

**A Correlation of
Science and Technology for Children®
and
Science and Technology Concepts
for Middle Schools™
to the
National English Language Arts Standards**

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This document gives a quick visual guide to the alignment of Science and Technology for Children® (STC®) and Science and Technology Concepts for Middle Schools™ (STC/MS™) units with the National English Language Arts Standards. Although each STC and STC/MS unit was developed for use at a specific grade level, there is some flexibility in grade placement—any unit may be used a grade above or below the one for which it was developed. Because of this flexibility, many curriculum planners prefer to think of each unit as covering a three-level band of grades (as indicated in the chart below). In addition, STC/MS units can be used at grade 9.

All fourth-grade through sixth-grade STC unit kits include a Discovery Deck, a set of extensions for the unit. When a Discovery Deck meets or helps to meet a standard, the abbreviation “DD” will follow the unit abbreviation.

Recommended Grade Levels and Unit Abbreviations

The National Science Resources Center (NSRC), developer of the STC and STC/MS programs, recommends the units be used within the following grade ranges.

	Grades	Life and Earth Science		Physical Science and Technology	
STC	K–2	<i>Organisms</i> (O)	<i>Weather</i> (W)	<i>Solids and Liquids</i> (SL)	<i>Comparing and Measuring</i> (CM)
	1–3	<i>The Life Cycle of Butterflies</i> (LCB)	<i>Soils</i> (S)	<i>Changes</i> ©	<i>Balancing and Weighing</i> (BW)
	2–4	<i>Plant Growth and Development</i> (PGD)	<i>Rocks and Minerals</i> (RM)	<i>Chemical Tests</i> (CT)	<i>Sound</i> (So)
	3–5	<i>Animal Studies*</i> (AS)	<i>Land and Water*</i> (LW)	<i>Electric Circuits*</i> (EC)	<i>Motion and Design*</i> (MD)
	4–6	<i>Microworlds*</i> (Mw)	<i>Ecosystems*</i> (E)	<i>Food Chemistry*</i> (FC)	<i>Floating and Sinking*</i> (FS)
	5–7	<i>Experiments with Plants*</i> (EP)	<i>Measuring Time*</i> (MT)	<i>Magnets and Motors*</i> (MM)	<i>The Technology of Paper*</i> (TP)
STC/MS	6–8**	<i>Human Body Systems</i> (HBS)	<i>Catastrophic Events</i> (CE)	<i>Properties of Matter</i> (POM)	<i>Energy, Machines, and Motion</i> (EMM)
		<i>Organisms—From Macro to Micro</i> (OMM)	<i>Earth in Space</i> (ES)	<i>Light</i> (L)	<i>Electrical Energy and Circuit Design</i> (EECD)

*Unit kit includes a Discovery Deck (DD).

**STC/MS units may also be used at grade 9.

Standards for the English Language Arts	
Reading for Perspective	
Kindergarten-12th Grade	STC and/or STC/MS Unit(s)
1. Students read a wide range of print and non-print to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment. Among these texts are fiction and nonfiction, classic and contemporary works.	All STC and STC/MS units (workplace and classic works not included)
Understanding the Human Experience	
2. Students read a wide range of literature from many periods in many genres to build an understanding of the many dimensions (e.g., philosophical, ethical, aesthetic) of human experience.	
Evaluation Strategies	
3. Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies, and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics).	Compatible with all STC units, Discovery Decks, and STC/MS units
Communication Skills	
4. Students adjust their use of spoken, written, and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes.	Compatible with all STC and STC/MS units
Communication Strategies	
5. Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes.	Compatible with all STC and STC/MS units
Applying Knowledge	
6. Students apply knowledge of language structure, language conventions (e.g., spelling and punctuation), media techniques, figurative language, and genre to create, critique, and discuss print and non-print texts.	
Evaluating Data	
7. Students conduct research on issues and interests by generating ideas and questions, and by posing problems. They gather, evaluate, and synthesize data from a variety of sources (e.g., print and non-print texts, artifacts, people) to communicate their discoveries in ways that suit their purpose and audience.	PGD (extension only), AS, Mw (extension only), E, FC, TP, all STC/MS units
Developing Research Skills	
8. Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge.	All STC units, AS DD, MD DD, FS DD, MT DD, MM DD, and all STC/MS units
Multicultural Understanding	
9. Students develop an understanding of and respect for diversity in language use, patterns, and dialects across cultures, ethnic groups, geographic regions, and social roles.	

