GRADE 3		
Properties of Matter 3.1 Materials have properties that can be identified and described through the use of simple tests.		
State Framework	**Grade-Level Expectations**	**CMT Correlation**
3.1.a. Heating and cooling cause changes in some of the properties of materials.	1. Compare and contrast the properties of solids, liquids and gases. 2. Carry out simple tests to determine if materials dissolve, sink or float in water, conduct heat or attract to magnets. 3. Classify materials based on their observable properties, including state of matter. 4. Design and conduct fair tests to investigate the absorbency of different papers, write conclusions based on evidence, and explain why similar investigations might produce different results. 5. Evaluate the effectiveness of different materials for keeping a substance warm or cold (i.e., conducting heat). 6. Explain the role of heat in changing matter from one state to another. 7. Predict the effect of adding or removing heat on the condensation, evaporation, melting or freezing of water.	**B1.** Sort and classify materials based on properties such as dissolving in water, sinking and floating, conducting heat, and attracting to magnets. **B2.** Describe the effect of heating on the melting, evaporation, condensation and freezing of water.

GRADE 3		
Heredity and Evolution 3.2 — Organisms can survive and reproduce only in environments that meet their basic needs.		
State Framework	**Grade-Level Expectations**	**CMT Correlation**
3.2.a. Plants and animals have structures and behaviors that help them survive in different environments.	1. Observe and analyze the external features and behaviors of diverse organisms that enable them to get food, water, find mates, and be protected from predators and weather. 2. Compare and contrast structural and behavioral adaptations that enable organisms to survive in different land and water environments. 3. Explain how hibernation and migration allow animals to survive seasonal changes. 4. Identify adaptations that allow plants to reach sunlight and water. 5. Give examples of ways in which animals use camouflage and explain how this adaptation helps them to survive. 6. Evaluate the ability of a plant or animal to survive in a given environment based on the organism's structural and behavioral adaptations.	**B3.** Describe how different plants and animals are adapted to obtain air, water, food and protection in specific land habitats. **B4.** Describe how different plants and animals are adapted to obtain air, water, food and protection in water habitats.

GRADE 3		
The Changing Earth 3.3 — Earth materials have different physical and chemical properties.		
State Framework	**Grade-Level Expectations**	**CMT Correlation**
3.3.a. Rocks and minerals have properties that may be identified through observation and testing; these properties determine how earth materials are used.	1. Differentiate between rocks and minerals. 2. Observe and measure various rocks, then classify them based on observable properties (e.g., shape, size, color, weight, visible markings). 3. Test the properties of different minerals (e.g. color, odor, streak, luster, hardness, magnetism), organize data in a table, and use the data and other resources to identify unknown mineral specimens. 4. Observe, compare and analyze rock properties (e.g., crystal size or layers) to infer the conditions under which they were formed. 5. Locate scientific information about rock formation and compare and contrast the conditions under which igneous, metamorphic and sedimentary rocks are formed. 6. Evaluate the usefulness of different rock types for specific applications (e.g., construction, countertops, statues).	**B5.** Describe the physical properties of rocks and relate them to their potential uses. **B6.** Relate the properties of rocks to the possible environmental conditions during their formation.

Grade 3

Content Standard: Inquiry-Students should demonstrate how scientific knowledge is created and communicated.

Students Expected Performances:

Make observations about objects, organisms and the environment to understand a new situation.
Seek information in books, magazines and electronic media.
Design and conduct simple investigations.
Employ simple equipment and measuring tools to gather data and extend the senses.
Use data to construct reasonable explanations.
Analyze, critique, and communicate investigations using words, graphs and drawings.
Read and write using a variety of science-related fiction and nonfiction texts.
Search the Web and locate relevant science information.
Use measurement tools and standard units (e.g. centimeters, meters, grams, kilograms) to describe objects and materials.
Use mathematics to analyze, interpret and present data.

Content Standard: Physical Science-Properties of Matter-Students should demonstrate how the structure of matter affects the properties and uses of materials.

Students Expected Performances:

Sort and classify substances based on properties such as dissolving in water, sinking and floating, conducting heat, and attraction to magnets.

Content Standard: Physical Science- Energy Transfer and Transformation- Students should demonstrate how energy is produced and transferred.

Students Expected Performances:

Describe how heat can be produced by burning, rubbing, and mixing substances.
Describe how heat can move from one object to another through conduction.
Describe the effect of heating on the melting, evaporation, condensation and freezing of water.

Content Standard: Life Science- Heredity and Evolution- Students will demonstrate what processes are responsible for life's unity and diversity.

Students Expected Performances:

Describe how different plants and animals are adapted to obtain air, water, food and protection in specific land habitats.
Describe how different plants and animals are adapted to obtain air, water, food and protection in specific water habitats.

GRADE 3		
READING **Students comprehend and respond in literal, critical and evaluative ways to various texts that are read, viewed and heard.**		
State Framework	**Grade-Level Expectations**	**Assessments**
1. Reading and Responding Students read, comprehend and respond in individual, literal, critical and evaluative ways to literary, informational and persuasive texts in multimedia formats. **1.3** Students select and apply strategies to facilitate word recognition and develop vocabulary in order to comprehend text.	**Phonics/Word Study** 1. Use phonetic, structural, syntactical and contextual clues to read and understand words. 2. Know sounds for a wide range of suffixes and prefixes, e.g., *-able, -tion, -ment, ex-, re-*. 3. Use letter-sound correspondence, structural analysis and syllable patterns to decode multisyllable words. 4. Infer word meanings from roots, prefixes, and suffixes. 5. Recognize automatically common regular and irregular words. 6. Analyze the meaning of words and phrases in context. 7. Use context to accurately read words with more than one pronunciation, e.g., *an object* vs. *to object.* 8. Explain common homophones, e.g. *fair/fare* or *made/maid,* and homographs, e.g., *a lead weight* vs. *lead the way.* 9. Identify pronoun referents in text. 10. Read words containing complex letter patterns and/or word families, e.g., *-ieve, -eive, -ield,* in isolation and in context.	
1. Reading and Responding **1.3**	**High-Frequency Words** 11. Read at least 600 high-frequency words, e.g., Dolch or Fry.	
1. Reading and Responding **1.3**	**Fluency** 12. Read aloud informational/expository text and literary/narrative text accurately, using appropriate pacing, phrasing and expression. 13. Read aloud, while comprehending, unpracticed text with fluency at 110-120+ words correct per minute. 14. Silently read longer, more complex texts.	

