
FOURTH GENERATION CONNECTICUT MASTERY TEST

**Performance Level Descriptors
For Mathematics, Reading, and
Writing**

Grade 4

Prepared by the Bureau of Research, Evaluation and Student
Assessment
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OVERVIEW OF PERFORMANCE LEVEL DESCRIPTORS

This document was developed to help parents, educators and students understand the scores a student receives on the Connecticut Mastery Test (CMT) in the areas of mathematics, reading and writing. Each year following testing, parents and students receive an Individual Student Report that identifies the student's performance level on the CMT in these three content areas.

For each content area, mathematics, reading and writing, there are 5 performance levels:

Level 5 Advanced

Level 4 Goal

Level 3 Proficient

Level 2 Basic

Level 1 Below Basic

The Performance Level Descriptors were developed by teachers and curriculum experts to reflect the grade level content standards included in the Connecticut Mathematics Curriculum Framework and the Connecticut English Language Arts Curriculum Framework in the areas of Mathematics, Reading and Writing. The curriculum frameworks define what a student is expected to know and be able to do in specific curriculum content areas at each grade level. The Performance Level Descriptors describe the typical performance and level of content knowledge represented by a range of CMT scale scores. This information provides an overview of the extent to which a student is meeting the expectations of the content standards included in the curriculum frameworks.

Refer to your student's Individual Student Report. Find where the performance level is reported for each content area i.e., mathematics, reading and writing. This information is located under Overall Results. Included in the results for each content area is a customized message (Performance Level Literal) that is designed to help parents understand the general performance level of their student. The Performance Level Descriptors on the following pages include the Performance Level Literals and more specific information about typical performance and content knowledge for each performance level.

PERFORMANCE LEVEL DESCRIPTORS FOR GRADE 4 MATHEMATICS

Level 5: Advanced

Generally, fourth-grade students who perform at this level demonstrate exceptional knowledge of grade-level content. These students demonstrate well-developed conceptual understanding, computational skills and problem-solving skills, as well as an advanced ability to solve complex and abstract mathematical problems. Typically, the solutions these students provide to math problems are well-organized and include clear and concise explanations. Generally, for each content standard listed below, students who perform at this level:

NUMERICAL AND PROPORTIONAL REASONING

- Competently use place value concepts to identify alternative forms of expressing whole numbers including expanded notation and regrouping
- Competently order whole numbers, fractions and decimals, and round whole numbers, and locate points on number lines and scales
- Competently represent fractions and decimals using various equivalent forms, including numerical and pictorial representations
- Competently identify the appropriate operation and write a story problem to match a given number sentence
- Competently compute and estimate sums, differences, products and quotients of whole numbers and money amounts
- Competently add and subtract simple fractions
- Competently solve problems involving whole numbers and money amounts with and without extraneous information
- Competently use estimation strategies to determine the reasonableness of an answer

CMT Performance Level Descriptors – Grade 4

GEOMETRY AND MEASUREMENT

- Competently solve problems involving time
- Competently estimate lengths and areas
- Competently measure lengths and identify appropriate measurement units for a given situation
- Competently identify, describe, classify and draw 2-dimensional geometric shapes

WORKING WITH DATA: PROBABILITY AND STATISTICS

- Competently read and interpret data in tables, graphs and charts and draw graphs using a given set of data
- Competently solve problems involving elementary notions of probability
- Competently sort, classify and draw logical conclusions from data and solve problems involving the organization of data

ALGEBRAIC REASONING: PATTERNS AND FUNCTIONS

- Competently extend or complete patterns involving whole numbers or attributes, and identify or state rules for patterns
- Competently solve simple 1-step equations

PERFORMANCE LEVEL DESCRIPTORS FOR GRADE 4 MATHEMATICS

Level 4: Goal

Generally, fourth-grade students who perform at this level demonstrate extensive knowledge of grade-level content. These students demonstrate well-developed conceptual understanding, computational skills and problem-solving skills, as well as an ability to solve complex and abstract mathematical problems. Typically, the solutions these students provide to math problems are organized and include clear and concise explanations. Generally, for each content standard listed below, students who perform at this level:

NUMERICAL AND PROPORTIONAL REASONING

- Competently use place value concepts to identify alternative forms of expressing whole numbers including expanded notation and regrouping
- Competently order whole numbers, fractions and decimals, and round whole numbers, and locate points on number lines and scales
- Adequately represent fractions and decimals using various equivalent forms, including numerical and pictorial representations
- Competently identify the appropriate operation and write a story problem to match a given number sentence
- Competently compute and estimate sums, differences, products and quotients of whole numbers and money amounts
- Competently add and subtract simple fractions
- Competently solve problems involving whole numbers and money amounts with and without extraneous information
- Adequately use estimation strategies to determine the reasonableness of an answer

CMT Performance Level Descriptors – Grade 4

GEOMETRY AND MEASUREMENT

- Adequately solve problems involving time
- Adequately estimate lengths and areas
- Adequately measure lengths and identify appropriate measurement units for a given situation
- Adequately identify, describe, classify and draw 2-dimensional geometric shapes

WORKING WITH DATA: PROBABILITY AND STATISTICS

- Competently read and interpret data in tables, graphs and charts and draw graphs using a given set of data
- Adequately solve problems involving elementary notions of probability
- Competently sort, classify and draw logical conclusions from data and solve problems involving the organization of data

ALGEBRAIC REASONING: PATTERNS AND FUNCTIONS

- Competently extend or complete patterns involving whole numbers or attributes, and identify or state rules for patterns
- Competently solve simple 1-step equations

PERFORMANCE LEVEL DESCRIPTORS FOR GRADE 4 MATHEMATICS

Level 3: Proficient

Generally, fourth-grade students who perform at this level demonstrate adequate knowledge of grade-level content. These students demonstrate adequate conceptual understanding, computational skills and problem-solving skills, as well as an ability to solve complex and abstract mathematical problems. Typically, the solutions these students provide to math problems are adequate and include sufficient explanations. Generally, for each content standard listed below, students who perform at this level:

NUMERICAL AND PROPORTIONAL REASONING

- Adequately use place value concepts to identify alternative forms of expressing whole numbers including expanded notation and regrouping
- Adequately order whole numbers, fractions and decimals, and round whole numbers, and locate points on number lines and scales
- Marginally represent fractions and decimals using various equivalent forms, including numerical and pictorial representations
- Competently identify the appropriate operation and write a story problem to match a given number sentence
- Competently compute and estimate sums, differences, products and quotients of whole numbers and money amounts
- Adequately add and subtract simple fractions
- Adequately solve problems involving whole numbers and money amounts with and without extraneous information
- Marginally use estimation strategies to determine the reasonableness of an answer

CMT Performance Level Descriptors – Grade 4

GEOMETRY AND MEASUREMENT

- Marginally solve problems involving time
- Marginally estimate lengths and areas
- Marginally measure lengths and identify appropriate measurement units for a given situation
- Marginally identify, describe, classify and draw 2-dimensional geometric shapes

WORKING WITH DATA: PROBABILITY AND STATISTICS

- Competently read and interpret data in tables, graphs and charts and draw graphs using a given set of data
- Adequately solve problems involving elementary notions of probability
- Adequately sort, classify and draw logical conclusions from data and solve problems involving the organization of data

ALGEBRAIC REASONING: PATTERNS AND FUNCTIONS

- Adequately extend or complete patterns involving whole numbers or attributes, and identify or state rules for patterns
- Adequately solve simple 1-step equations

PERFORMANCE LEVEL DESCRIPTORS FOR GRADE 4 MATHEMATICS

Level 2: Basic

Generally, fourth-grade students who perform at this level demonstrate partially developed knowledge of grade-level content. These students demonstrate partially developed conceptual understanding, computational skills and problem-solving skills, as well as a limited ability to solve complex and abstract mathematical problems. Typically, the solutions these students provide to math problems are unorganized and include minimal explanations. Generally, for each content standard listed below, students who perform at this level:

NUMERICAL AND PROPORTIONAL REASONING

- Adequately use place value concepts to identify alternative forms of expressing whole numbers including expanded notation and regrouping
- Marginally order whole numbers, fractions and decimals, and round whole numbers, and locate points on number lines and scales
- Marginally represent fractions and decimals using various equivalent forms, including numerical and pictorial representations
- Adequately identify the appropriate operation and write a story problem to match a given number sentence
- Adequately compute and estimate sums, differences, products and quotients of whole numbers and money amounts
- Adequately add and subtract simple fractions
- Marginally solve problems involving whole numbers and money amounts with and without extraneous information
- Marginally use estimation strategies to determine the reasonableness of an answer

CMT Performance Level Descriptors – Grade 4

GEOMETRY AND MEASUREMENT

- Marginally solve problems involving time
- Marginally estimate lengths and areas
- Marginally measure lengths and identify appropriate measurement units for a given situation
- Marginally identify, describe, classify and draw 2-dimensional geometric shapes

WORKING WITH DATA: PROBABILITY AND STATISTICS

- Adequately read and interpret data in tables, graphs and charts and draw graphs using a given set of data
- Marginally solve problems involving elementary notions of probability
- Marginally sort, classify and draw logical conclusions from data and solve problems involving the organization of data

ALGEBRAIC REASONING: PATTERNS AND FUNCTIONS

- Marginally extend or complete patterns involving whole numbers or attributes, and identify or state rules for patterns
- Marginally solve simple 1-step equations

PERFORMANCE LEVEL DESCRIPTORS FOR GRADE 4 MATHEMATICS

Level 1: Below Basic

Generally, fourth-grade students who perform at this level demonstrate limited knowledge of grade-level content. These students demonstrate limited conceptual understanding, computational skills and problem-solving skills, as well as a limited ability to solve complex and abstract mathematical problems. Typically, the solutions these students provide to math problems are inadequate and lack explanations. Generally, for each content standard listed below, students who perform at this level demonstrate a **limited ability** to:

NUMERICAL AND PROPORTIONAL REASONING

- Use place value concepts to identify alternative forms of expressing whole numbers including expanded notation and regrouping
- Order whole numbers, fractions and decimals, and round whole numbers, and locate points on number lines and scales
- Represent fractions and decimals using various equivalent forms, including numerical and pictorial representations
- Identify the appropriate operation and write a story problem to match a given number sentence
- Compute and estimate sums, differences, products and quotients of whole numbers and money amounts
- Add and subtract simple fractions
- Solve problems involving whole numbers and money amounts with and without extraneous information
- Use estimation strategies to determine the reasonableness of an answer

CMT Performance Level Descriptors – Grade 4

GEOMETRY AND MEASUREMENT

- Solve problems involving time
- Estimate lengths and areas
- Measure lengths and identify appropriate measurement units for a given situation
- Identify, describe, classify and draw 2-dimensional geometric shapes

WORKING WITH DATA: PROBABILITY AND STATISTICS

- Read and interpret data in tables, graphs and charts and draw graphs using a given set of data
- Solve problems involving elementary notions of probability
- Sort, classify and draw logical conclusions from data and solve problems involving the organization of data

ALGEBRAIC REASONING: PATTERNS AND FUNCTIONS

- Extend or complete patterns involving whole numbers or attributes, and identify or state rules for patterns
- Solve simple 1-step equations

PERFORMANCE LEVEL DESCRIPTORS FOR GRADE 4 READING

Reading scale scores and state Reading standards are based on a combination of scores from the Degrees of Reading Power® (DRP) and Reading Comprehension tests. Each test accounts for 50 percent of the total reading scale score.

Level 5: Advanced

Fourth-grade students who perform at this level are likely to demonstrate an exceptional ability to read and respond to grade-appropriate literary and informational texts without assistance. Students at this level effectively use sophisticated strategies before, during, and after reading to understand, interpret and evaluate grade-appropriate text. Students at this level demonstrate an expert ability to analyze words in context to construct meaning from grade-appropriate text. Generally, students at the Advanced Level can:

READING COMPREHENSION

- Thoroughly and effectively identify and make inferences about important characters, settings, problems, events, and details
- Make insightful inferences and draw conclusions that can be supported by sufficient, specific, and relevant stated and implied evidence from a text
- Thoroughly and effectively identify and explain organizational patterns contained in a specific paragraph of text (e.g., main idea/supporting details, rhyme patterns)
- Thoroughly and effectively draw conclusions about an author’s purpose for choosing a genre and for including or omitting specific details in a text
- Thoroughly and effectively discuss and respond to texts by making text-to-self, text-to-text and text-to-world connections that are supported by relevant and specific information from the text
- Thoroughly and effectively analyze and evaluate an author’s craft, including the use of literary devices and textual elements (e.g., word choice, simile)
- Thoroughly and effectively select and use relevant information within the text to extend or critically evaluate the text
- Thoroughly and effectively make and support judgments about the themes and quality of a text and use relevant and specific information to support judgments

CMT Performance Level Descriptors – Grade 4

DEGREES OF READING POWER®

- Thoroughly and effectively use phonetic, structural, syntactical and contextual clues
- Thoroughly and effectively analyze words and phrases in context
- Consistently use content vocabulary appropriately and accurately
- Comprehend textbooks and other materials typically used at fourth-grade and above, and use information to perform the tasks and assignments appropriately expected of a student at the fourth-grade level with minimal teacher assistance

PERFORMANCE LEVEL DESCRIPTORS FOR GRADE 4 READING

Level 4: Goal

Fourth-grade students who perform at this level are likely to demonstrate a consistent ability to read and respond to grade-appropriate literary and informational texts with minimal assistance. Students at this level consistently use effective strategies before, during, and after reading to understand, interpret and evaluate grade-appropriate text. Students at this level demonstrate a consistent ability to analyze words in context to construct meaning from grade-appropriate text. Generally, students at the Goal Level can:

READING COMPREHENSION

- Thoroughly and effectively identify and make inferences about important characters, settings, problems, events, and details
- Make reasonable inferences and draw conclusions that can be supported by specific and relevant stated and implied evidence from a text
- Consistently identify and explain organizational patterns contained in a specific paragraph of text (e.g., main idea/supporting details, rhyme patterns)
- Consistently draw conclusions about an author’s purpose for choosing a genre and for including or omitting specific details in a text
- Consistently discuss and respond to texts by making text-to-self, text-to-text and text-to-world connections that are supported by relevant information from the text
- Consistently analyze and evaluate an author’s craft, including the use of literary devices and textual elements (e.g., word choice, simile)
- Consistently select and use relevant information within the text to extend or critically evaluate the text
- Consistently make and support judgments about the themes and quality of a text and use relevant and specific information to support judgments

CMT Performance Level Descriptors – Grade 4

DEGREES OF READING POWER®

- Consistently use phonetic, structural, syntactical and contextual clues
- Consistently analyze words and phrases in context
- Consistently use content vocabulary appropriately and accurately
- Comprehend textbooks and other materials typically used at fourth-grade and above, and use information to perform the tasks and assignments appropriately expected of a student at the fourth-grade level with minimal teacher assistance

PERFORMANCE LEVEL DESCRIPTORS FOR GRADE 4 READING

Level 3: Proficient

Fourth-grade students who perform at this level are likely to demonstrate an adequate ability to read and respond to grade-appropriate literary and informational texts with some assistance. Students at this level effectively use some strategies before, during, and after reading to understand and interpret grade-appropriate text. Students at this level demonstrate an adequate ability to analyze words in context to construct meaning from grade-appropriate text. Generally, students at the Proficient Level can:

READING COMPREHENSION

- Consistently identify and make inferences about important characters, settings, problems, events, and details
- Make adequate inferences and draw conclusions that can be supported by some stated and implied evidence from a text
- Adequately identify and explain organizational patterns contained in a specific paragraph of text (e.g., main idea/supporting details, rhyme patterns)
- Adequately draw conclusions about an author's purpose for choosing a genre and for including or omitting specific details in a text
- Adequately discuss and respond to texts by making text-to-self, text-to-text and text-to-world connections that are supported by information from the text
- Adequately analyze and evaluate an author's craft, including the use of literary devices and textual elements (e.g., word choice, simile)
- Adequately select and use information within the text to extend or evaluate the text
- Adequately make and support judgments about the themes and quality of a text and use information from the text to support judgments

CMT Performance Level Descriptors – Grade 4

DEGREES OF READING POWER®

- Adequately use phonetic, structural, syntactical and contextual clues
- Adequately analyze words and phrases in context
- Adequately use content vocabulary
- Comprehend textbooks and other materials typically used at fourth-grade and below with some teacher assistance

