

**PREKINDERGARTEN AND KINDERGARTEN**

**Properties of Matter**

K.1 — Objects have properties that can be observed and used to describe similarities and differences.

State Framework	Grade-Level Expectations	CMT Correlation
<p><b>K.1.a. Some properties can be observed with the senses, and others can be discovered by using simple tools or tests.</b></p>	<ol style="list-style-type: none"> <li>1. Match each of the five senses with its associated body part and the kind of information it perceives.</li> <li>2. Make scientific observations using the five senses, and distinguish between an object’s observable properties and its name or its uses.</li> <li>3. Classify organisms or objects by one and two observable properties and explain the rule used for sorting (e.g., size, color, shape, texture or flexibility).</li> <li>4. Use simple tools and nonstandard units to estimate and measure properties such as heaviness, magnetic attraction and float/sink.</li> <li>5. Compare the observable properties of different materials from which objects are made (e.g., wood, plastic, metal, cloth and paper).</li> <li>6. Count, order and sort objects by their observable properties.</li> </ol>	<p><b>A1.</b> Use the senses and simple measuring tools, such as rulers and equal-arm balances, to observe common objects and sort them into groups based on size, weight, shape or color.</p> <p><b>A2.</b> Sort objects made of materials such as wood, paper and metal into groups based on properties such as flexibility, attraction to magnets, and whether they float or sink in water.</p> <p><b>A3.</b> Count objects in a group and use mathematical terms to describe quantitative relationships such as: same as, more than, less than, equal, etc.</p>

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**Heredity and Evolution**

K.2 — Many different kinds of living things inhabit the Earth.

<b>State Framework</b>	<b>Grade Level Expectations</b>	<b>CMT Correlation</b>
<p><b>K.2.a. Living things have certain characteristics that distinguish them from nonliving things, including growth, movement, reproduction and response to stimuli.</b></p>	<ol style="list-style-type: none"> <li>1. Use the senses to make observations of characteristics and behaviors of living and nonliving things.</li> <li>2. Infer from observations that living things need air, food, water, shelter and space to stay alive.</li> <li>3. Compare and contrast living things, which grow and can make a new living thing like itself, with nonliving things, which do not grow or reproduce.</li> <li>4. Give examples of living things and nonliving things.</li> <li>5. Make observations and distinguish between the characteristics of plants and animals.</li> <li>6. Match parents with their offspring (both plants and animals) to show that offspring are similar, but not identical, to their parents and to one another.</li> </ol>	<p><b>A4.</b> Describe the similarities and differences in the appearance and behaviors of plants, birds, fish, insects and mammals (including humans).</p> <p><b>A5.</b> Describe the similarities and differences in the appearance and behaviors of adults and their offspring.</p> <p><b>A6.</b> Describe characteristics that distinguish living from nonliving things.</p>

**PREKINDERGARTEN AND KINDERGARTEN**

**Energy in the Earth's Systems**

K.3 — Weather conditions vary daily and seasonally.

<b>State Framework</b>	<b>Grade-Level Expectations:</b>	<b>CMT Correlation</b>
<b>K.3.a. Daily and seasonal weather conditions affect what we do, what we wear and how we feel.</b>	<ol style="list-style-type: none"><li>1. Use the senses and simple measuring tools to estimate and record weather data and represent it in bar graphs.</li><li>2. Analyze weather data collected over time (during the day, from day to day, and from season to season) to identify patterns and make predictions.</li><li>3. Observe, compare and contrast cloud shapes, sizes and colors, and relate the appearance of clouds to fair weather or precipitation.</li><li>4. Summarize ways that weather influences humans, other animals and plants.</li><li>5. Make judgments about appropriate clothing and activities based on weather conditions.</li></ol>	<p><b>A7.</b> Describe and record daily weather conditions.</p> <p><b>A8.</b> Relate seasonal weather patterns to appropriate choices of clothing and activities.</p>

**PREKINDERGARTEN AND KINDERGARTEN**

**Science and Technology in Society**

K.4 — Some objects are natural, while others have been designed and made by people to improve the quality of life.

*This content standard is an application of the concepts in content standard K.1 and should be integrated into the same unit.*

<b>State Framework</b>	<b>Grade-Level Expectations:</b>	<b>CMT Correlation</b>
<b>K.4.a. Humans select both natural and man-made materials to build shelters based on local climate conditions, properties of the materials, and their availability in the environment.</b>	<ol style="list-style-type: none"><li>1. Conduct simple tests to determine properties that make different materials useful for making roofs, windows, walls and floors (e.g., waterproof, transparent, strong).</li><li>2. Seek information in books, magazines and pictures that describes materials used to build shelters by people in different regions of the world.</li><li>3. Compare and contrast the materials used by humans and animals to build shelters.</li></ol>	<b>A9.</b> Describe the types of materials used by people to build houses and the properties that make the materials useful.