GRADE 3		
READING **Students comprehend and respond in literal, critical and evaluative ways to various texts that are read, viewed and heard.**		
State Framework	**Grade-Level Expectations**	**Assessments**
1. Reading and Responding **1.3**	**Vocabulary** 15. Use glossary, dictionary and thesaurus to find and confirm word meanings. 16. Use prior knowledge, context, pictures, illustrations and diagrams to predict, clarify and/or expand word meaning, including multiple-meaning words. 17. Use new vocabulary from informational/expository text and literary/narrative text, including text from a variety of cultures and communities, in own oral and written communication. 18. Define words and concepts necessary for understanding math, science, social studies, literature and other content area text.	
1. Reading and Responding **1.1** Students use appropriate strategies before, during and after reading in order to construct meaning. **1.2** Students interpret, analyze and evaluate text in order to extend understanding and appreciation. **2. Exploring and Responding** Students read and respond to classical and contemporary texts from many cultures and literary periods. **2.1** Students recognize how literary devices and conventions engage the reader.	**Reading Comprehension** ***Students will independently accomplish all before, during and after comprehension grade-level expectations. Teachers will continue to spiral all previous grade-level expectations. Students will read, view, listen to and write about a variety of fiction and nonfiction contemporary, classical, multicultural and culturally relevant texts in all content areas. Teachers will be culturally responsive to students. Students will provide evidence from text to support all oral, written and presented responses about text.*** **Before Reading** 19. Choose the appropriate text for a specific purpose. 20. Articulate what is known about the text topic based on the title, author, pictures, illustrations, prior knowledge. 21. Make relevant predictions about what will probably happen in a story (fiction) or what will be learned (nonfiction) based on title, cover, chapter headings, illustrations, etc.	

GRADE 3

READING
Students comprehend and respond in literal, critical and evaluative ways to various texts that are read, viewed and heard.

State Framework	Grade-Level Expectations	Assessments
1. Reading and Responding **1.1** **1.2** **2. Exploring and Responding** **2.1** **2.2** Students explore multiple responses to literature. **2.3** Students recognize and appreciate that contemporary and classical literature has shaped human thought. **2.4** Students recognize that reads and authors are influences by individual, social, cultural and historical contexts.	**During Reading** 22. Make predictions and connections. 23. Ask and answer questions. 24. Describe the mental imagery that occurs while reading. 25. Identify specific words or phrases that cause comprehension difficulties and self monitor. 26. Explain first-, second-, and third-person point of view. 27. Interpret graphical information, e.g., charts, tables, diagrams. 28. Make inferences based on explicit information in the text; provide justification for those inferences.	**DRA** **DRP** **CMT Reading Comprehension** **A4** Use information from the text to make predictions based on what is read. **A5** Use context clues to determine meanings of unknown or multiple-meaning words or figurative language. **C1** Make connections between the text and outside experiences and knowledge.

GRADE 3

READING
Students comprehend and respond in literal, critical and evaluative ways to various texts that are read, viewed and heard.

State Framework	Grade-Level Expectations	Assessments
1. Reading and Responding **1.1** **1.2** **1.4** Students communicate with others to create interpretations of written, oral and visual texts. **2. Exploring and Responding to Literature** **2.1** **2.2** **2.3** **2.4**	**After Reading — CMT Strands Highlighted Below** **General Understanding** 29. Describe characters' physical and personality traits. 30. Develop a new title that best fits a text. 31. Describe the conflict faced by a character in a story. 32. State the main idea with supporting details in informational text. 33. State the theme in literary text. **Developing an Interpretation** 34. Explain similarities and differences in a story. 35. Draw conclusions based on implicit or explicit evidence from text. 36. Decide an author's purpose for including particular information in text. 37. Interpret meaning based on charts, graphs, maps, illustrations, photos in text. 38. Identify and explain text structures, e.g., sequence, main idea/details, compare/contrast, cause and effect.	**CMT Reading Comprehension** **A1** Determine the main idea (nonfiction) theme (fiction) the text. **A2** Identify or infer important characters, problems, settings, events, relationships and details. **A3** Select and use relevant information from the text in order to summarize events and/or ideas in the text. **B1** Identify or infer the author's use of structure/organizational patterns. **B2** Draw conclusions about the author's purpose for choosing genres or including or omitting specific details in the text. **B3** Use stated or implied evidence from the text to draw and/or support a conclusion.

GRADE 3

READING
Students comprehend and respond in literal, critical and evaluative ways to various texts that are read, viewed and heard.