Applying Non-English Perspectives	
10. Students whose first language is not English make use of their first language to develop competency in the English language arts and to develop understanding of content across the curriculum.	
Participating in Society	
11. Students participate as knowledgeable, reflective, creative, and critical members of a variety of literacy communities.	
Applying Language Skills	
12. Students use spoken, written, and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion, and the exchange of information).	All STC and STC/MS units
National Standards and Benchmarks for Language Arts	
Writing	
Standard 1: Uses the general skills and strategies of the writing process	
Level I (Grade K-2)	STC Unit(s)
1. Prewriting: Uses prewriting strategies to plan written work (e.g., discusses ideas with peers, draws pictures to generate ideas, writes key thoughts and questions, rehearses ideas, records reactions and observations)	Compatible with all STC units
2. Drafting and Revising: Uses strategies to draft and revise written work (e.g., rereads; rearranges words, sentences, and paragraphs to improve or clarify meaning; varies sentence type; adds descriptive words and details; deletes extraneous information; incorporates suggestions from peers and teachers; sharpens the focus)	Compatible with all STC units
3. Editing and Publishing: Uses strategies to edit and publish written work (e.g., proofreads using a dictionary and other resources; edits for grammar, punctuation, capitalization, and spelling at a developmentally appropriate level; incorporates illustrations or photos; uses available, appropriate technology to compose and publish work; shares finished product)	Compatible with all STC units
4. Evaluates own and others' writing (e.g., asks questions and makes comments about writing, helps classmates apply grammatical and mechanical conventions)	
5. Uses strategies to organize written work (e.g., includes a beginning, middle, and ending; uses a sequence of events)	Compatible with all STC units
6. Uses writing and other methods (e.g., drawing pictures, using letters or phonetically spelled words, telling, dictating, making lists) to describe familiar persons, places, objects, or experiences	O, SL, CM, LCB, S, C, BW, PGD, RM, CT, So
7. Writes in a variety of forms or genres (e.g., picture books, friendly letters, stories, poems, information pieces, invitations, personal experience narratives, messages, responses to literature)	O, W (extensions only), SL, LCB, S (friendly letters not included)
Level II (Grade 3-5)	STC Unit(s)
1. Prewriting: Uses prewriting strategies to plan written work (e.g., uses graphic organizers, story maps, and webs; groups related ideas; takes notes; brainstorms ideas; organizes information according to type and purpose of writing)	Compatible with all STC units
2. Drafting and Revising: Uses strategies to draft and revise written work (e.g., elaborates on a central idea; writes with attention to audience, word choice, sentence variation; uses paragraphs to develop separate ideas; produces multiple drafts)	Compatible with all STC units

3. Editing and Publishing: Uses strategies to edit and publish written work (e.g., edits for grammar, punctuation, capitalization, and spelling at a developmentally appropriate level; uses reference materials; considers page format [paragraphs, margins, indentations, titles]; selects presentation format according to purpose; incorporates photos, illustrations, charts, and graphs; uses available technology to compose and publish work)	Compatible with all STC units
4. Evaluates own and others' writing (e.g., determines the best features of a piece of writing, determines how own writing achieves its purposes, asks for feedback, responds to classmates' writing)	
5. Uses strategies (e.g., adapts focus, organization, point of view; determines knowledge and interests of audience) to write for different audiences (e.g., self, peers, teachers, adults)	Compatible with all STC units
6. Uses strategies (e.g., adapts focus, point of view, organization, form) to write for a variety of purposes (e.g., to inform, entertain, explain, describe, record ideas)	Compatible with all STC units
7. Writes expository compositions (e.g., identifies and stays on the topic; develops the topic with simple facts, details, examples, and explanations; excludes extraneous and inappropriate information; uses structures such as cause-and-effect, chronology, similarities and differences; uses several sources of information; provides a concluding statement)	Compatible with all STC units
8. Writes narrative accounts, such as poems and stories (e.g., establishes a context that enables the reader to imagine the event or experience; develops characters, setting, and plot; creates an organizing structure; sequences events; uses concrete sensory details; uses strategies such as dialogue, tension, and suspense; uses an identifiable voice)	S (extension only), PGD, RM, CT, AS, LW (extensions only), EC, MD, FC, EP, MM (extension only), TP
9. Writes autobiographical compositions (e.g., provides a context within which the incident occurs, uses simple narrative strategies, and provides some insight into why this incident is memorable)	Mw (extension only)
10. Writes expressive compositions (e.g., expresses ideas, reflections, and observations; uses an individual, authentic voice; uses narrative strategies, relevant details, and ideas that enable the reader to imagine the world of the event or experience)	S, C (extensions only), RM, CT, AS, LW (extensions only), EC, MD, Mw, E, FS (extension only), EP, MT, MM (extensions only), TP
11. Writes in response to literature (e.g., summarizes main ideas and significant details; relates own ideas to supporting details; advances judgments; supports judgments with references to the text, other works, other authors, nonprint media, and personal knowledge)	S, C, RM, CT, AS, LW, MD, E, MM, TP
12. Writes personal letters (e.g., includes the date, address, greeting, body, and closing; addresses envelopes; includes signature)	
Level III (Grade 6-8)	STC and/or STC/MS Unit(s)
1. Prewriting: Uses a variety of prewriting strategies (e.g., makes outlines, uses published pieces as writing models, constructs critical standards, brainstorms, builds background knowledge)	All STC/MS units