## **Kindergarten**

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

**Students Expected Performances:**

- Ask questions about objects, organisms and the environment.
- Use senses to collect data.
- Listen and speak about observations of the natural world.
- Present information in drawings.
- Use non-standard measures to measure and compare the sizes of objects.

**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:**

- Use the senses and simple measuring tools, such as rulers and equal arm balances, to observe common objects and sort them into groups based on size, weight, shape or color.
- Sort objects made of materials such as wood, paper and metal into groups based on properties such as flexibility, attraction to magnets, and whether they float or sink in water.
- Count objects in groups and use mathematical terms to describe quantitative relationships such as: same as, more than, less than, equal, etc.

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

**Students Expected Performances:**

- Describe the similarities and differences in the appearance and behaviors of plants, birds, fish, insects, and mammals; including humans.
- Describe the similarities and differences in the appearance and behaviors of adults and their offspring.
- Describe characteristics that distinguish living from non-living things.

**Content Standard: Earth Science- Forces and Motion- Students should demonstrate how external and internal sources of energy affect the Earth's systems.**

**Students Expected Performances:**

- Describe and record daily weather conditions.
- Relate seasonal weather patterns to appropriate choices of clothing and activities.

**Content Standard: Global Awareness and 21<sup>st</sup> Century Skills- Students should demonstrate how science and technology affect the quality of our lives.**

**Students Expected Performances:**

Describe the types of materials used by people to build houses and the properties that make the materials useful.

Describe the different types of houses in different parts of the world.

**PREKINDERGARTEN**

**WRITING**

Students express, develop and substantiate ideas and experiences through their own writing and artistic and technical presentations.

State ELA Frameworks	State Preschool Framework	Grade-Level Expectations	Assessments
<p><b>3. Communicating with Others</b> 3.1 3.2</p> <p><b>4. Applying English Language Conventions</b> 4.1 4.2 4.3</p>		<p style="text-align: center;"><b>Writing Genres, Traits and Crafts</b></p> <p><b>Descriptive:</b> 8. Use pictures and letter-like approximations to describe a person, place or thing.</p> <p><b>Narrative:</b> 9. Write or discuss “stories,” using at least pictures and letter-like approximations.</p> <p><b>Expository:</b> 10. Write, discuss or draw to explain a current event, e.g., weekend news.</p> <p><b>Persuasive:</b> 11. Write, discuss or draw to explain why they like something, e.g., school, teacher, dessert.</p> <p><b>Poetic:</b> 12. Write, discuss or draw to complete a rhyming sentence.</p>	<p><b>COG 12</b> Recognizes similar sounds in speech</p> <p><b>COG 14</b> Uses writing to convey meaning</p> <p><b>CRE 2</b> Draws and paints to represent own ideas</p>

## KINDERGARTEN

### 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
<p><b>1. Reading and Responding</b> Students read, comprehend and respond in individual, literal, critical and evaluative ways to literary, informational and persuasive texts in multimedia formats.</p> <p><b>1.3</b> Students select and apply strategies to facilitate word recognition and develop vocabulary in order to comprehend text.</p>	<p style="text-align: center;"><b>Concepts About Print</b></p> <ol style="list-style-type: none"> <li>1. Recognize words are separated by spaces.</li> <li>2. Recognize sentences are made of separate words.</li> <li>3. Identify types of everyday print materials, e.g., poems, newspapers, signs, labels and storybooks.</li> <li>4. Distinguish letters from words.</li> <li>5. Identify parts of books, e.g., spine, cover, pages, title, front, back.</li> <li>6. Emergently “read” familiar books, i.e., recognize print and pictures tell the story.</li> <li>7. Track printed words from left to right demonstrating one-to-one correspondence.</li> </ol>	
<p><b>1. Reading and Responding</b> <b>1.3</b></p>	<p style="text-align: center;"><b>Phonological Awareness</b></p> <ol style="list-style-type: none"> <li>8. Produce rhyming words orally in response to spoken words.</li> <li>9. Blend onset and rime to form words, e.g., /d/ /o/ /g/ = <i>dog</i>.</li> <li>10. Identify spoken words with similar initial sounds.</li> <li>11. Identify spoken words with similar ending sounds.</li> <li>12. Produce groups of words orally that begin with the same initial sounds.</li> <li>13. Segment and isolate initial, medial and final sounds of CVC (consonant-vowel-consonant) words.</li> <li>14. Blend up to three orally presented phonemes into a correct word.</li> <li>15. Substitute initial phoneme sounds.</li> <li>16. Identify the number of syllables in three-syllable words.</li> </ol>	
<p><b>1. Reading and Responding</b> <b>1.3</b></p>	<p style="text-align: center;"><b>Phonics</b></p> <ol style="list-style-type: none"> <li>17. Demonstrate letter-sound correspondences for all single consonants.</li> <li>18. Identify letters matched to short vowel sounds.</li> <li>19. Use common consonant sounds with short vowels to decode three letter words.</li> </ol>	
<p><b>1. Reading and Responding</b> <b>1.3</b></p>	<p style="text-align: center;"><b>High-Frequency Words</b></p> <ol style="list-style-type: none"> <li>20. Read at least 25 high-frequency words, e.g., Dolch or Fry.</li> <li>21. Recognize some high-frequency words taught in context.</li> </ol>	