State Framework	Grade-Level Expectations	Assessments
	Making Reader/Text Connections a. Identify most surprising/interesting/important part of a text and explain why. **Content and Structure** 39. Recognize values, ethics and beliefs included in a text. 40. Select, synthesize and use relevant information from a text to include in an extension or response to the text, e.g., journal response, questions to ask the author, points to include in a speech. 41. Identify the author's use of literary devices, e.g., simile, personification. **42.** Discuss the culture and/or traditions described in a piece of literature and explain how they are similar or different from those of the reader.	**C1** Make connections between the text and outside experiences and knowledge. **C2** Select, synthesize and/or use relevant information within the text to write a personal response to the text. **D1** Analyze and evaluate the author's craft including use of literary devices and textual elements **D2** Select, synthesize and/or use relevant information within the texts to extend or evaluate the texts. **D3** Demonstrate an awareness of an author's or character's values, customs and beliefs included in the text.
1. Reading and Responding **1.2** **2. Exploring and Responding to Literature** **2.1**	**Reading Reflection/Behaviors** 43. Listen to, read, and discuss a variety of literature representing different perspectives of family, friendship, culture and tradition. 44. Identify reading strengths and weaknesses with teacher assistance and select targets on which to work. 45. Cite favorite authors and books and support with reasons.	

GRADE 3		
ORAL LANGUAGE **Students will listen and speak to communicate ideas clearly.**		
State Framework	**Grade-Level Expectations**	**Assessments**
1. Reading and Responding **1.4** **3. Communicating with Others** Students produce written, oral and visual texts to express, develop and substantiate ideas and experiences. **3.1** Students use descriptive, narrative, expository, persuasive and poetic modes. **4. Applying English Language Conventions** Students apply the conventions of standard English in oral, written and visual communication. **4.1** Students use knowledge of their language and culture to improve competency in English.	**Listening** 1. Recognize the difference between standard and nonstandard English. 2. Listen to the opinions of others about written, oral and visual texts. 3. Paraphrase information that has been shared by others.	

GRADE 3		
ORAL LANGUAGE **Students will listen and speak to communicate ideas clearly.**		
State Framework	**Grade-Level Expectations**	**Assessments**
1. Reading and Responding **1.4** **3. Communicating with Others** Students produce written, oral and visual texts to express, develop and substantiate ideas and experiences. **3.1** **3.2** Students prepare, publish and/or present work appropriate to audience, purpose and task. **4. Applying English Language Conventions** **4.2** Students speak and write using standard language structures and diction appropriate to audience and task.	**Speaking** 4. Express clearly main idea and elaborate with supporting details. 5. Sequence ideas logically with effective transition words to connect ideas. 6. Present ideas with clarity, voice and fluency to communicate a message, e.g., present dramatic interpretations of experiences, stories, poems or plays.	

GRADE 3		
WRITING **Students express, develop and substantiate ideas and experiences through their own writing and artistic and technical presentations.**		
State Framework	**Grade-Level Expectations**	**Assessments**
1. Reading and Responding **1.4** **3. Communicating with Others** **3.2** **4. Applying English Language Conventions** **4.1** **4.2** **4.3** Students use standard English for composing and revising written text.	**Spelling** 7. Spell words involving previously studied generalizations and word patterns, and words taught as part of the third-grade spelling curriculum. Examples: - vowel patterns, e.g., *aw, ou, oy* - affixes, e.g., *un-, pre-, -ed* - plurals rules, e.g., *cat* to *cats, glass* to *glasses, carry* to *carries* - double consonant rules, e.g., *bunny, hopping, hotter, hottest* - common homophones, e.g., *to, two, too; there, their, they're* 8. Use phonetic spelling for challenging words. 9. Recognize words that may be misspelled and make corrections.	

GRADE 3		
WRITING **Students express, develop and substantiate ideas and experiences through their own writing and artistic and technical presentations.**		
State Framework	**Grade-Level Expectations**	**Assessments**
1. Reading and Responding **1.4** **3. Communicating with Others** **3.2** **4. Applying English Language Conventions** **4.1** **4.2** **4.3**	**Capitalization/Punctuation/Usage** 10. Capitalize person's title, e.g., *President Smith* vs. *the president.* 11. Capitalize first word inside quotation marks. 12. Capitalize all proper nouns. 13. Write apostrophes to show possession. 14. Use period after an abbreviation or initial, e.g., *Dr. Georgia Scott, M.D.* 15. Use comma between city and state, e.g., *Seattle, Washington.* 16. Use commas in a series, e.g., *She bought red socks, white shoes, and a blue dress* OR *She bought red socks, white shoes and a blue dress.* 17. Use comma between the day of the month and the year, e.g., *March 2, 2000.* 18. Use comma in compound sentences. 19. Use quotation marks in dialogue. 20. Use apostrophe in possessive nouns, e.g., *the dog's house, the dogs' houses.* 21. Use correct pronoun as subject, e.g., *I* vs. *me.* 22. Use consistent verb tense most of the time. 23. Do not use double negatives or make common errors such as *would of* rather than *would have;* does not run sentences together or write accidental fragments. 24. Use appropriate homonym, e.g., *it's* vs. *its, your* vs. *you're, their* vs. *there* vs. *they're, to* vs. *two* vs. *too.* 25. Use paragraph conventions, e.g., designated by indentation or skipping lines between paragraphs. 26. Use resources to find correct spelling for words identified as misspelled, e.g., word walls, student dictionaries.	**CMT Editing & Revising**
4. Applying English Language Conventions **4.1** **4.2** **4.3**	**Handwriting** 27. Print and use cursive legibly, e.g., size, spacing, formation, uppercase and lowercase; and type when appropriate.	

