Grade Three Learning Guide

Danbury Public Schools

2008

- THE ELEMENTARY SCHOOL LEARNING TREE-

CONTENT SPECIFIC ELEMENTARY EXIT STANDARDS

The **Content Specific Elementary Exit Standards** described on the next page detail what students in the Danbury Elementary Schools should know and be able to do at the conclusion of fifth grade. They represent the ***leaves*** of **THE LEARNING TREE**. It is important to note that students learn at different rates and bring different experiences, strengths, and needs to the learning experience. Therefore some students will exceed the stated learning expectations, others will need additional resources to reach the desired level of performance, and some will require further modifications to achieve the desired outcomes.

K-12 UNIVERSAL/LIFE-LONG LEARNING SKILLS

The Universal/Life-Long Learning Skills indicated below are those skills, which are necessary for an individual to be a life-long learner. These skills are germane to all content areas and grade levels. They represent the ***trunk*** of **THE LEARNING TREE** and need to be incorporated into each instructional unit, as appropriate. The Universal/Life-Long Learning Skills combined with the Content Specific Exit Standards represent the curriculum. Both components are required to address the learning needs of our students.

✧ **READ, WRITE AND LISTEN FOR MANY PURPOSES**

✧ **DEVELOP AND APPLY THINKING STRATEGIES**

- **Ask questions for clarification and understanding**
- **Activate relevant, prior knowledge (schema)**
- **Determine the most important ideas or themes from information sources**
- **Create sensory images from information sources**
- **Analyze data and recognize patterns**
- **Draw inferences from information sources**
- **Synthesize information**
- **Monitor meaning and comprehension**
- **Engage in self-reflection to evaluate process and product**

✧ **DEVELOP AND APPLY SKILLS IN TECHNOLOGY TO THE LEARNING PROCESS**

✧ **COMMUNICATE WITH CLARITY AND PRECISION**

CONTENT SPECIFIC ELEMENTARY EXIT STANDARDS

By the end of Grade 5 students will be able to:

LANGUAGE ARTS

- Develop proficiency in the areas of reading, writing, speaking, listening, and viewing.
- Construct meaning and respond thoughtfully to a variety of material from print, non-print, and electronic materials.
- Use a variety of strategies to create and develop meaning when reading, writing, listening, speaking, and viewing.
- Express questions, thoughts, interpretations, and opinions related to material from print, non-print, and electronic source content and purpose in both oral and written form.
- Develop stories, essays, and poems using the writing process.
- Read to learn and for pleasure.

MATHEMATICS

- Use mathematical skills, techniques, and applications to solve problems.
- Demonstrate an operational sense of the fact families in addition and subtraction through 18, and multiplication and division through the 9's table.
- Demonstrate number sense by counting, comparing, estimating, and using place-value concepts in whole numbers, fractions, and decimals.
- Demonstrate spatial sense by describing, modeling, drawing, and classifying shapes, and relate geometric ideas to numbers and measurement ideas.
- Use mathematical reasoning to solve problems by applying number sense or using spatial relationships.
- Use common units of measure such as length, capacity, weight, area, volume, time, temperature, and angles.
- Select and use computational techniques appropriate to specific whole number problems, and determine whether the results are reasonable.
- Collect organize, and describe data.
- Explain verbally and in writing all taught mathematical concepts.

SCIENCE

- Make accurate observations involving biology, physical, and chemical characteristics.
- Describe how organisms share basic characteristics, which include life cycles that begin with birth and end with death.
- Describe why water is important for life.
- Diagram the earth and describe how it obtains its energy from the Sun.
- Demonstrate that matter has physical and chemical properties that can be changed.
- Use scientific instruments correctly in gathering data.
- Demonstrate how science, math, and technology are interrelated.

SOCIAL STUDIES

- Demonstrate an understanding of social studies units of study by acquiring, organizing, interpreting, and applying data from various forms of print and non-print material.
- Use historical statements and concepts to assist in decision-making about public issues.
- Recognize and apply distance, direction, scale, map symbols, latitude, and longitude through the use of maps and globes.
- Recognize and understand events, personalities, geographic and economic factors that have shaped the history and culture of Danbury, Connecticut and other regions of the United States.
- Demonstrate an understanding of the historical and economic events that created and transformed the new American Nation to 1800.

INFORMATION LITERACY AND TECHNOLOGY

- State a simple research question, present research findings in a variety of formats, and compile a list of works cited for any presentation.
- Locate and use materials with appropriate guidance from a variety of sources including print, non-print, electronic, and the Internet to answer a research question.
- Select books and articles from the major literacy genres: novels, short stories, poetry, and non-fiction for independent reading.
- Select, access and use software appropriate to a given task and create a multi-media presentation to communicate ideas.
- Follow Acceptable Use Policy Guidelines for safe and appropriate use of the Internet.

MUSIC

- Develop introductory listening, singing, movement, and instrumental skills.
- Read, understand, and apply basic musical notation and vocabulary.
- Discuss appropriate historical, cultural, and interdisciplinary elements of music.

VISUAL ARTS

- Demonstrate a basic knowledge of elements and principles of art and their creative application to two and three-dimensional design.
- Explore a variety of appropriate art methods, media, and subjects.
- Understand appropriate historical, cultural, and interdisciplinary elements of art.

PHYSICAL EDUCATION

- Demonstrate age appropriate form in the fundamental movement skills: locomotor, nonlocomotor, and selected manipulative skills.
- Recognize the personal physiological effects that accompany moderate to vigorous physical activity.
- Recognize the contributions that individual differences add to group activities.