## KINDERGARTEN

### READING

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State Framework	Grade-Level Expectations	Assessments
<p><b>1. Reading and Responding</b> <b>1.3</b></p>	<p style="text-align: center;"><b>Fluency</b></p> <p>22. Read decodable texts to practice and gain fluency. 23. Identify patterns in books, rhymes and songs. 24. Read or sing along with correct expression and pace in books, rhymes and songs.</p>	
<p><b>1. Reading and Responding</b> <b>1.3</b></p>	<p style="text-align: center;"><b>Vocabulary</b></p> <p>25. Confirm meanings of unknown words, using prior knowledge, context, photos, illustrations and diagrams. 26. Identify common words in basic categories, i.e., can give examples of favorite foods or favorite colors.</p>	
<p><b>1. Reading and Responding</b> <b>1.1</b> Students use appropriate strategies before, during and after reading in order to construct meaning.</p> <p><b>1.2</b> Students interpret, analyze and evaluate text in order to extend understanding and appreciation.</p> <p><b>2. Exploring and Responding to Literature</b> Students read and respond to classical and contemporary texts from many cultures and literary periods.</p> <p><b>2.1</b> Students recognize how literary devices and conventions engage the reader.</p>	<p style="text-align: center;"><b>Reading Comprehension</b></p> <p><i>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.</i></p> <p style="text-align: center;"><b>Before Reading</b></p> <p>27. Use pre-reading strategies, such as predicting, picture walks, and questioning to set context for reading and to aid comprehension. 28. Activate prior knowledge to aid comprehension of fiction and nonfiction texts in terms of what is true and what is not true.</p>	<p style="text-align: center;"><b>Developmental Reading Assessment (DRA)</b></p>

## KINDERGARTEN

### 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
<p><b>1. Reading and Responding</b>  <b>1.1</b>  <b>1.2</b></p> <p><b>2. Exploring and Responding to Literature</b>  <b>2.1</b>  <b>2.2</b> Students explore multiple responses to literature.  <b>2.3</b> Students recognize and appreciate that contemporary and classical literature has shaped human thought.    <b>2.4</b> Students recognize that reads and authors are influences by individual, social, cultural and historical contexts.</p>	<p><b>During Reading</b></p> <p>29. Ask questions when things do not make sense.            30. Create pictures from read-aloud and shared readings.            31. Identify parts of a text that seem important.            32. Make connections between text and self.            33. Make predictions about what may happen next.</p>	
<p><b>1. Reading and Responding</b>  <b>1.1</b>  <b>1.2</b>  <b>1.4</b> Students communicate with others to create interpretations of written, oral and visual texts.</p> <p><b>2. Exploring and Responding to Literature</b>  <b>2.1</b>  <b>2.2</b>  <b>2.3</b>  <b>2.4</b></p>	<p><b>After Reading</b></p> <p>34. Answer literal and easy inferential questions about texts read aloud.            35. Retell information from a story, using proper sequence.            36. Identify the setting, theme, conflict, and important events of the plot in a story.            37. Identify the topic of a nonfiction text.            38. Make text-to-self connections.            39. Identify the specific purposes of a text, e.g., to find information, to enjoy a story, to receive a message.            40. Express opinions about texts and the reasons why, e.g., <i>I liked ...</i>, <i>I did not like ...</i></p>	

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<b>State Framework</b>	<b>Grade-Level Expectations</b>	<b>Assessments</b>
<b>1. Reading and Responding</b> <b>1.2</b>	<b>Reading Reflection/Behaviors</b> 41. Choose a book to read, and share it with the teacher and classmates. 42. Independently “read” books for 5-10 minutes.	