GRADE 3		
WRITING **Students express, develop and substantiate ideas and experiences through their own writing and artistic and technical presentations.**		
State Framework	**Grade-Level Expectations**	**Assessments**
3. Communicating with Others **3.1** **3.2** **4. Applying English Language Conventions** **4.1** **4.2** **4.3**	**Writing Process** 28. **Plan:** develop ideas for a particular topic or purpose, e.g., questioning, brainstorming, drawing and listing key thoughts. 29. **Draft:** complete a draft of a singe topic, using simple notes or outlines generated from the planning stage . 30. **Revise:** revise a completed draft by rearranging words, phrases or sentences, provide supporting details, use correct sequence, fix run-on sentences and fragments. 31. **Edit:** edit drafts for complete sentences, capitalization, punctuation and usage. 32. **Publish/Present:** publish and present completed drafts, e.g., student authors' celebration, cooperative group science project, peer teaching math word problems. 33. **Reflect:** explain strengths and weaknesses of writing, e.g., CMT rubric and anchor papers, checklist, scoring guides.	**CMT Writing: Narrative (personal or fictional)**

GRADE 3		
WRITING **Students express, develop and substantiate ideas and experiences through their own writing and artistic and technical presentations.**		
State Framework	**Grade-Level Expectations**	**Assessments**
3. Communicating with Others **3.1** **3.2** **4. Applying English Language Conventions** **4.1** **4.2** **4.3**	**Writing Genres, Traits and Crafts** *Show increasing use of formal language patterns with a focus on voice, fluency, word choice and organization.* **Descriptive**: 34. Select a topic and use specific words to "paint a picture." 35. Use a variety of sentence lengths and sentence types, e.g., declarative, imperative, interrogative. **Narrative**: 36. Write personal narratives, using personal experience and observations to support ideas, e.g., diary entries, autobiography. 37. Write fictional narratives with an evident problem and solution, e.g., folktale, fairytale, fable. 38. Use transition words to connect ideas, e.g., *afterward, later on.* **Expository**: 39. Write a report to explain a topic, citing one source. 40. Write three or more paragraphs, maintaining focus on a specific topic and using a variety of sentence beginnings, e.g., start with an adverb, *quickly, the snake slithered away.* 41. Describe procedures sequentially, e.g., steps in a scientific experiment, mathematical problem, recipe. 42. Summarize through the use of charts and graphs . **Persuasive:** 43. Write two or more paragraphs, stating an opinion and supporting that opinion with details. **Poetic**: 44. Write a quatrain poem. 45. Write a limerick. 46. Write a free verse poem, e.g., repeated sentence beginnings: *If I were to change the world …*	**CMT Writing: Narrative (personal or fictional)**

GRADE 3
Content Suggestion: One's town as a context to expand knowledge of geography, history, human interdependence, etc., incorporating international comparisons. This may include comparing the history and geography of the local community with at least one other town in the United States and at least two towns or regions in other parts of the world.

Standard 1: Content Knowledge
Knowledge of concepts, themes, and information from history and social studies is necessary to promote understanding of our nation and our world.

Strand *Demonstrate an understanding of:*	**Grade Level Expectations** *Students will be able to:*	**Correlations**
1.1 – Significant events and themes in United States history.	1. Create timelines using appropriate intervals of time and record events in the order they occurred. 2. Identify and examine local connections to significant events and themes in United States history (e.g. American Revolution, Civil War, Industrial Revolution, Civil Rights Movement, WWI, WWII, 9/11). 3. Recognize and evaluate the significance of historical national documents (e.g. Constitution, Bill of Rights, Declaration of Independence).	Critical Thinking and Problem Solving Civic Literacy NCSS 3 "People. Places, and Environments" NCSS 6 "Power, Authority, and Governance I&TL: 3
1.2 – Significant events in local and Connecticut history and their connections to United States history.	4. Identify and examine connections between events in local and regional history.	Critical Thinking and Problem Solving NCSS 2 "Time, Continuity, and Change" I&TL: 3
1.3 – Significant events and themes in world history/international studies.	5. Investigate one's own family heritage, making comparisons to classmates and community members. 6. Investigate the national origins of prominent individuals (past and present) in one's town and examine the influence of their heritage on the community.	Critical Thinking and Problem Solving NCSS 3 "People, Places, and Environments" I&TL: 1, 2, 3, 5, 6
1.4 – Geographical space and place.	7. Identify and locate Earth's various physical features (e.g. continents, oceans, mountains). 8. Create a representation of geographic features (e.g. map, graph, model). 9. Differentiate between absolute and relative locations (e.g. longitude and latitude versus proximity).	Critical Thinking and Problem Solving Information Literacy NCSS 3 "People, Places, and Environments" I&TL: 3, 4, 5, 6, 7

1.5– Interaction of humans and the environment.	10. Evaluate the ways in which people affect the environment (e.g. dams, mining, global warming, preservation, recycling). 11. Discuss how geographical features and natural resources shape people's lives.	Critical Thinking and Problem Solving Information Literacy Global Awareness NCSS 3 "People, Places, and Environments" I&TL: 3, 6
1.6 – Patterns of human movement across time and place.	12. Analyze how and why people settled in various areas in their community (e.g. religion, ethnicity, socioeconomic level). 13. Analyze the geographic features that promoted settlement in one's community.	Critical Thinking and Problem Solving Global Awareness NCSS 3 "People, Places, and Environments" I&TL: 3
1.7– The purpose, structures and functions of government and law at the local, state, national and international levels.	14. Explain how local government structure provides basic services.	Critical Thinking and Problem Solving Civic Literacy NCSS 5 "Individuals, Groups, and Institutions" NCSS 6 "Power, Authority, and Governance" I&TL: 3
1.8– The interactions between citizens and their government in the making and implementation of laws.	15. Explain how residents help create town laws. 16. Recognize that one purpose of taxes is to finance services. 17. Compare the relationship between residents and government in one's own town with towns in other parts of the United States and the world.	Critical Thinking and Problem Solving Civic Literacy Financial Literacy NCSS 6 "Power, Authority, and Governance" NCSS 10 "Civic Ideals and Practices" I&TL: 3
1.9– The rights and responsibilities of citizens.	18. Identify one's rights and responsibilities as a citizen (e.g. voting, paying taxes, obeying laws). 19. Predict the impact on a state or nation if people did not meet their responsibilities.	Critical Thinking and Problem Solving Civic Literacy NCSS 10 "Civic Ideals and Practices" I&TL: 3
1.10– How limited resources influence economic decisions.	20. Give examples of goods and services. 21. Explain how people use resources to make goods and services (factors of production).	Critical Thinking and Problem Solving Financial Literacy NCSS 7 "Production, Distribution, and Consumption" I&TL: 3
1.11 – How different economic systems organize resources.	22. Compare and contrast how different communities determine what, how and for whom to produce goods and services.	Critical Thinking and Problem Solving NCSS 7 "Production, Distribution, and Consumption" I&TL: 3