HEALTH EDUCATION

- Explain how childhood injuries and illnesses can be prevented.
- Demonstrate the ability to locate school and community health helpers.
- Compare behaviors that are safe to behaviors that are risky or harmful.
- Explain how media influences thoughts, feelings, and health behaviors.
- Demonstrate the ability to apply a decision-making process to health issues and problems.

GRADE THREE BODY OF KNOWLEDGE

- **Content Exit Standards**

- **Building Blocks**
  to Achieve the Application of Universal/Life-Long Learning Skills and Content Exit Standards

GRADE THREE CONTENT EXIT STANDARDS

The content standards detailed below are to serve as the foundation for each grade three student's classroom-based instructional experience:

Reading

- Develop and apply graphophonic (sounds/symbols)and structural (word and sentence) skills and strategies
- Develop sight vocabulary and strategies for using context cues
- Read aloud with expression and fluency, demonstrating the development of rhythm, cadence, an understanding of end punctuation marks and the development of meaning
- Develop and apply universal thinking and comprehension strategies to understand a variety of fiction and nonfiction texts
- Employ the language arts for lifelong learning, work, and enjoyment

Writing

- Use appropriate modes of writing for a variety of purposes and audiences with or without teacher assistance
- Use the stages of a writing process [prewriting, drafting, revising, editing and publishing]
- Develop and apply legible penmanship

Speaking, Listening, Viewing and Enacting

- Demonstrate grade appropriate use of standard English and delivery strategies
- Respond critically to oral communication, films, videos, presentations, graphics, and written work
- Perform in a manner that guides the listener's understanding of key ideas, using appropriate phrasing, pitch, and modulation

Mathematics

- Use place value to represent alternative forms of expressing whole number less than one hundred.
- Use whole numbers and unit fractions to determine magnitude, compare, order, picture, and round.
- Develop estimation strategies
- Develop strategies to add, subtract, multiply, and divide numbers
- Use data to analyze or create simple tables, charts, or graphs
- Use money, tell time, measure length
- Develop Spatial relationships and Geometry

Social Studies

- Demonstrate successfully that latitude and longitude are effective tools to locate places anywhere in the world
- Understand that the early development of Danbury was affected by the desire of Connecticut to define its border with New York, the availability of a fresh water supply, and the differences between native Americans and settlers
- Understand that as the American colonies opposed British rule, Danbury's location determined its role in the war as a supply depot

Social Studies Continued

- Understand that population growth and improvements in transportation transformed Danbury from a farming, to a trading, to a manufacturing town
- Understand that the hatting industry created great wealth and financed residential, public, and commercial building projects
- Understand that the civil war revealed Danbury's dependence on hatting, and that different demands, coupled with innovations, stimulated the growth
- Understand how events of the 20th century contributed to the development of Danbury
- Develop a personal connection to historic events, people, places, and institutions in Danbury

Science

Life Cycle

- Recognize differences and similarities in animal and plant life cycles
- Demonstrate an understanding between complete and incomplete metamorphosis
- Demonstrate an understanding of the terms producers, consumers, and decomposers
- Recognize differences among flowering plants
- Recognize characteristics of non-flowering plants

Nutrition

- Recognize the importance of foods' nutrient values
- Demonstrate and understand the importance of proper food preparation and handling
- Recognize the importance of the digestive process in animals

Sun, Moon, and Earth

- Recognize the sizes and features of the Moon and Earth
- Recognize the interactions of the Sun, Moon, and the Earth
- Recognize the characteristics of the Sun

Information Literacy and Technology

- Operate and use computers and other technologies as tools for productivity, problem-solving and learning across the content areas
- Define information needs and identify effective courses of action to conduct research and solve problems
- Understand and demonstrate a command of information skills and strategies to locate and effectively use print, non-print and/or digital resources to solve problems and conduct research
- Apply evaluative criteria to the selection, interpretation, analysis, reorganization and synthesis of information from a variety of sources and formats
- Use appropriate technologies to create written, visual, oral and multimedia products to communicate ideas, information or conclusions to others
- Evaluate the effectiveness and efficiency of their own choices and uses of information and technology for problem-solving and communication
- Demonstrate the responsible, legal and ethical use of information resources, computers and other technologies
- Develop life-long reading habits to foster personal enrichment and continuous learning
- Develop a deeper awareness of media literacy as a life skill that is integral to modern citizenship and informed decision-making

BUILDING BLOCKS TO ACHIEVE:

THE APPLICATION OF THE UNIVERSAL/LIFE-LONG LEARNING SKILLS

and

THE CONTENT EXIT STANDARDS

The information provided in this section is offered to support the teacher's planning, delivery, and assessment efforts.

K-12 UNIVERSAL/LIFE-LONG LEARNING SKILLS

GRADE THREE APPLICATION OF UNIVERSAL/LIFE-LONG LEARNING SKILLS

The skills detailed below are to be integrated in all instructional experiences - wherever and whenever possible.