2. Drafting and Revising: Uses a variety of strategies to draft and revise written work (e.g., analyzes and clarifies meaning, makes structural and syntactical changes, uses an organizational scheme, uses sensory words and figurative language, rethinks and rewrites for different audiences and purposes, checks for a consistent point of view and for transitions between paragraphs, uses direct feedback to revise compositions)	Compatible with all STC and STC/MS units
3. Editing and Publishing: Uses a variety of strategies to edit and publish written work (e.g., eliminates slang; edits for grammar, punctuation, capitalization, and spelling at a developmentally appropriate level; proofreads using reference materials, word processor, and other resources; edits for clarity, word choice, and language usage; uses a word processor or other technology to publish written work)	Compatible with all STC and STC/MS units
4. Evaluates own and others' writing (e.g., applies criteria generated by self and others, uses self-assessment to set and achieve goals as a writer, participates in peer response groups)	L
5. Uses content, style, and structure (e.g., formal or informal language, genre, organization) appropriate for specific audiences (e.g., public, private) and purposes (e.g., to entertain, to influence, to inform)	Compatible with all STC and STC/MS units
6. Writes expository compositions (e.g., states a thesis or purpose; presents information that reflects knowledge about the topic of the report; organizes and presents information in a logical manner, including an introduction and conclusion; uses own words to develop ideas; uses common expository structures and features, such as compare-contrast or problem-solution)	Compatible with all STC and STC/MS units
7. Writes narrative accounts, such as short stories (e.g., engages the reader by establishing a context and otherwise developing reader interest; establishes a situation, plot, persona, point of view, setting, conflict, and resolution; develops complex characters; creates an organizational structure that balances and unifies all narrative aspects of the story; uses a range of strategies and literary devices such as dialogue, tension, suspense, naming, figurative language, and specific narrative action such as movement, gestures, and expressions; reveals a specific theme)	EP, MM (extension only), TP, CE, EMM, EECD (extensions only)
8. Writes compositions about autobiographical incidents (e.g., explores the significance and personal importance of the incident; uses details to provide a context for the incident; reveals personal attitude towards the incident; presents details in a logical manner)	Mw, HBS (extensions only)
9. Writes biographical sketches (e.g., illustrates the subject's character using narrative and descriptive strategies such as relevant dialogue, specific action, physical description, background description, and comparison or contrast to other people; reveals the significance of the subject to the writer; presents details in a logical manner)	TP (extension only)
10. Writes persuasive compositions (e.g., engages the reader by establishing a context, creating a persona, and otherwise developing reader interest; develops a controlling idea that conveys a judgment; creates and organizes a structure appropriate to the needs and interests of a specific audience; arranges details, reasons, examples, and/or anecdotes persuasively; excludes information and arguments that are irrelevant; anticipates and addresses reader concerns and counter arguments; supports arguments with detailed evidence, citing sources of information as appropriate)	