1.12– The interdependence of local, national and global economies.	23. Analyze why certain products are produced in specific locations.	Critical Thinking and Problem Solving NCSS 7 "Production, Distribution, and Consumption" NCSS 9 "Global Connections" I&TL: 1, 2, 3, 5, 6
1.13 – The characteristics of and interactions among culture, social systems and institutions.	24. Explain characteristics that help define an ethnic group (e.g. language, religion, clothing). 25. Compare and contrast individual identity (e.g. beliefs, values, abilities) with that of peer group and other ethnic/cultural groups.	Critical Thinking and Problem Solving NCSS 1 "Culture" I&TL: 1, 3

Standard 2: History/Social Studies Literacy
Competence in literacy, inquiry, and research skills is necessary to analyze, evaluate, and present history and social studies information.

Strand	Grade Level Expectations *Students will be able to:*	Correlations
2.1– Access and gather information from a variety of primary and secondary sources including electronic media (maps, charts, graphs, images, artifacts, recordings and text).	1. Gather information in content areas through independent use of reference material and electronic media. 2. Answer questions about content gathered from print and non-print sources.	Critical Thinking and Problem Solving Information Literacy RI3- 1, 2, 4, 5 W3- 7, 8 I&TL: 1, 2, 5, 6
2.2 – Interpret information from a variety of primary and secondary sources, including electronic media (e.g. maps, charts, graphs, images, artifacts, recordings and text).	3. Explain different points of view expressed in fiction and nonfiction materials. 4. Compare and summarize information from political and physical maps by using map symbols. 5. Compare and summarize information from charts and graphs.	Critical Thinking and Problem Solving Communication Information Literacy RI3- 3, 6, 7, 9 SL3- 2 I&TL: 3
2.3 – Create various forms of written work (e.g. journal, essay, blog, Web page, brochure) to demonstrate an understanding of history and social studies issues.	6. Create written work (e.g. reports, poems) based on information gathered on a social studies topic, citing one source.	Critical Thinking and Problem Solving Information Literacy Communication W3- 2, 4, 6, 10 I&TL: 4, 5, 6, 7
2.4 – Demonstrate an ability to participate in social studies discourse through informed discussion, debate and effective oral presentation.	7. Present information gathered on a social studies topic with clarity, voice and fluency. 8. Respond to questions related to information presented. 9. Participate in collaborative conversations with diverse partners about social studies	Critical Thinking and Problem Solving Information Literacy Communication SL3- 1, 3, 4, 6 I&TL: 4, 5, 6, 7

	topics and texts with peers and adults in small and larger groups.	
2.5 – Create and present relevant social studies materials using both print and electronic media (e.g. maps, charts, models, displays).	10. Create visual presentations on social studies topics depicting relevant information (e.g. poster, chart, picture, timeline, map)	Critical Thinking and Problem Solving Information Literacy Communication I&TL: 1, 2, 3, 4, 5, 6, 7

Standard 3: Civic Engagement
Civic competence in analyzing historical issues and current problems requires the synthesis of information, skills, and perspective.

Strand	Grade Level Expectations *Students will be able to:*	Correlations
3.1 – Use evidence to identify, analyze and evaluate historical interpretations.	1. Use evidence to examine different points of view of an event.	Critical Thinking and Problem Solving Information Literacy Communication NCSS 4 "Individual Development and Identity" I&TL: 1, 2, 3, 5, 6
3.2 – Analyze and evaluate human action in historical and/or contemporary contexts from alternative points of view.	2. Discuss various points of view related to a historical situation. 3. Predict various points of view people might have on a contemporary issue (local level).	Critical thinking and Problem solving Skills I&TL: 3
3.3 - Apply appropriate historical, geographic, political, economic and cultural concepts and methods in proposing and evaluating solutions to contemporary problems.	4. Identify a contemporary issue and develop a plan for resolving the issue (e.g. recycling, helping with a social need, nutrition, safety). 5. Participate in implementing a plan in one's class or school that addresses an identified contemporary issue.	Critical Thinking and Problem Solving Information Literacy Communication I&TL: 1, 2, 3, 4, 5, 6, 7

GRADE 3

Numerical and Proportional Reasoning

Place Value

- Use models to compose and decompose representations of two- and three-digit numbers.
- Compare and round numbers to the nearest 10 and 100.
- Locate, label, compare and order whole numbers to 1000.
- Use coins and bills to show different ways to make a given amount and/or equivalent amounts of money; record using decimal notation.