**KINDERGARTEN**

**ORAL LANGUAGE**

**STUDENTS WILL LISTEN AND SPEAK TO COMMUNICATE IDEAS CLEARLY.**

State Framework	Grade-Level Expectations	Assessments
<p><b>1. Reading and Responding</b> <b>1.4</b></p> <p><b>3. Communicating with Others</b> Students produce written, oral and visual texts to express, develop and substantiate ideas and experiences. <b>3.1</b> Students use descriptive, narrative, expository, persuasive and poetic modes.</p> <p><b>4. Applying English Language Conventions</b> Students apply the conventions of standard English in oral, written and visual communication. <b>4.1</b> Use knowledge of their language and culture to improve competency in English</p>	<p style="text-align: center;"><b>Listening</b></p> <ol style="list-style-type: none"><li>1. Listen for a specific purpose, including recalling events, summarizing details, and acquiring information.</li><li>2. Listen to acquire information and to respond to questions.</li><li>3. Follow simple verbal three- and four-step directions.</li></ol>	

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<b>State Framework</b>	<b>Grade-Level Expectations</b>	<b>Assessments</b>
<p><b>1. Reading and Responding</b> <b>1.4</b></p> <p><b>3. Communicating with Others</b> Students produce written, oral and visual texts to express, develop and substantiate ideas and experiences. <b>3.1</b> <b>3.2</b> Students prepare, publish and/or present work appropriate to audience, purpose and task.</p> <p><b>4. Applying English Language Conventions</b> <b>4.2</b> Students speak and write using standard language structures and diction appropriate to audience and task.</p>	<p style="text-align: center;"><b>Speaking</b></p> <ol style="list-style-type: none"><li>4. Take turns during conversation.</li><li>5. Participate in group discussion.</li><li>6. Use voice level fitting of setting.</li><li>7. Share information and ideas in complete sentences.</li><li>8. Relate an experience or a story in a logical sequence.</li><li>9. Recite short poems, rhymes and songs.</li><li>10. Describe objects, events, feelings, etc. with details or examples.</li><li>11. Make simple comparisons, e.g., positional words.</li></ol>	

## KINDERGARTEN

### WRITING

**Students express, develop and substantiate ideas and experiences through their own writing and artistic and technical presentations.**

State Framework	Grade-Level Expectations	Assessments
<p><b>1. Reading and Responding</b> 1.4</p> <p><b>3. Communicating with Others</b> 3.2</p> <p><b>4. Applying English Language Conventions</b> 4.1 4.2 4.3 Students use standard English for composing and revising written text.</p>	<p style="text-align: center;"><b>Writing Conventions</b></p> <ol style="list-style-type: none"> <li>1. Use periods, question marks and exclamation marks at the end of sentences.</li> <li>2. Use letters in writing; represent sounds, especially beginning and ending phonemes; use spaces to represent words; use left-to-right progression.</li> <li>3. Write first and last name with correct capitalization.</li> <li>4. Use directionality of print in writing—left to right, top to bottom.</li> <li>5. Use capital letters to begin sentences, names and the word “I.”</li> <li>6. Leave space between words.</li> <li>7. Recognize names of letters and are able to write uppercase and lowercase letters when the letter name or sound is dictated.</li> <li>8. Spell high-frequency words, e.g., <i>I, a, it, go, the, and</i>.</li> </ol>	
<p><b>3. Communicating with Others</b> 3.1 3.2</p> <p><b>4. Applying English Language Conventions</b> 4.1 4.2 4.3</p>	<p style="text-align: center;"><b>Writing Process</b></p> <ol style="list-style-type: none"> <li>9. Look at pictures and listen to discussions to generate ideas for writing.</li> <li>10. “Write” for several minutes.</li> <li>11. Write name on paper.</li> <li>12. Revise by adding details to pictures or letters to words.</li> <li>13. Talk about writing with the teacher.</li> <li>14. Publish and present final products in a variety of ways, e.g., reader’s theater, word processing.</li> </ol>	