PERFORMANCE LEVEL DESCRIPTORS FOR GRADE 4 READING

Level 2: Basic

Fourth-grade students who perform at this level are likely to demonstrate a limited ability to read and respond to grade-appropriate literary and informational texts, and require assistance to complete many reading tasks. Students at this level use some strategies before, during, and after reading to understand and interpret grade-appropriate text, but efficient strategy usage may be inconsistent. Students at this level demonstrate a limited ability to analyze words in context to construct meaning from grade-appropriate text. Generally, students at the Basic Level can:

READING COMPREHENSION

- Adequately identify and make inferences about important characters, settings, problems, events, and details
- Make limited inferences and draw limited conclusions that can be supported by some stated and implied evidence from a text
- Inconsistently identify and explain organizational patterns contained in a specific paragraph of text (e.g., main idea/supporting details, rhyme patterns)
- Inconsistently draw conclusions about an author's purpose for choosing a genre and for including or omitting specific details in a text
- Inconsistently discuss and respond to texts by making text-to-self, text-to-text and text-to-world connections that are supported by limited information from the text
- Inconsistently analyze and evaluate an author's craft, including the use of literary devices and textual elements (e.g., word choice, simile)
- Inconsistently select and use information within the text to extend or evaluate the text
- Inconsistently make and support judgments about the themes and quality of a text and use information from the text to support judgments

CMT Performance Level Descriptors – Grade 4

DEGREES OF READING POWER®

- Inconsistently use phonetic, structural, syntactical and contextual clues
- Inconsistently analyze words and phrases in context
- Inconsistently use content vocabulary
- Comprehend textbooks and other materials typically used at fourth-grade and below with some teacher assistance

PERFORMANCE LEVEL DESCRIPTORS FOR GRADE 4 READING

Level 1: Below Basic

Fourth-grade students who perform at this level are likely to demonstrate a very limited ability to read and respond to grade appropriate literary and informational texts, and require significant assistance to complete most reading tasks. Students at this level are not able to use strategies to understand and interpret grade-appropriate text. Students at this level demonstrate a very limited ability to analyze words in context to construct meaning from grade-appropriate text. Generally, students demonstrate a **very limited ability** to:

READING COMPREHENSION

- Identify and make inferences about important characters, settings, problems, events, and details
- Make adequate inferences and draw conclusions that can be supported by some stated and implied evidence from a text
- Identify and explain organizational patterns contained in a specific paragraph of text (e.g., main idea/supporting details, rhyme patterns)
- Draw conclusions about an author’s purpose for choosing a genre and for including or omitting specific details in a text
- Discuss and respond to texts by making text-to-self, text-to-text and text-to-world connections that are supported by information from the text
- Analyze and evaluate an author’s craft, including the use of literary devices and textual elements (e.g., word choice, simile)
- Select and use information within the text to extend or evaluate the text
- Make and support judgments about the themes and quality of a text and use information from the text to support judgments

CMT Performance Level Descriptors – Grade 4

DEGREES OF READING POWER®

- Use phonetic, structural, syntactical and contextual clues
- Analyze words and phrases in context
- Use content vocabulary appropriately and accurately
- Comprehend, with varying degrees of difficulty, textbooks and other materials written below a fourth-grade level

PERFORMANCE LEVEL DESCRIPTORS FOR GRADE 4 WRITING

Writing scale scores and state writing standards are based on a combination of scores from the Direct Assessment of Writing test and the Editing and Revising test. The Direct Assessment of Writing test accounts for 60 percent of the total scale score and 40 percent is attributed to the Editing and Revising test.