- **READ, WRITE AND LISTEN FOR MANY PURPOSES**
  - Choose to read in a sustained way for a period of time
  - Choose reading related activities for enjoyment
  - Use personal criteria to select reading material (*e.g., interest, knowledge of author/genre, text difficulty, recommendation of others*)
  - Begin to self-assess and set goals for purposeful, sustained reading
  - Respond with curiosity and awe
- **DEVELOP AND APPLY THINKING STRATEGIES**
  - **Ask questions for clarification and understanding**
    - Ask and answer questions of themselves and the information sources they use
    - Understand that some answers to some questions are found in the text, but that others must be inferred based upon background knowledge or supported through other resources
    - Begin to determine appropriate sources of information to answer a question
    - Question context, content, probability/possibility and format with teacher support and questions
    - Begin to understand that new questions may be raised when listening to others' questions
    - Begin to understand that many of the most intriguing questions are left to the reader's interpretation
  - **Activate relevant, prior knowledge (schema)**
    - Begin to make, confirm and revise complex predictions (*e.g., use prior knowledge, ideas presented in text, illustrations, text structure, key words, ideas presented by other readers*)
    - Reveal use of background knowledge and experience to interpret text
    - Justify meaningful, relevant connections when extending meaning
  - **Determine the most important ideas or themes from information sources**
    - Use text organizers and structure (*e.g., headings, topic sentences, graphic features, guide words, bold typeface, chapter titles*) to determine main ideas and to locate information in text
    - Cite important details from a text
  - **Create sensory images from information sources**
    - Represent concrete information (*e.g., persons, places, things, events*) as explicit visual images
    - Capture meaning from figurative language (*e.g., similes, metaphors, poetic images, onomatopoeia, alliteration, and personification*) in prose and poetry
    - Use mental imagery in writing

- **Analyze data and recognize patterns**
  - Recognize and use sensory data (*e.g., observations*) as sources of information
  - Understand structural patterns or organization in texts (*e.g., chronological, sequential, compare/contrast, cause/effect, main idea/details*)
  - Analyze relations among different parts of a text
  - Analyze causes, motivations, sequences and results of events in informational texts
  - Relate new information to prior knowledge (*experiences and text*)
  - Use multiple resources to locate information
- **Draw inferences from information sources**
  - Infer word meanings from roots, prefixes and suffixes as well as from overall contextual meaning
  - Distinguish between cause and effect, fact and opinion, main idea and supporting detail
  - Draw conclusions and form personal interpretations of text and graphical information; provide justification for those conclusions
- **Synthesizing information**
  - Extend retellings to include personal response
  - Select, synthesize and /or use relevant information in text to include in a question, extension, response, or critical stance to the text
  - Begin to synthesize information using categorical terms (*mammals: dogs, cats, lions, etc.*)
  - Compare one text to another they have read or heard
  - Begin to paraphrase information orally and in writing
  - Determine generalizations [big ideas] with teacher support
- **Monitor meaning and comprehension**
  - Monitor own reading making modifications as needed (*e.g., recognizes when reader is confused by a section of text, questions whether the text makes sense, identifies specific words or phrases or structures causing comprehension difficulties*)
  - Use analogies when problem-solving new words
  - Use one's ear for syntax to help figure out word meanings
  - Begin to adjust speed of reading to suit purpose and difficulty of the material
- **Engage in self-reflection to evaluate process and product**
  - Evaluate own and others' work and verbalize/chart criteria used

- **DEVELOP AND APPLY SKILLS IN TECHNOLOGY TO THE LEARNING PROCESS**
  - Develop introductory skills in word processing, graphics, telecommunications and presentations
  - Use appropriate technologies to create written, visual, oral and multimedia presentations
- **COMMUNICATE WITH CLARITY AND PRECISION**

Content Specific Curriculum Standards and Building Blocks

-Reading/Language Arts-

Reading

- **Develop and apply graphophonic (sounds/symbols)and structural (word and sentence) skills and strategies**

Initial Understanding

Know sounds for a wide range of suffixes and prefixes (*e.g., -able, -tion, -ment; and ex-, re-)*
Read words with irregularly spelled suffixes (*e.g., -ous, -ion, -ive*)
Begin to use syntactic structure to decode unknown words (*e.g., parts of speech*)

Developing an Interpretation

Print-sound code automatic across the whole span of language
Use phonetic and structural analysis techniques, and semantic context to decode unknown multi-syllabic words (*e.g., vowel patterns, root words, affixes, begin to use complex word families (-ieve, -eive, -ield, etc.) and syllabication*)

- **Develop sight vocabulary and strategies for using context cues**

Initial Understanding

Use word reference materials (*e.g., glossary, dictionary, thesaurus*) to determine meaning and pronunciation

Developing an Interpretation

Use a variety of context clues to decode unknown words (*e.g., draws on earlier reading, reads ahead*)
Use context to read accurately words with more than one pronunciation (*e. g., an object vs. to object*)
Understand and explain level-appropriate reading vocabulary *(e.g., synonyms, antonyms, homophones, homographs, idioms, analogies, and multi-meaning words*)
Infer word meanings from taught roots, prefixes and suffixes
Know how to talk about nouns and pronouns in terms of function and category
Know how to talk about verbs as action words
Know how to talk about adjectives/adverbs in terms of function
Use correct form of irregular adjectives *(e.g., good-better-best*)
Begin to talk about the precision of words (*e.g., small vs. tiny or minute*)

Making Connections

Use phonetic/structural/contextual clues to determine meaning
Compare adverbs and adjectives in terms of function
Understand use of and complete a variety of semantic graphic organizers

- **Read aloud with expression and fluency, demonstrating the development of rhythm, cadence, an understanding of end punctuation marks and the development of meaning**

Initial Understanding

Independently read aloud from unfamiliar Level O books (*fiction and nonfiction*) with 96% accuracy or better
Independently read aloud from unfamiliar Level O books (*fiction and nonfiction*) at a rate of 90-120 correct words per minute
Silently read longer, more complex texts

Developing an Interpretation

Use punctuation cues to guide fluency and comprehension in increasingly complex texts
Use pacing and intonation to convey meaning of clauses and phrases of sentences read aloud

- **Develop and apply universal thinking and comprehension strategies to understand a variety of fiction and nonfiction texts**