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State Framework	Grade-Level Expectations	Assessments
<p><b>3. Communicating with Others</b>            3.1            3.2</p> <p><b>4. Applying English Language Conventions</b>            4.1            4.2            4.3</p>	<p style="text-align: center;"><b>Writing Genres, Traits and Crafts</b></p> <p><b>Descriptive:</b>            15. Use pictures and letters to describe a topic, idea or event.</p> <p><b>Narrative:</b>            16. Draw and write in journals about the day’s events.            17. Draw and write a story with a character and a problem.</p> <p><b>Expository:</b>            18. Dictate and write simple lists, labels, captions and informational sentences.</p> <p><b>Persuasive:</b>            19. Dictate and write one idea for liking something.</p> <p><b>Poetic:</b>            20. Write an ABC poem.            21. Write a name or acrostic poem.            22. Demonstrate voice through the use of different colors, facial features and actions of “characters.”</p>	

**KINDERGARTEN**

**Content Suggestion:** The individual and his/her environment; include more opportunities related to the broader community. Continue to use opportunities from the lives of children and significant others to explore the wider 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.*

<b>Strand</b> <i>Demonstrate an understanding of:</i>	<b>Grade Level Expectations</b> <i>Students will be able to:</i>	<b>Correlations</b>
<b>1.1 – Significant events and themes in United States history.</b>	<ol style="list-style-type: none"> <li>1. Recognize events that reoccur and the frequency of reoccurrence.</li> <li>2. Compare past and present experiences (e.g. explain what was different when parents were little or what they were like as babies).</li> </ol>	Civic Literacy Critical Thinking and Problem Solving Creativity and Innovation Skills Communication Skills NCSS 2 “Time, Continuity, and Change” I&TL: 3
<b>1.2 – Significant events in local and Connecticut history and their connections to United States history.</b>	<ol style="list-style-type: none"> <li>3. Recognize events that reoccur and the frequency of reoccurrence.</li> <li>4. Locate yesterday, today and tomorrow on a calendar to sequence events</li> <li>5. Use terms such as before and after to compare events.</li> </ol>	Civic Literacy Critical Thinking and Problem Solving Contextual Learning Skills NCSS 2 “Time, Continuity, and Change”
<b>1.3 – Significant events and themes in world history/international studies.</b>	<ol style="list-style-type: none"> <li>6. Examine similarities and differences between one’s own culture and other cultures to which students are exposed through personal experience or media.</li> </ol>	Global Awareness Critical Thinking and Problem Solving Information and Media Literacy Creativity and Innovation Skills Communication Skills NCSS 1 “Culture” I&TL: 2, 3, 5, 6
<b>1.4 – Geographical space and place.</b>	<ol style="list-style-type: none"> <li>7. Explain the geographical relationships of familiar places in one’s own community (e.g. home to school, home to store).</li> <li>8. Identify and explain the significance of important locations in one’s neighborhood.</li> </ol>	Global Awareness Critical Thinking and Problem Solving Contextual Learning Skills Creativity and Innovation Skills Communication Skills NCSS 3 “People, Places, and Environments” I&TL: 3
<b>1.5 – Interaction of humans and the environment.</b>	<ol style="list-style-type: none"> <li>9. Discuss how people’s actions affect the environment (e.g. why we recycle or conserve energy).</li> </ol>	Global Awareness Critical Thinking and Problem Solving Creativity and Innovation Skills Communication Skills I&TL: 3, 6