11. Writes compositions that address problems/solutions (e.g., identifies and defines a problem in a way appropriate to the intended audience, describes at least one solution, presents logical and well-supported reasons)	E
12. Writes in response to literature (e.g., responds to significant issues in a log or journal, answers discussion questions, anticipates and answers a reader's questions, writes a summary of a book, describes an initial impression of a text, connects knowledge from a text with personal knowledge, states an interpretive, evaluative, or reflective position; draws inferences about the effects of the work on an audience)	E, FC, FS, MT, MM, TP, POM, EECD
13. Writes business letters and letters of request and response (e.g., uses business letter format; states purpose of the letter; relates opinions, problems, requests, or compliments; uses precise vocabulary)	FC (extension only), FS DD, TP, CE, ES, EECD (extensions only)
14. Writes technical text, such as bylaws for an organization (e.g., identifies essential steps in a logical sequence; lists materials or equipment needed; describes all factors and variables that need to be considered; uses appropriate formatting)	
Standard 2: Uses the stylistic and rhetorical aspects of writing	
Level I (Grade K-2)	STC Unit(s)
1. Uses descriptive words to convey basic ideas	O, W, SL (extension only), CM, C, BW, PGD, RM, CT, (extensions only) So
Level II (Grade 3-5)	STC Unit(s)
1. Uses descriptive language that clarifies and enhances ideas (e.g., common figures of speech, sensory details)	C, BW, PGD, RM, CT (extensions only), So, Mw, E
2. Uses paragraph form in writing (e.g., indents the first word of a paragraph, uses topic sentences, recognizes a paragraph as a group of sentences about one main idea, uses an introductory and concluding paragraph, writes several related paragraphs)	Compatible with all STC units, EC DD
3. Uses a variety of sentence structures in writing (e.g., expands basic sentence patterns)	Compatible with all STC units
Level III (Grade 6-8)	STC and/or STC/MS Unit(s)
1. Uses descriptive language that clarifies and enhances ideas (e.g., establishes tone and mood, uses figurative language, uses sensory images and comparisons, uses a thesaurus to choose effective wording)	Mw, E, OMM
2. Uses paragraph form in writing (e.g., arranges sentences in sequential order, uses supporting and follow-up sentences, establishes coherence within and among paragraphs)	HBS, CE, POM, EMM (extensions only), OMM, L, EECD
3. Uses a variety of sentence structures to expand and embed ideas (e.g., complex sentences; parallel structure, such as similar grammatical forms or juxtaposed items)	Compatible with all STC and STC/MS units
4. Uses explicit transitional devices	Compatible with all STC and STC/MS units
Standard 3: Uses grammatical and mechanical conventions in written compositions	
Level I (Grade K-2)	STC Unit(s)
1. Uses conventions of print in writing (e.g., forms letters in print, uses upper- and lowercase letters of the alphabet, spaces words and sentences, writes from left-to-right and top-to-bottom, includes margins)	Compatible with all STC units
2. Uses complete sentences in written compositions	Compatible with all STC units
3. Uses declarative and interrogative sentences in written compositions	Compatible with all STC units

4. Uses nouns in written compositions (e.g., nouns for simple objects, family members, community workers, and categories)	Compatible with all STC units
5. Uses verbs in written compositions (e.g., verbs for a variety of situations, action words)	Compatible with all STC units
6. Uses adjectives in written compositions (e.g., uses descriptive words)	O, S, RM, CT (extensions only)
7. Uses adverbs in written compositions (i.e., uses words that answer how, when, where, and why questions)	Compatible with all STC units
8. Uses conventions of spelling in written compositions (e.g., spells high frequency, commonly misspelled words from appropriate grade-level list; spells phonetically regular words; uses letter-sound relationships; spells basic short vowel, long vowel, r-controlled, and consonant blend patterns; uses a dictionary and other resources to spell words; spells own first and last name)	Compatible with all STC units
9. Uses conventions of capitalization in written compositions (e.g., first and last names, first word of a sentence)	Compatible with all STC units
10. Uses conventions of punctuation in written compositions (e.g., uses periods after declarative sentences, uses questions marks after interrogative sentences, uses commas in a series of words)	Compatible with all STC units
Level II (Grade 3-5)	STC Unit(s)
1. Writes in cursive	Compatible with PGD, RM, CT, So, AS, LW, EC, MD, Mw, E, FC, FS, EP, MT, MM, TP
2. Uses exclamatory and imperative sentences in written compositions	Compatible with all STC units
3. Uses pronouns in written compositions (e.g., substitutes pronouns for nouns, uses pronoun agreement)	Compatible with all STC units
4. Uses nouns in written compositions (e.g., uses plural and singular naming words, forms regular and irregular plurals of nouns, uses common and proper nouns, uses nouns as subjects)	Compatible with all STC units, EC DD
5. Uses verbs in written compositions (e.g., uses a wide variety of action verbs, past and present verb tenses, simple tenses, forms of regular verbs, verbs that agree with the subject)	Compatible with all STC units, EC DD
6. Uses adjectives in written compositions (e.g., indefinite, numerical, predicate adjectives)	S, RM, LW, FS (extensions only)
7. Uses adverbs in written compositions (e.g., to make comparisons)	Compatible with all STC units
8. Uses coordinating conjunctions in written compositions (e.g., links ideas using connecting words)	Compatible with all STC units
9. Uses negatives in written compositions (e.g., avoids double negatives)	Compatible with all STC units
10. Uses conventions of spelling in written compositions (e.g., spells high frequency, commonly misspelled words from appropriate grade-level list; uses a dictionary and other resources to spell words; uses initial consonant substitution to spell related words; uses vowel combinations for correct spelling; uses contractions, compounds, roots, suffixes, prefixes, and syllable constructions to spell words)	Compatible with all STC units, EC DD
11. Uses conventions of capitalization in written compositions (e.g., titles of people; proper nouns [names of towns, cities, counties, and states; days of the week; months of the year; names of streets; names of countries; holidays]; first word of direct quotations; heading, salutation, and closing of a letter)	Compatible with all STC units, EC DD