Initial Understanding

Preview text (*e.g., begins to skim material; use pictures, textual clues, and text format*) to get an overall idea of content
Establish a purpose for reading
Understand pronoun antecedents in text

Identify major and minor characters
Explain first-, second-, and third-person point of view
Use vocabulary and specific phrases from story or informational text when responding to text

Developing an Interpretation

Infer author's viewpoint and purpose
Know the defining characteristics of a variety of literary forms/genres and informational text (*e.g., fiction, fairy tales, folk tales, poems, fables, tall tales, mystery, memoir, nonfiction, informational article, directions/procedures, magazines*)
Examine character traits, words, feelings
Examine reasons for a characters actions, accounting for situation, point of view, and motive
Discuss author's craft: why an author might have chosen/used particular words, content, point of view, plot, beginnings and endings, sentence and/or text structure, character development, and included or excluded information
Understand underlying theme or message (e.g., big ideas about growing up, courage, hope/disappointment, selfishness)
Begin to understand causes for complex events in text
Draw conclusions about author's purpose for choosing genre and/or details
Select and complete graphic organizers appropriate to a specific task

Making Connections

Identify most surprising or interesting or important part(s) of a text and explain why
Make connections between characters or simple events in a text to self/other text/world

Critical Stance

Explain the motives of characters
Explain how the character(s) change as a result of their experiences
Evaluate or rate a story or character using prior knowledge and support from the text
Evaluate the merits of text based on class-established criteria (*e.g., effective use of figurative language, character development, theme, mood, humor, point of view*)
Recognize values, ethics and beliefs included in a text
Begin to recognize ways readers and writers are influenced by factors such as their time, culture/traditions, and experiences

Writing

- **Use appropriate modes of writing for a variety of purposes/audiences with or without teacher assistance**

Initial Understanding

Write in a variety of modes:

- **Narrative/poetry**: e.g., orient or engage the reader, create a believable world, introduce characters through precise choice of detail, changing episodes, story grammar elements, provide pacing, begin to develop character motivation/emotions/actions, develop plot, and provide a conclusion/ending, use interesting vocabulary and transition words to connect ideas, write quatrains, limericks, and free verse poems
- **Functional:** e.g., establishes context, identifies topic provides a guide to action, shows steps to action with specific detail, includes relevant information, clear straightforward language, uses illustrations and/or diagrams if appropriate
- **Expository**: e.g., communicate big ideas with elaboration and support using structure, introductions and conclusions, other appropriate text features (*e.g., headings, diagrams*), excludes extraneous and inappropriate information, and a straightforward tone of voice, state opinions and support them with details
- **Responsive**: e.g., support interpretations by making specific references to text, provide enough detail from text so reader can understand interpretation, go beyond retelling, compare two works by an author, discuss several works around a common idea or theme, make connections between the text and their own ideas and lives, uses individual, authentic voice.

Begin to use a variety of strategies to write for different audiences (e.g., adapts focus, determines knowledge and interests of audience)

- **Use the stages of a writing process (prewriting, drafting, revising, editing and publishing)**

Prewriting

Initial Understanding

Use prewriting strategies to plan written work (*e.g., graphic organizers, story maps and webs, groups related ideas, begins to take notes*)

Use a variety of strategies to plan research (*e.g., brainstorming, questioning, idea webs, organize prior knowledge about a topic, develops a course of action, determines how to locate necessary information*) with or without teacher assistance

Begin to use multiple representations of information (*e.g., maps, charts, photos, diagrams*) to find information

Drafting

Initial Understanding

Use appropriate pronoun antecedents (*subject, object, and possessive*)

Use dialogue effectively

Use appropriate technology to compose work

Developing an Interpretation

Develop snapshots (*sharp physical detail*) and thought-shots (*what a character thinks, remembers or feels*) and scene (*dialogue mixed with description, snapshots, and/or thought-shots*)

Use descriptive language that clarifies and enhances ideas (*e.g., common figures of speech, sensory details*)

Use paragraph form (*e.g., indents, topic sentences, recognizes a paragraph as a group of sentences around one main idea, uses introductory and concluding paragraphs, writes several related paragraphs*)

Making Connections

Embed literary language where appropriate

Determine and use appropriate text structure and visual access points (*bold print, charts, etc.*) to support big idea

Critical Stance

Recognize and communicate big ideas

Revising

Developing an Interpretation

Begin to vary word order, sentence patterns, and sentence length to show relationship of ideas, change reader's pacing, or create a mood

Fully elaborates with specific details

Use multiple drafts to extend and rework pieces

Use specialized vocabulary related to topic or setting (*e.g., dogs: German Shepherds, poodles, content words*)

Use explicit transitional devices

Making Connections

Consciously appropriate specific elements of a favorite author's craft to refine the quality of their own work
Begin to use thesaurus to enhance use of precise language

Critical Stance

Evaluate own and others' writing (*e.g., determine best features, determine if own piece achieves its purpose, responds helpfully to others' writing*)

Editing

Initial Understanding

Edit for irrelevant information
Edit for sentence fragments and run-ons
Proofread using a dictionary and other resources

Developing an Interpretation

Use knowledge about morphology and structural analysis as an aid to spelling words

Critical Stance

Begin to apply both standard criteria and personal criteria to judge the quality of their writing
Edit own and others' writing for previously studied generalizations and word patterns such as: unusual vowel patterns (*e.g., -aw, -ou, -oy*), affixes (*e.g., un-, pre-, -ed*), plural rules (*e.g., y to ie, s, es*), double consonants rules, common homophones
Edit own and others' writing for conventions of capitalization (*e.g., person's title, first word in quotation marks, all proper nouns*)
Edit own and others' writing for conventions of punctuation (*e.g., indentation, commas—city/state, series, month/year, compound sentences--, apostrophe, quotation marks, titling formats--periods*)
Edit own and others' writing for correct usage (*e.g., pronouns as subjects, consistent verb tense, double negatives, appropriate homonyms, common errors such as would of instead of would have*)