Number Sense

- Use models and pictures of sets and arrays to represent multiplication and division of two- and three-digit numbers by one-digit numbers.
- Use commutative and associative properties to solve problems.
- Recall the multiplication and division facts with factors of 1, 2, 3, 4, 5 and 10.
- Write and solve multiplication and division story problems and match to number sentences (equations).
- Estimate, add and subtract with two- and three- digit numbers using a variety of strategies.
- Use estimation strategies to determine and justify the reasonableness of a computational answer, including over- and under-estimates.

Fractions, Decimals & Ratios

- Use models and pictures to represent fractions and label parts with words and symbols.
- Identify a whole as a fraction with the same numerator and denominator.
- Estimate common fractional values and measure to the nearest half unit with the aid of number lines and rulers.
- Construct and use models to identify equivalent fractions and to compare and order fractions with like and unlike denominators of 2, 3, 4, 5, 6 and 8.
- Identify patterns with equivalent ratios such as 3 out of 6 crayons are red or 4 out of 8 crayons are red are the same as 1 out of 2 crayons is red.
- Construct and use models to add and subtract fractions with like denominators and record as fraction sentences.

Geometry and Measurement

Geometry

- Describe, analyze, and classify 2-dimensional shapes, including number of angles and sides.
- Draw simple 2-dimensional geometric shapes and figures.
- Sort polygons and solids by the relationship of sides (parallel, perpendicular), kinds of angles (acute, right and obtuse), symmetry and congruence.
- Draw and interpret simple maps using coordinate systems.

Measurement

- Tell time to 15 minute intervals and solve problems involving time, elapsed time (15 minute increments) and calendars.
- Draw and measure lengths to the nearest inch or centimeter.
- Develop and explain strategies for using nonstandard and standard referents to estimate measurements of length, area, weight, temperature, volume and capacity.

Working With Data: Probability and Statistics

Working With Data

- Pose questions and use a variety of ways to collect, organize and analyze data from samples and surveys.

- Display, read, interpret and draw conclusions from data collected from samples and surveys that are represented in tables, charts, lists, diagrams, line plots or bar graphs.

Probability and Statistics

- Make predictions and test them by conducting probability experiments and recording results.

Algebraic Reasoning: Patterns and Functions

- Sort and classify the same set of objects in more than one way and explain the reason for each sort.
- Construct, reproduce, describe and extend numerical and spatial patterns.
- Model situations that reflect mathematical relationships involving addition, subtraction, multiplication and division as open number sentences and match number sentences to story problems.
- Explore inequalities and the ≠ symbol.

THE UNIVERSITY OF CHICAGO SCHOOL MATHEMATICS PROJECT

EVERYDAY MATHEMATICS

GRADE 3 GRADE-LEVEL GOALS

Content Strand: Number and Numeration			
Grade-Level Goals		**Content Thread**	**Program Goal**
Goal 1	Read and write whole numbers up to 1,000,000; read, write, and model with manipulatives decimals through hundredths; identify places in such numbers and the values of the digits in those places; translate between whole numbers and decimals represented in words, in base-10 notation, and with manipulatives.	*Place value and notation*	Understand the Meanings, Uses, and Representations of Numbers
Goal 2	Read, write, and model fractions; solve problems involving fractional parts of a region or a collection; describe strategies used.	*Meanings and uses of fractions*	
Goal 3	Find multiples of 2, 5, and 10.	*Number theory*	
Goal 4	Use numerical expressions involving one or more of the basic four arithmetic operations to give equivalent names for whole numbers.	*Equivalent names for whole numbers*	Understand Equivalent Names for Numbers
Goal 5	Use manipulatives and drawings to find and represent equivalent names for fractions; use manipulatives to generate equivalent fractions.	*Equivalent names for fractions, decimals, and percents*	
Goal 6	Compare and order whole numbers up to 1,000,000; use manipulatives to order decimals through hundredths; use area models and benchmark fractions to compare and order fractions.	*Comparing and ordering numbers*	Understand Common Numerical Relations

Content Strand: Operations and Computation			
Grade-Level Goals		**Content Thread**	**Program Goal**
Goal 1	Demonstrate automaticity with all addition and subtraction facts through 10 + 10; use basic facts to compute fact extensions such as 80 + 70.	*Addition and subtraction facts*	Computes Accurately
Goal 2	Use manipulatives, mental arithmetic, paper-and-pencil algorithms, and calculators to solve problems involving the addition and subtraction of whole numbers and decimals in a money context; describe the strategies used and explain how they work.	*Addition and subtraction procedures*	
Goal 3	Demonstrate automaticity with x0, x1, x2, x5, and x10 multiplication facts; use strategies to compute remaining facts up to 10 x 10.	*Multiplication and division facts*	
Goal 4	Use arrays, mental arithmetic, paper-and-pencil algorithms, and calculators to solve problems involving the multiplication of 2- and 3-digit whole numbers by 1-digit and describe the strategies used.	*Multiplication and division procedures*	
Goal 5	Make reasonable estimates for whole number addition and subtraction problems; explain how the estimates were obtained.	*Computational estimation*	Make Reasonable Estimates
Goal 6	Recognize and describe change, comparison, and parts-and-total situations; use repeated addition, arrays, and skip counting to model multiplication; use equal sharing and equal grouping to model division.	*Models for the operations*	Understand Meanings of Operations

