100.0	100.0

Connecticut State Department of Education

Program and Support Services

Lorraine M. Aronson
Deputy Commissioner

Office of Research and Evaluation

Pascal D. Forgione, Jr., Chief

Douglas A. Rindone
Education Consultant

Peter Behuniak
Education Consultant

William Congero
Education Service Specialist

Christina D. Danoff
Program Assistant, Mastery Testing

Division of Curriculum and Professional Development

Betty J. Sternberg, Director

Betsy Carter
Steven Linwand
Mathematics Consultants

Robert Kinder
Mary Weinland
Reading/Language Arts Consultants