Publishing

Initial Understanding

Use diagrams, illustrations, charts and/or graphs where appropriate
Select presentation format according to purpose and audience with or without teacher assistance
Use appropriate technology to publish work

Making Connections

Share finished product

Critical Stance

Begin to evaluate strengths and weaknesses of writing and publishing process, as well as, final format

- **Develop and apply legible penmanship**

Initial Understanding

Write upper and lower case letters legibly in cursive

Developing an Interpretation

Write legibly, adhering to margins and correct spacing between letters in a word and words in a sentence.

Speaking. Listening, Viewing and Enacting

- **Demonstrate grade appropriate use of standard English and delivery strategies**

Initial Understanding

Listen to classmates and adults (*e.g., does not interrupt, faces the speaker, asks questions, begins to paraphrase to confirm understanding, gives feedback*)

Developing an Interpretation

Use level-appropriate vocabulary (*e.g., familiar idioms, similes*)

Making Connections

Use strategies to convey a clear main point when speaking (*e.g., expresses ideas in logical manner, uses specific vocabulary to begin to establish tone and present information, uses effective transition words to connect ideas*)

- **Respond critically to oral communication, films, videos, presentations, graphics and written work**

Initial Understanding

Know specific ways in which language is used in real-life situations *(e.g., to purchase, to request, to argue, to express)*

Ask questions (*e.g., when confused, to seek opinions and comments*)

Listen for specific information

Begin to paraphrase what another speaker has said

Recognize that film and television have features that identify different genres (e*.g., style of dress, setting*)

Developing an Interpretation

Understand main ideas and supporting details in spoken and visual texts (*e.g., presentations, guest speakers, ads*)

Understand different messages conveyed through visual media (*e.g., main ideas/supporting details in expository contexts and main characters, setting and sequence of events in narrative contexts*)

Begin to explore techniques used to convey messages (*e.g., sound, color and emphasis*)

Understand the different ways in which people are stereotyped in visual media (*e.g., clever people wearing glasses, scientists wearing white coats, super heroes)*

Understands techniques used to convey messages in visual media (*e.g., animation, and different tones of voice in audio productions*)

Making Connections

Interpret the use of nonverbal cues used in conversation (*gestures, facial expressions, etc.)*

Begin to ask other students questions requiring them to support their claims or arguments

Indicate when one's own or others' ideas need further support or explanation

Refer to knowledge built during discussion

Begin to verbalize how different elements from films, videos, television and other visual/auditory media relate to written text conventions

Understand the similarities and differences between real life and life depicted in other media

Critical Stance

Begin to evaluate the effect of media's use of different features to influence a viewer's perception (*facial/body expressions, clothing, relationships, sound*)

- **Perform in a manner that guides the listener's understanding of key ideas, using appropriate phrasing, pitch and modulation**

Initial Understanding

Make basic oral presentations to class (*e.g., uses subject-related information and vocabulary; includes content appropriate to audience, relates ideas and observations, incorporates visual aids or props, begins to incorporate several sources of information*)

Begin to apply the main formats and characteristics of familiar media (*e.g., format of quiz shows, contestants, types of advertising such as T-shirts or commercials*) to presentations

Developing an Interpretation

Use comparison and analogies to explain ideas

Refer to knowledge built during discussion

Begin to metacognitively use a variety of nonverbal communication skills (*e.g., eye contact, gestures, facial expressions, posture*)

Use a variety of verbal communication skills (*e.g., projection, volume, rate, articulation*)

Organize ideas for oral presentations (e.g., uses introduction and conclusion; uses notes or other memory aids; organizes in sequence or chronologically; uses structures such as cause/effect, compare/contrast, question/answer, details and examples)

Making Connections

Restate own ideas with greater clarity when a listener indicates non-comprehension

Critical Stance

Evaluate one's own and others' presentation according to class-determined criteria

-Mathematics-

- **Use place value to represent alternative forms of expressing whole number less than one hundred.**

Initial Understanding

Relate pictorial representations using base ten blocks to whole numbers and vice versa.

Developing an Interpretation

Solve problems involving 1 and 10 more or less
Use place value concepts to interpret the meaning of numbers
Identify alternative forms of expressing whole numbers using regrouping
Identify points representing whole numbers on a number line and vice versa
Identify alternative forms of expressing whole numbers using expanded notation

Making Connections

Round whole numbers in a context

- **Use whole numbers and unit fractions to determine magnitude, compare, order, picture, and round.**

Developing an Interpretation

Order whole numbers
Describe the magnitude of whole numbers
Identify, label or shade fractional parts of regions or sets

- **Develop estimation strategies**

Developing an Interpretation

Estimate a reasonable answer to a problem
Identify the best expression to find an estimate
Estimate lengths and areas (standard)
Estimate lengths and areas (metric)

Making Connections

Determine a reasonable estimate.