Content Strand: Data and Chance			
Grade-Level Goals		**Content Thread**	**Program Goal**
Goal 1	Collect and organize data or use given data to create charts, tables, bar graphs, and line plots.	*Data collection and representation*	Select and Create Appropriate Graphical Representations of Collected or Given Data
Goal 2	Use graphs to ask simple questions and draw conclusions; find the maximum, minimum, range, mode, and median of a data set.	*Data analysis*	Analyze and Interpret Data
Goal 3	Describe events using *certain*, *very likely*, *likely*, *unlikely*, *very unlikely*, *impossible* and other basic probability terms; explain the choice of language.	*Qualitative probability*	Understand and Apply Basic Concepts of Probability
Goal 4	Predict the outcomes of simple experiments and test the predictions using manipulatives; express the probability of an event by using "_ out of _" language.	*Quantitative probability*	

Content Strand: Measurement and Reference Frames			
Grade-Level Goals		**Content Thread**	**Program Goal**
Goal 1	Estimate length with and without tools; measure length to the nearest ½ inch and ½ centimeter; draw and describe angles of records of rotations.	*Length, weight, and angles*	Understand the Systems and Processes of Measurement; Use Appropriate Techniques, Tools, Units, and Formulas in Making Measurements
Goal 2	Describe and use strategies to measure the perimeter of polygons; count unit squares to find the areas of rectangles.	*Area, perimeter, volume, and capacity*	
Goal 3	Describe relationships among inches, feet, and yards; describe relationships between minutes in an hour, hours in a day, days in a week.	*Units and systems of measurement*	
Goal 4	Tell and show time to the nearest minute on an analog clock; tell and write time in digital notation.	*Time*	Use and Understand Reference Frames

Content Strand: Geometry			
Grade-Level Goals		**Content Thread**	**Program Goal**
Goal 1	Identify and draw points, intersecting and parallel line segments, and lines, rays, and right angles.	*Lines and angles*	Investigate Characteristics and Properties of Two- and Three-Dimensional Geometric Shapes
Goal 2	Identify, describe, model, and compare plane and solid figures including circles, polygons, spheres, cylinders, rectangular prisms, pyramids, cones, and cubes using appropriate geometric terms including the terms *face*, *edge*, *vertex,* and *base*.	*Plane and solid figures*	
Goal 3	Create and complete two-dimensional symmetric shapes or designs; locate multiple lines of symmetry in a two-dimensional shape.	*Transformations and symmetry*	Apply Transformations and Symmetry in Geometric Situations

Content Strand: Patterns, Functions, and Algebra			
Grade-Level Goals		**Content Thread**	**Program Goal**
Goal 1	Extend, describe, and create numeric patterns; describe rules for patterns and use them to solve problems; use words and symbols to describe and write rules for functions involving addition, subtraction, and multiplication and use those rules to solve problems.	*Patterns and functions*	Understand Patterns and Functions
Goal 2	Read, write, and explain number sentences using the symbols +, – , x, ÷, =, >, and <; solve number sentences, write expressions and number sentences to model number stories.	*Algebraic notation and solving number sentences*	Use Algebraic Notation to Represent and Analyze Situations and Structures
Goal 3	Recognize that numeric expressions can have different values depending on the order in which operations are carried out; understand that grouping symbols can be used to affect the order in which operations are carried out.	*Order of operations*	
Goal 4	Describe and apply the Commutative and Associative Properties of Addition, the Commutative Property of Multiplication, and the Multiplicative Identity.	*Properties of the arithmetic operations*	

Connecticut Mastery Test – Fourth Generation

Mathematics Grade 3 Test Blueprint

Content Standards and Strands	# of multiple-choice items	# of open-ended items
Numerical and Proportional Reasoning		
1. Place Value	6	
2. Pictorial Representations of Numbers	4	2
3. Equivalent Fractions, Decimals and Percents	NT	NT
4. Order, Magnitude and Rounding of Numbers	6	
5. Models for Operations	4	2
6. Basic Facts	6	
7. Computation with Whole Numbers and Decimals	6	
8. Computation with Fractions and Integers	NT	
9. Solve Word Problems	6	
10. Numerical Estimation Strategies	4	
11. Estimating Solutions to Problems	4	
12. Ratios and Proportions	NT	NT
13. Computation with Percents	NT	NT
Geometry and Measurement		
14. Time	6	
15. Approximating Measures	6	
16. Customary and Metric Measures	3	3
17. Geometric Shapes and Properties	3	3
18. Spatial Relationships	NT	NT
Working with Data: Probability and Statistics		
19. Tables, Graphs and Charts	4	2
20. Statistics and Data Analysis	NT	NT
21. Probability	4	
24. Classification and Logical Reasoning	2	2
Algebraic Reasoning: Patterns and Functions		
22. Patterns	2	2
23. Algebraic Concepts	NT	NT
Integrated Understandings		
25. Mathematical Applications		2
TOTAL	**76**	**18**

* NT = Strand not tested at this grade level.