		NCSS 3 “People, Places, and Environments”
<b>1.6 – Patterns of human movement across time and place.</b>	<p>10. Describe types of transportation and related geographical features (e.g. boats go in the water, cars have wheels to drive on land).</p> <p>11. Explain how one travels to and from school and other places in the community.</p>	<p>Global Awareness Critical Thinking and Problem Solving Contextual Learning Skills NCSS 3 “People, Places, and Environments” I&amp;TL: 3</p>
<b>1.7 – The purpose, structures and functions of government and law at the local, state, national and international levels.</b>	<p>12. State basic classroom, school, family and community rules/laws.</p> <p>13. Explain the reason for rules related to basic safety and fairness.</p>	<p>Civic Literacy Critical Thinking and Problem Solving Communication Skills NCSS 6 “Power, Authority, and Governance” I&amp;TL: 3</p>
<b>1.8 – The interactions between citizens and their government in the making and implementation of laws.</b>	<p>14. Work collaboratively to develop classroom rules.</p>	<p>Civic Literacy Critical Thinking and Problem Solving Collaboration Skills NCSS 6 “Power, Authority, and Governance” I&amp;TL: 3</p>
<b>1.9 – The rights and responsibilities of citizens.</b>	<p>15. Participate in leadership roles within classroom.</p> <p>16. Give basic reasons for the functions of classroom leaders (e.g. line leader, messenger).</p> <p>17. Discuss responsibilities students have to classmates and school community.</p>	<p>Critical Thinking and Problem Solving Civic Literacy Collaboration Skills Communication Skills Creativity and Innovation Skills NCSS 10 “Civic Ideals and Practices” I&amp;TL: 3, 6</p>
<b>1.10 – How limited resources influence economic decisions.</b>	<p>18. Problem-solve when materials are limited with teacher support as needed.</p>	<p>Financial Literacy Critical Thinking and Problem Solving Creativity and Innovation Skills NCSS 7 “Production, Distribution, and Consumption” I&amp;TL: 3</p>
<b>1.11 – How different economic systems organize resources.</b>	<p>19. Identify and role-play diverse jobs.</p> <p>20. Describe basic functions of key community roles (e.g. police officer, mail carrier, farmer, merchant).</p>	<p>Financial Literacy Critical Thinking and Problem Solving Creativity and Innovation Skills NCSS 5 “Individuals, Groups, and Institutions” NCSS 7 “Production, Distribution, and Consumption” I&amp;TL: 3</p>
<b>1.12 – The interdependence of local, national and global</b>	<p>21. Understand that money is represented by different forms (coins, currency, credit</p>	<p>Critical Thinking and Problem Solving</p>

economies.	cards, checks).	Financial Literacy Global Awareness NCSS 7 “Production, Distribution, and Consumption” NCSS 10 “Global Connections” I&TL: 3
1.13 – The characteristics of and interactions among culture, social systems and institutions.	22. Identify cultural characteristics of self and family (e.g. food, language, religion, traditions).	Global Awareness Social and Cross-Cultural Awareness Critical Thinking and Problem Solving Creativity and Innovation Skills NCSS 1 “Culture” I&TL: 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 <i>Students will be able to</i>	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).	<ol style="list-style-type: none"> <li>Find a relevant source of information related to a specific topic (e.g. book about a particular topic, map or globe to find a location).</li> <li>Actively engage in group social studies reading activities with purpose and understanding</li> </ol>	RIK- 10 WK- 7, 8 ICT Literacy Information and Media Literacy 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).	<ol style="list-style-type: none"> <li>Share and interpret information gathered from senses, print or media sources in a variety of ways (e.g. retell a story, create a simple graph, draw a picture or write to represent an experience).</li> </ol>	WK- 2, 6 ICT Literacy Information and Media Literacy I&TL: 2, 3, 4, 5, 6, 7
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.	<ol style="list-style-type: none"> <li>Draw and write in journals to reflect on one’s own histories.</li> </ol>	WK- 3 Information and Media Literacy Creativity and Innovation Skills Communication Skills I&TL: 4, 5, 6
2.4 – Demonstrate an ability to participate in social studies discourse through informed discussion, debate and effective oral presentation.	<ol style="list-style-type: none"> <li>Share personal past and future events or experiences through group discussions and dramatization.</li> </ol>	SLK- 4, 5, 6 Civic Literacy Communication Skills Collaboration Skills I&TL: 3

<b>2.5 – Create and present relevant social studies materials using both print and electronic media (e.g. maps, charts, models, displays).</b>	6. Represent geographic or community locations, including relevant details, using classroom materials.	IICT Literacy Information and Media Literacy Creativity and Innovation Skills  I&TL: 4, 5, 6, 7
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**Standard 3: Civic Engagement**

*Civic competence in analyzing historical issues and current problems requires the synthesis of information, skills, and perspective.*

<b>Strand</b>	<b>Grade Level Expectations</b> <i>Students will be able to:</i>	<b>Correlations</b>
<b>3.1 – Use evidence to identify, analyze and evaluate historical interpretations.</b>	1. Predict how another person might feel given a simple scenario.	Civic Literacy Information and Media Literacy Creativity and Innovation Skills I&TL: 3
<b>3.2 – Analyze and evaluate human action in historical and/or contemporary contexts from alternative points of view.</b>	2. Describe similarities and differences of their own feelings compared with others.	Civic Literacy Critical Thinking and Problem Solving
<b>3.3 - Apply appropriate historical, geographic, political, economic and cultural concepts and methods in proposing and evaluating solutions to contemporary problems.</b>	3. Solve conflicts and classroom issues using appropriate strategies.	Civic Literacy Global Awareness Creativity and Innovation Critical Thinking and Problem Solving I&TL: 3

**STAMFORD PUBLIC SCHOOLS  
MATHEMATICS GRADE-LEVEL STANDARDS AND EXPECTATIONS\*  
KINDERGARTEN – GRADE EIGHT**

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**GRADE K**

**Numerical and Proportional Reasoning**

Place Value

- Identify and match sets of objects to the numerals 1-10.
- Count to and past 10 to 20, then to 30, and group and count objects by 10.
- Identify ordinal position of objects, first through fifth, and last.
- Use numbers to locate, order, label and measure.