Critical Stance

Describe and defend strategy used to make an estimate
Use estimation to make and defend a decision

- **Develop strategies, to add, subtract, multiply, and divide numbers**

Initial Understanding

Add and subtract facts to 18
Add and subtract 1 and 2 digit numbers without regrouping
Multiply and divide by 2, 5, and 10

Developing an Interpretation

Identify or write the appropriate operation or number sentence to solve story problems
Write story problems from add/subtract number sentences
Solve simple story problems involving addition and subtraction
Relate multiplication and division facts to rectangular arrays and pictures
Solve problems involving elementary notions of probability

Making Connections

Add 1 and 2 digit numbers with regrouping
Solve extended numerical problems
Solve simple story problems involving addition and subtraction with extraneous information
Extend patterns and identify or state the rule for a given pattern.

Developing an Interpretation

Identify or state rules for given patterns
Identify objects that are the same or different by one attribute
Sort objects into two groups by a common attribute

Making Connections

Extend or complete patterns involving whole numbers and attributes

Critical Stance

State the rule for the pattern

- **Use data to analyze or create simple table's charts or graphs**

Initial Understanding

Identify correct information from graphs, tables, and charts

Create bar graphs and pictographs from data in tables and charts

Making Connections

Solve extended statistical problems

- **Use money, tell time, measure length**

Initial Understanding

Tell time to the nearest hour, half hour, and quarter hour using analog and digital clocks

Measure or draw lengths to the nearest inch

Measure or draw lengths to the nearest centimeter

Developing an Interpretation

Identify an appropriate metric measure for a given situation

Making Connections

Solve problems involving time, elapsed time, and calendars

Identify an appropriate customary measure for a given situation

- **Develop spatial relationships and Geometry**

Initial Understanding

Identify geometric shapes and figures including the number of angles and sides of polygons

Developing an Interpretation

Draw geometric shapes and figures

Critical Stance

In Mathematics justifying, proving or explaining a conjecture or answer is connected to the learning environment. Students are encouraged and expected to question one an others' ideas and to explain and support their own ideas in the face of others' challenges. Each objective in mathematics can be framed to have students defend support, explain or prove their answer. Educational research offers compelling evidence that student learn mathematics well only when they construct their own mathematical understandings. To understand what they learn, students must enact for themselves verbs that permeate the mathematics curriculum: examine, represent, transform, solve, apply and prove.

-Science-

Physical Science
Properties of Matter
How does the structure of matter affect the properties and uses of materials?

- **Recognize that matter has properties that can be identified and described through simple tests**

Initial Understanding

Observe safety guidelines when handling chemicals
Identify chemical and physical properties
Observe evaporation, condensation and filtration
Observe that heating and cooling causes changes in some of the properties of materials

Develop and Interpretation

Describe the characteristics of acids and bases
Explain what happens when heat is added to certain materials
Explain what happens when cooling is added to certain materials

Making Connections

Sort and classify materials based on properties such as dissolving in water, sinking and floating, conducting heat, and attracting to magnets
Understand that common materials can be classified as being acidic, neutral or basic

Critical Stance

Describe and explain the effect of heating on the melting, evaporation, condensation and freezing of water
Demonstrate that chemical reactions are continually happening around us

Life Science
Heredity and Evolution
What processes are responsible for life's unity and diversity?
Organisms can survive and reproduce only in environments that meet their basic needs.

- **Recognizes differences and similarities in animal and plant life cycles**

Initial Understanding

Observe that animal and plant species have unique characteristics that enable them to survive in a given environments

Developing an Interpretation

Identify the survival needs of animals
Identify different ways that the unique characteristics of animals enable them to survive in their given environment

Making Connections

Describe the connection between animals' needs and their environment

Critical Stance

Compare the needs/characteristics of animals' adaptations that are addressed by their unique environment
Demonstrate that animals' unique characteristics enable them to adapt

- **Demonstrate an understanding between producers, consumers, and decomposers**

Initial Understanding

Recognize and understand the differences among producers, consumers, and decomposers
Compare and contrast herbivores, carnivores, omnivores, and decomposers

Developing a Interpretation

Identify sequences of feeding relationships in a food chain
Demonstrate how food chains form food webs

Making Connections

Explain how a change in one part of a food chain might affect the rest of the food chain

Critical Stance

Explain how changes made in the environment by animals and humans affect other living organisms

- **Recognize differences among flowering plants (angiosperms)**

Initial Understanding

Identify the life cycle of flowering and non-flowering plants

Developing an Interpretation

Explain the parts of the flowering plant

Observe the unique relationship between insects and flowering plants

Making Connections

Illustrate the relationship between the flowering parts of the plant and their pollinators that include insects, birds, other animals, and wind

Critical Stance

Explain, draw and demonstrate the relationship that exists between plants and insects and small mammals

- **Recognize characteristics of non-flowering plants (gymnosperms)**

Initial Understanding

Recognize that not all plants have flowers but that all plants produce seeds/spores

Identify the parts of the non-flowering plants and where in the environment they are found

Developing an Interpretation

Describe and illustrate how flowering and non-flowering plants are able to reproduce

Making Connections

Illustrate the relationship between plants and insects, small mammals, wind

Critical Stance

Demonstrate that plants are the foundation of life on Earth

Explain how different plants and animals are adapted to obtain air, water, food and protection in water habitats

Earth Science

The Changing Earth

How do materials cycle through the Earth's systems?

- **Earth materials have different physical and chemical properties**

Initial Understanding

Safety rules are presented when handling the rocks and minerals

Identify sedimentary, igneous and metamorphic rock

Rocks and minerals have unique properties that may be identified through observation and testing

Understand that coal is a fossil fuel

Developing an Interpretation

Describe the rock cycle and the forces that change rocks

Rocks and minerals have unique properties that determine how they formed

Describe the physical properties of rocks and relate them to their potential uses

Explain how coal is formed

Making Connections

Relate the properties of rocks to the possible environmental conditions during their formation

Rocks and minerals can be identified through unique properties such as transparency, luster, hardness, and crystal shape

Understand that the underlying component of coal is decaying plant matter

Critical Stance

What defines rocks and minerals?