Level 5: Advanced

Fourth-grade students who perform at this level are likely to demonstrate an exceptional ability to communicate their ideas in writing. Generally, students at this level produce fluent narratives that include a thorough expansion of key ideas. In addition, students at this level are likely to demonstrate an exceptional ability to apply the conventions of standard English to edit and revise written work. Generally, students at the Advanced Level can:

DIRECT ASSESSMENT OF WRITING

- Thoroughly and effectively respond to a narrative writing prompt within a timed test setting
- Produce a fully elaborated first draft that includes many specific details and shows a strong organizational strategy and sequencing of events

EDITING AND REVISING

- Thoroughly and effectively revise samples of grade appropriate text (e.g., correct redundancy of words/phrases, identify sentence fragments)
- Thoroughly and effectively edit samples of grade appropriate text (e.g., correct errors in end punctuation and past/present verb tense)

PERFORMANCE LEVEL DESCRIPTORS FOR GRADE 4 WRITING

Level 4: Goal

Fourth-grade students who perform at this level are likely to demonstrate a consistent ability to communicate their ideas in writing. Generally, students at this level produce fluent narratives that include an effective expansion of key ideas. In addition, students at this level are likely to demonstrate a consistent ability to apply the conventions of standard English to edit and revise written work. Generally, students at the Goal Level can:

DIRECT ASSESSMENT OF WRITING

- Effectively respond to a narrative writing prompt within a timed test setting
- Produce a moderately elaborated first draft that includes mostly specific details and shows a satisfactory organizational strategy and/or sequencing of events

EDITING AND REVISING

- Adequately revise samples of grade appropriate text (e.g., correct redundancy of words/phrases, identify sentence fragments)
- Consistently edit samples of grade appropriate text (e.g., correct errors in end punctuation and past/present verb tense)

PERFORMANCE LEVEL DESCRIPTORS FOR GRADE 4 WRITING

Level 3: Proficient

Fourth-grade students who perform at this level are likely to demonstrate an adequate ability to communicate their ideas in writing. Generally, students at this level produce somewhat fluent narratives that include a moderate expansion of key ideas. In addition, students at this level are likely to demonstrate some ability to apply the conventions of standard English to edit and revise written work. Generally, students at the Proficient Level can:

DIRECT ASSESSMENT OF WRITING

- Adequately respond to a narrative writing prompt within a timed test setting
- Produce a somewhat elaborated first draft that includes a mix of general and specific details and a satisfactory organizational strategy and/or some sequencing of events

EDITING AND REVISING

- Inconsistently revise samples of grade appropriate text (e.g., correct redundancy of words/phrases, identify sentence fragments)
- Adequately edit samples of grade appropriate text (e.g., correct errors in end punctuation and past/present verb tense)

PERFORMANCE LEVEL DESCRIPTORS FOR GRADE 4 WRITING

Level 2: Basic

Fourth-grade students who perform at this level are likely to demonstrate some ability to communicate their ideas in writing. Generally, students at this level produce somewhat-developed narratives that include expansion of some key ideas. These narratives may be somewhat fluent. In addition, students at this level are likely to demonstrate a very limited ability to apply the conventions of standard English to edit and revise written work. Generally, students at the Basic Level can:

DIRECT ASSESSMENT OF WRITING

- Adequately respond to a narrative writing prompt within a timed test setting
- Produce a minimally-elaborated first draft that includes a mix of general and specific details and some evidence of an organizational strategy and/or some sequencing of events

EDITING AND REVISING

- Seldom revise samples of grade appropriate text (e.g., correct redundancy of words/phrases, identify sentence fragments)
- Seldom edit samples of grade appropriate text (e.g., correct errors in end punctuation and past/present verb tense)

PERFORMANCE LEVEL DESCRIPTORS FOR GRADE 4 WRITING

Level 1: Below Basic

Fourth-grade students who perform at this level are likely to demonstrate a limited ability to communicate their ideas in writing. Generally, students at this level produce minimally-developed or underdeveloped narratives that may be awkward in parts. In addition, students at this level are unlikely to demonstrate the ability to apply the conventions of standard English to edit and revise written work. Generally, students at the Below Basic Level can:

DIRECT ASSESSMENT OF WRITING

- Produce a limited response to a narrative writing prompt within a timed test setting
- Produce a general or unelaborated first draft that may include mostly general details and little evidence of an organizational strategy or sequencing of events

EDITING AND REVISING

- Seldom revise samples of grade appropriate text (e.g., correct redundancy of words/phrases, identify sentence fragments)
- Seldom edit samples of grade appropriate text (e.g., correct errors in end punctuation and past/present verb tense)