Number Sense

- Compare sets using the terms “more,” “less” or “the same” and order sets from least to greatest.
- Act out story problems and solve practical problems using objects.
- Identify, name, and count pennies and dimes.
- Estimate the number of objects in a set using 10 as a benchmark

Fractions

- Use a variety of models to identify a whole and a half of an object and recognize that two halves can be put together to make a whole.
- Share a set of objects by forming smaller sets that have equal amounts.
- Identify sets and numbers, which are equal and one more.

**Geometry and Measurement**

Geometry

- Identify, sort and compare two- and three-dimensional shapes and such as triangles, squares, rectangles, circles, cubes, spheres, cylinders and cones.
- Describe the position, location and direction of objects using terms such as inside, outside, top, bottom, close, closer, etc.
- Compare and sequence small sets by size, length, area and volume.

Measurement

- Locate a date on the calendar (yesterday, today and tomorrow) and sequence events using terms like before and after.
- Explore nonstandard units to estimate and measure length, area and capacity.
- Compare two objects using a balance scale to identify which is heavier.

**Working With Data: Probability and Statistics**

Working With Data

- Explore ways to collect, record and organize data using tallies and lists.
- Construct real graphs and picture graphs and describe the data using the terms more, less and same.
- Identify visual, auditory and physical patterns and extend to make predictions.

**Algebraic Reasoning: Patterns and Functions**

- Sort and classify objects by a variety of attributes and describe the reason for the sort.
- Copy and extend patterns in a variety of contexts and describe the rule of the pattern.



# EVERYDAY MATHEMATICS

## KINDERGARTEN GRADE-LEVEL GOALS

Content Strand: Number and Numeration		
Grade-Level Goals	Content Thread	Program Goal
Goal 1 Count on by 1s to 100; count on by 2s, 5s, and 10s and count back by 1s with number grids, number lines, and calculators.	<i>Rote counting</i>	Understand the Meanings, Uses, and Representations of Numbers
Goal 2 Count 20 or more objects; estimate the number of objects in a collection.	<i>Rational counting</i>	
Goal 3 Model numbers with manipulatives; use manipulatives to exchange 1s for 10s and 10s for 100s; recognize that digits can be used and combined to read and write numbers; read numbers up to 30.	<i>Place value and notation</i>	
Goal 4 Use manipulatives to model half of a region or a collection; describe the model.	<i>Meanings and uses of fractions</i>	
Goal 5 Use manipulatives, drawings, and numerical expressions involving addition and subtraction of 1-digit numbers to give equivalent names for whole numbers up to 20.	<i>Equivalent names for whole numbers</i>	Understand Equivalent Names for Numbers
Goal 6 Compare and order whole numbers up to 20.	<i>Comparing and ordering numbers</i>	Understand Common Numerical Relations



# EVERYDAY MATHEMATICS

## KINDERGARTEN GRADE-LEVEL GOALS

<b>Content Strand: Operations and Computation</b>		
<b>Grade-Level Goals</b>	<b>Content Thread</b>	<b>Program Goal</b>
Goal 1 Use manipulatives, number lines, and mental arithmetic to solve problems involving the addition and subtraction of single-digit whole numbers.	<i>Addition and subtraction procedures</i>	Computes Accurately
Goal 2 Identify join and take-away situations.	<i>Models for the operations</i>	Understand Meanings of Operations

  

<b>Content Strand: Data and Chance</b>		
<b>Grade-Level Goals</b>	<b>Content Thread</b>	<b>Program Goal</b>
Goal 1 Collect and organize data to create class-constructed tally charts, tables, and bar graphs.	<i>Data collection and representation</i>	Select and Create Appropriate Graphical Representations of Collected or Given Data
Goal 2 Use graphs to answer simple questions.	<i>Data analysis</i>	Analyze and Interpret Data
Goal 3 Describe events using <i>certain, possible, impossible</i> , and other basic probability terms.	<i>Qualitative probability</i>	Understand and Apply Basic Concepts of Probability