Describe the relationship between dating rock layers and fossils with the evolution of organisms

Science and Technology in Society

How do science and technology affect the quality of our lives?

- **Earth materials provide resources for all living things, but these resources are limited and should be conserved**

Initial Understanding

Develop an awareness of natural resources including energy and materials

Decisions made by individuals can impact the global supply of many resources

Observe, describe, and classify different natural resources

Developing an Interpretation

Describe how earth materials can be conserved by reducing the quantities used

Interpret data on the use of natural resources

Making Connections

Explain what happens to trash at the landfill
Compare and contrast various disposal methods: alternate usage
Explore reusing and recycling materials rather than discarding them

Critical Stance

Draw conclusions about how new materials or material change can lead to conservation
Create alternative solutions to polluting the environment

Social Studies

- **Demonstrated That Latitude and Longitude Are Effective Tools to Locate Places Anywhere In the World**

Initial Understanding

Define Latitude and longitude, equator, and prime meridian
Identify the equator and the prime meridian as the initial number in the sequence.

Developing an Interpretation

Understand that latitude and longitude are imaginary grid lines
Understand that these grid lines help locate places in a precise way
Understand the relationship between the intersecting lines

Making Connections

Practice locating areas using degree designation
Use an atlas and computer software to demonstrate an understanding of relative location on each continent
Introduce the connection between latitude and climate
Understand That The Early Development Of Danbury Was Affected By Political, Geographic and Cultural Needs

Initial Understanding

Identify border, three sisters; crossroads
Understand the purpose of slash and burn land clearing
Locate Danbury in its relation to New York
Identify the early families who came from Norwalk
Identify ways different cultures record their histories

Developing an Interpretation

Describe what the early settlers learned from the Potatuck Indians
Describe the influence of the Connecticut General Court in settling Danbury
Explain the importance of the Still River Valley in the selection of Danbury as a settlement site

Making Connections

Draw conclusions about the word "crossroad" used to describe Danbury
Explain the importance of a fresh water supply to native Americans and settlers
Explore how the Native Americans and Danbury settlers use natural resources

Critical Stance

What defines an area as a crossroad

- **Understand that Danbury's Geographical Location Determined It's Role As A Supply Depot In The American Revolution**

Initial Understanding

Identify General David Wooster, General Israel Putnam, Benedict Arnold, Sybil Luddington, colony, taxes, patriot, redcoat, militia, and supply depot

Developing an Interpretation

Understand appreciate some of the difficulties early settlers encountered

Making Connections

Explore the conflicts between settlers and Native Americans and between settlers and newcomers
Explain why Danbury sided with the Continental Army and became a military center
Explain why General Tryon chose to burn Danbury

Critical Stance

Draw conclusions about how changes can lead to conflict

- **Understand That Danbury Grew From a Farming and Trading Community to a Manufacturing Center**

Initial Understanding

Identify artificer, raw materials, import, and manufacture

Developing an Interpretation

Explain why craftsmen and tradesmen would be attracted to Danbury

Making Connections

Describe how the Revolutionary War helped Danbury to grow
Explain how improved transportation would help Danbury to grow
Describe how insufficient land for farming and population growth would change Danbury's economic focus
Explain how westward expansion created new markets for raw materials and manufactured goods

- **Understand That The Hatting Industry Created Great Wealth And Financed Residential, Public, And Commercial Building Projects**

Initial Understanding

Identify home industries, fuel, merchant, wealth, and borough

Developing an Interpretation

Describe how the Industrial Revolution allowed for large-scale production
Examine the connection between railway expansion and the need to import and export raw materials
Describe the services required by the town's center
Explain how hatting changed from a home industry to a manufacturing industry

Making Connections

Explain how the area around Town Street (Main Street) would become a densely populated borough
Explain how the hatting industry created wealth
Describe how Danburians used this wealth

- **Understand That Following The Civil War Danbury Became the Hatting Capital of the World**

Initial Understanding

Identify barter, depot, slave, union, secession, confederate, Wooster Guard, waste, polluted, orphanage, City of Danbury

Developing an Interpretation

Understand that three regions of America: the north, the south, and the west each had different needs
Describe the unsafe and unsanitary conditions experienced by the expanding borough
Explain how machinery can replace the need for many workers

Making Connections

Explain how moving from a barter system to cash wages changed the life of hatters
What influence did the Civil War have on Danbury
Explain the community services created to improve the quality of life in Danbury
Contrast the new wave of immigrants after the Civil War to the immigrants of earlier times

Critical Stance

Describe how improved conditions for everyone lessened Danbury's dependence on hatting

- **Understand How Events Of The 20th Century Contributed To The Development Of Danbury**

Initial Understanding

Identify Danbury Normal School, Danbury State Fair, Hotel Green, Taylor Opera House, unions, Mad Hatter, Hatters Case, foreign born, trolley, Chamber of Commerce, Candlewood Lake, Great Depression, New Deal, suburbs, and Yankee Expressway
Identify New Deal construction in Danbury

Developing an Interpretation

Explain the significance of social organizations to Danbury's ethnic populations
Explain why the demand for hats decreased
Explain why the Danbury Chamber of Commerce was formed
Explain why the Candlewood Lake was created by Connecticut Light and Power
Explain how the flood of 1955 led to improvements in Danbury's appearance