Connecticut Mastery Test – Fourth Generation

Mathematics Grade 3 Content

Strand	Concepts/Skills Assessed
1. Place Value	A. Solve problems involving 1 MORE/LESS or 10 MORE/LESS using 2-digit numbers. B. Identify alternative forms of expressing 3-digit whole numbers using expanded notation. C. Identify alternative forms of expressing 2-digit whole numbers using regrouping. D. Use place value concepts to identify and compare the magnitude and value of digits in 2- and 3-digit numbers.
2. Pictorial Representation of Numbers	A. Relate whole numbers to pictorial representations of base ten blocks and vice versa. B. Identify fractional parts of regions and sets using pictures and vice versa. C. Label and/or shade fractional parts of regions and sets.
3. Equivalent Fractions, Decimals and Percents	Not tested
4. Order, Magnitude and Rounding of Numbers	A. Order 2- and 3-digit whole numbers. B. Describe magnitude of 2- and 3-digit whole numbers. C. Round 2-digit whole numbers in context. D. Identify points representing 2- and 3-digit whole numbers on a number line and vice versa.
5. Models for Operations	A. Relate multiplication and division facts to rectangular arrays and pictures. B. Identify the appropriate operation or number sentence to solve a story problem. C. Write story problems from addition or subtraction number sentences.
6. Basic Facts	A. Add and subtract facts to 18. B. Multiply and divide by 2, 5 and 10.
7. Computation with Whole Numbers and Decimals	A. Add and subtract 1- and 2-digit whole numbers without regrouping. B. Add 1- and 2-digit whole numbers with regrouping.
8. Computation with Fractions and Integers	Not tested
9. Solve Word Problems	A. Solve simple story problems involving addition (with/without regrouping) or subtraction (without regrouping). B. Solve simple story problems involving addition (with/without regrouping) or subtraction (without regrouping) with extraneous information.
10. Numerical Estimation Strategies	A. Identify the best expression to find an estimate.
11. Estimating Solutions to Problems	A. Identify a reasonable estimate to a problem.
12. Ratios and Proportions	Not tested
13. Computation with Percents	Not tested
14. Time	A. Tell time to the nearest hour, half-hour and quarter-hour using analog and digital clocks. B. Solve problems involving time, elapsed time (15-minute increments) and calendars.

Strand	Grade 3 Concepts/Skills Assessed
15. Approximating Measures	A. Estimate lengths and areas by comparing.
16. Customary and Metric Measures	A. Measure lengths to the nearest inch or centimeter. B. Draw lengths to the nearest inch or centimeter. C. Identify appropriate customary or metric units of measure for a given situation (inches, feet, centimeters and meters).
17. Geometric Shapes and Properties	A. Identify and recognize 2-dimensional geometric shapes and figures, including number of angles and sides of polygons. B. Draw 2-dimensional geometric shapes and figures.
18. Spatial Relationships	Not tested
19. Tables, Graphs and Charts	A. Identify correct information from tables, bar graphs, pictographs and charts. B. Create bar graphs and pictographs from data in tables and charts.
20. Statistics and Data Analysis	Not tested
21. Probability	A. Identify correct solutions to problems involving elementary notions of probability.
22. Patterns	A. Extend or complete patterns, or identify rules using numbers and attributes. B. Extend or complete patterns and state rules using numbers and attributes.
23. Algebraic Concepts	Not tested
24. Classification and Logical Reasoning	A. Identify objects that are the same or different by one attribute. B. Sort objects into 2 groups by a common attribute.
25. Mathematical Applications	A. Solve extended numerical and statistical problems.

Common Core State Standards for Mathematics
Grade 3

Domains	Operations and Algebraic Thinking	Number & Operations in Base Ten	Number & Operations: *Fractions*	Measurement and Data	Geometry
Clusters	• Represent and solve problems involving multiplication and division • Understand properties of multiplication and the relationship between multiplication and division • Multiply and divide within 100 • Solve problems involving the four operations, and identify and explain patterns in arithmetic	• Use place value understanding and properties of operations to perform multi-digit arithmetic	• Develop understanding of fractions as numbers	• Solve problems involving measurement and estimation of intervals of time, liquid, volumes and masses of objects • Represent and interpret data • Geometric measurement: understand concepts of area and relate area to multiplication and to addition • Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures	• Reason with shapes and their attributes
Mathematical Practices	1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively.	3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics.	5. Use appropriate tools strategically. 6. Attend to precision.	7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.	

In Grade 3, instructional time should focus on four critical areas (note: multiplication, division, and fractions are the most important developments):

1. ***Developing understanding of multiplication and division and strategies for multiplication and division within 100***
   - Students develop an understanding of the meanings of multiplication and division of whole numbers through activities and problems involving equal-sized groups, arrays, and area models; multiplication is finding an unknown product, and division is finding an unknown factor in these situations. For equal-sized group situations, division can require finding the unknown number of groups or the unknown group size. Students use properties of operations to calculate products of whole numbers, using increasingly sophisticated strategies based on these properties to solve multiplication and division problems involving single-digit factors. By comparing a variety of solution strategies, students learn the relationship between multiplication and division.
2. ***Developing understanding of fractions, especially unit fractions (fractions with numerator 1)***
   - Students develop an understanding of fractions, beginning with unit fractions. Students view fractions in general as being built out of unit fractions, and they use fractions along with visual fraction models to represent parts of a whole. Students understand that the size of a fractional part is relative to the size of the whole. For example, 1/2 of the paint in a small bucket could be less paint than 1/3 of the paint in a larger bucket; but 1/3 of a ribbon is longer than 1/5 of the same ribbon because when the ribbon is divided into 3 equal parts, the parts are longer than when the ribbon is divided into 5 equal parts. Students are able to use fractions to represent numbers equal to, less than, and greater than one. They solve problems that involve comparing fractions by using visual fraction models and strategies based on noticing equal numerators or denominators.
3. ***Developing understanding of the structure of rectangular arrays and of area***
   - Students recognize area as an attribute of two-dimensional regions. They measure the area of a shape by finding the total number of same-size units of area required to cover the shape without gaps or overlaps, a square with sides of unit length being the standard unit for measuring area. Students understand that rectangular arrays can be decomposed into identical rows or into identical columns. By decomposing rectangles into rectangular arrays of squares, students connect area to multiplication, and justify using multiplication to determine the area of a rectangle.
4. ***Describing and analyzing two-dimensional shapes***
   - Students describe, analyze, and compare properties of two-dimensional shapes. They compare and classify shapes by their sides and angles, and connect these with definitions of shapes. Students also relate their fraction work to geometry by expressing the area of part of a shape as a unit fraction of the whole.