# EVERYDAY MATHEMATICS

## KINDERGARTEN GRADE-LEVEL GOALS

<b>Content Strand: Measurement and Reference Frames</b>		
<b>Grade-Level Goals</b>	<b>Content Thread</b>	<b>Program Goal</b>
Goal 1 Use nonstandard tools and techniques to estimate and compare weight and length; identify standard measuring tools.	<i>Length, weight, and angles</i>	Understand the Systems and Processes of Measurement; Use Appropriate Techniques, Tools, Units, and Formulas in Making Measurements
Goal 2 Identify pennies, nickels, dimes, quarters, and dollar bills.	<i>Money</i>	
Goal 3 Describe temperature using appropriate vocabulary, such as <i>hot</i> , <i>warm</i> , and <i>cold</i> ; identify a thermometer as a tool for measuring temperature.	<i>Temperature</i>	Use and Understand Reference Frames
Goal 4 Describe and use measures of time periods relative to a day and week; identify tools that measure time.	<i>Time</i>	



# EVERYDAY MATHEMATICS

## KINDERGARTEN GRADE-LEVEL GOALS

<b>Content Strand: Geometry</b>		
<b>Grade-Level Goals</b>	<b>Content Thread</b>	<b>Program Goal</b>
Goal 1 Identify and describe plane and solid figures including circles, triangles, squares, rectangles, spheres, and cubes.	<i>Plane and solid figures</i>	Investigate Characteristics and Properties of Two- and Three-Dimensional Geometric Shapes
Goal 2 Identify shapes having line symmetry.	<i>Transformations and symmetry</i>	Apply Transformations and Symmetry in Geometric Situations

<b>Content Strand: Patterns, Functions, and Algebra</b>		
<b>Grade-Level Goals</b>	<b>Content Thread</b>	<b>Program Goal</b>
Goal 1 Extend, describe, and create visual, rhythmic, and movement patterns; use rules, which will lead to functions, to sort, make patterns, and play “What’s My Rule?” and other games.	<i>Patterns and functions</i>	Understand Patterns and Functions
Goal 2 Read and write expressions and number sentences using the symbols +, -, and =.	<i>Algebraic notation and solving number sentences</i>	Use Algebraic Notation to Represent and Analyze Situations and Structures

# Common Core State Standards for Mathematics

## Kindergarten

Domains	Counting and Cardinality	Operations and Algebraic Thinking	Number and Operations in Base Ten	Measurement and Data	Geometry
Clusters	<ul style="list-style-type: none"> <li>Know number names and the count sequence</li> <li>Counting to tell the number of objects</li> <li>Compare numbers</li> </ul>	<ul style="list-style-type: none"> <li>Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from</li> </ul>	<ul style="list-style-type: none"> <li>Work with numbers 11 – 19 to gain foundations for place value</li> </ul>	<ul style="list-style-type: none"> <li>Describe and compare measurable attributes</li> <li>Classify objects and count the number of objects in each category</li> </ul>	<ul style="list-style-type: none"> <li>Identify and describe shapes</li> <li>Analyze, compare, create and compose shapes</li> </ul>
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 Kindergarten, instructional time should focus on two critical areas:

### 1. *Representing and comparing whole numbers, initially with sets of objects*

- Students use numbers, including written numerals, to represent quantities and to solve quantitative problems, such as counting objects in a set; counting out a given number of objects; comparing sets or numerals; and modeling simple joining and separating situations with sets of objects, or eventually with equations such as  $5 + 2 = 7$  and  $7 - 2 = 5$ . (Kindergarten students should see addition and subtraction equations, and student writing of equations in kindergarten is encouraged, but it is not required.) Students choose, combine, and apply effective strategies for answering quantitative questions, including quickly recognizing the cardinalities of small sets of objects, counting and producing sets of given sizes, counting the number of objects in combined sets, or counting the number of objects that remain in a set after some are taken away.

### 2. *Describing shapes and space*

- Students describe their physical world using geometric ideas (e.g., shape, orientation, spatial relations) and vocabulary. They identify, name, and describe basic two-dimensional shapes, such as squares, triangles, circles, rectangles, and hexagons, presented in a variety of ways (e.g., with different sizes and orientations), as well as three-dimensional shapes such as cubes, cones, cylinders and spheres. They use basic shapes and spatial reasoning to model objects in their environment and to construct more complex shapes.

More learning time in Kindergarten should be devoted to number than to other topics.