Making Connections

Describe how conditions in factories led to labor unions
Describe Danbury's involvement in WWI and how life changed as a result
Describe how Danbury changed after the introduction of electricity and the automobile
Explain why Candlewood Lake made Danbury a popular destination
Explain why people moved to the suburbs after WWII

Critical Stance

Articulate why you think that I-84 is good for Danbury?
Understand the impact of various technological developments on the local community
Develop a personal connection to historic events, people, places, and institutions in Danbury

Information Literacy And Technology

- **Operate and use computers and other technologies as tools for productivity, problem-solving and learning across the content areas**

Initial Understanding

Use basic operational features of available technology (digital cameras, scanners, etc.)
Operate school computers and demonstrate ability to use the system's software and special features
Use established procedures to obtain assistance with hardware and software problems

Developing an Interpretation

Create word processing documents, drawing and paint documents, graphs, web pages and multimedia presentations, using age appropriate software
Work in more than one program or window at the same time
Understand and expect that technology tools are constantly changing
Distinguish between different technologies and their uses

Making Connections

Describe ways the computer is used to help people work, learn and play
Work collaboratively and cooperatively with peers and others when using computers
Use content-specific technology tools and software
Develop standard keyboarding skills

- **Define information needs and identify effective courses of action to conduct research and solve problems**

Initial Understanding

Identify keywords for searching for information (with assistance)

Developing an Interpretation

Identify existing knowledge and, independently, list areas where more information is needed.
Identify appropriate print, non-print, and / or electronic resources available through library media center, and understand the advantages and disadvantages of each (with assistance)

Making Connections

Clearly restate the scope and criteria of a task (such as timeline, length, audience and presentation mode) with minimal prompting
Describe a course of action for addressing an essential question and completing the task

Critical Stance

Frame an essential question that is related to a topic of interest or a given assignment (with assistance)

- **Understand and demonstrate a command of information skills and strategies to locate and effectively use print, non-print and / or digital resources to solve problems and conduct research**

Initial Understanding

Select appropriate print, non-print and / or electronic resources, (atlases, almanacs, encyclopedias, dictionaries, newspapers, telephone directories, etc.) understanding that information is stored and accessed in different ways
Perform simple keyword searches
Use Internet resources to locate information, with supervision

Developing Interpretation

Use basic print, non-print, and electronic reference sources (atlases, almanacs, encyclopedias, dictionaries, newspapers, telephone directories, etc.) to locate information
Take print and/or electronic notes in own words from several sources of information

Making Connections

Apply principles of organized information systems to learning endeavors

- Alphabetize by word to find information in resources
- Use the online catalog to locate materials by author, title, or subject
- Locate information from various areas of the media center, including use of the Dewey Decimal System

- Use organizing features of print, non-print and electronic materials (parts of a book, bibliographies, simple menus and hyperlinks) to locate and use information
- Use an Internet search engine from a selected list to locate information
- Navigate Internet web sites

Interpret charts, graphs and tables in information sources

- **Apply evaluative criteria to the selection, interpretation, analysis, reorganization and synthesis of information from a variety of sources and formats**

Initial Understanding

Determine appropriate sources of information for a specific purpose

Developing Interpretation

Use technology to organize and reorganize information

Making Connections

Develop and apply criteria to judge the relevance, credibility, currency and completeness of information, including Internet resources

Organize information into related categories

Critical Stance

Use critical evaluation skills in listening and viewing

- **Use appropriate technologies to create written, visual, oral and multimedia products to communicate ideas, information or conclusions to others**

Initial Understanding

Understand strengths and weaknesses of various media formats in creating a presentation

Making Connections

Construct slide shows, multimedia presentations, web pages, spreadsheets, databases to communicate ideas or data and present conclusions

Create and use digital images in presentations

Critical Stance

Determine the most appropriate technology and format to present information and new knowledge

Create and share clear and meaningful presentations that communicate information and new knowledge appropriate for a specific audience

- **Evaluate the effectiveness and efficiency of their own choices and uses of information and technology for problem solving and communication**

Critical Stance

Evaluate their process for searching (with assistance)

Assess the retrieved information for relevancy and completeness (with assistance)

Use a rubric to assess whether the product meets conventional standards and expresses ideas clearly (with assistance)

- **Demonstrate the responsible, legal and ethical use of information resources, computers and other technologies**

Initial Understanding

Understand that the right to copy original works is owned by the author or artist

Developing an Interpretation

Practice responsible use of print and non-print materials, computers and other technologies and networks

Making Connections

Give citation credit to original sources when using or transmitting information to others

Critical Stance

Demonstrate positive social and ethical behaviors by observing the legal and ethical limitations for using or copying print, non-print or electronic information sources

- **Develop life-long reading habits to foster personal enrichment and continuous learning**

Initial Understanding

Locate and access various genres of literature in the media center using the electronic card catalog

Developing an Interpretation

Choose various genres for pleasure reading and/or listening

Choose a variety of reading material for information

Making Connections

Explain the role that reading plays as a valid activity outside of school

Analyze personal reading habits for the purpose of expanding reading choices

Critical Stance

Evaluate and choose reading materials based on interest, readability, and relevance

- **Develop a deeper awareness of media literacy as a life skill that is integral to modern citizenship and informed decision-making**

Initial Understanding

Recognize that information comes to us from a variety of media sources - print, television, radio, Internet

Recognize that the message from a media source may have a purpose that is unstated and or biased

Developing an Interpretation

Describe how an individual's understanding and interpretation of media differs based on his/her emotions, experiences, biases, social and cultural attitudes and back round

Making Connections

Identify messages from media sources and analyze for purpose/ bias

Critical Stance

Analyze and evaluate information read, heard or seen for relevance and credibility