12. Uses conventions of punctuation in written compositions (e.g., uses periods after imperative sentences and in initials, abbreviations, and titles before names; uses commas in dates and addresses and after greetings and closings in a letter; uses apostrophes in contractions and possessive nouns; uses quotation marks around titles and with direct quotations; uses a colon between hour and minutes)	Compatible with all STC units, EC DD
Level III (Grade 6-8)	STC and/or STC/MS Unit(s)
1. Uses simple and compound sentences in written compositions	Compatible with all STC and STC/MS units
2. Uses pronouns in written compositions (e.g., relative, demonstrative, personal [i.e., possessive, subject, object])	Compatible with all STC and STC/MS units
3. Uses nouns in written compositions (e.g., forms possessives of nouns; forms irregular plural nouns)	Mw (extension only)
4. Uses verbs in written compositions (e.g., uses linking and auxiliary verbs, verb phrases, and correct forms of regular and irregular verbs)	Compatible with all STC and STC/MS units
5. Uses adjectives in written compositions (e.g., pronominal, positive, comparative, superlative)	Mw, FS (extensions only)
6. Uses adverbs in written compositions (e.g., chooses between forms of adjectives and adverbs)	Compatible with all STC and STC/MS units
7. Uses prepositions and coordinating conjunctions in written compositions (e.g., uses prepositional phrases, combines and embeds ideas using conjunctions)	Compatible with all STC and STC/MS units
8. Uses interjections in written compositions	Compatible with all STC and STC/MS units
9. Uses conventions of spelling in written compositions (e.g., spells high frequency, commonly misspelled words from appropriate grade-level list, uses a dictionary and other resources to spell words, uses common prefixes and suffixes as aids to spelling, applies rules for irregular structural changes)	Compatible with all STC and STC/MS units
10. Uses conventions of capitalization in written compositions (e.g., titles [books, stories, poems, magazines, newspapers, songs, works of art], proper nouns [team names, companies, schools and institutions, departments of government, religions, school subjects], proper adjectives, nationalities, brand names of products)	Compatible with all STC and STC/MS units
11. Uses conventions of punctuation in written compositions (e.g., uses exclamation marks after exclamatory sentences and interjections; uses periods in decimals, dollars, and cents; uses commas with nouns of address and after mild interjections; uses quotation marks with poems, songs, and chapters; uses colons in business letter salutations; uses hyphens to divide words between syllables at the end of a line)	Compatible with all STC and STC/MS units
12. Uses appropriate format in written compositions (e.g., includes footnotes, uses italics [for titles of books, magazines, plays, movies])	Compatible with all STC and STC/MS units
Standard 4: Gathers and uses information for research purposes	
Level I (Grade K-2)	STC Unit(s)
1. Generates questions about topics of personal interest	All STC units
2. Uses a variety of sources to gather information (e.g., informational books, pictures, charts, indexes, videos, television programs, guest speakers, Internet, own observation)	All STC units

Level II (Grade 3-5)	STC Unit(s)
1. Uses a variety of strategies to plan research (e.g., identifies possible topic by brainstorming, listing questions, using idea webs; organizes prior knowledge about a topic; develops a course of action; determines how to locate necessary information)	AS, E, TP
2. Uses encyclopedias to gather information for research topics	FC (extension only)
3. Uses dictionaries to gather information for research topics	
4. Uses electronic media to gather information (e.g., databases, Internet, CD-ROM, television shows, cassette recordings, videos, pull-down menus, word searches)	AS DD, MD DD, FS DD, MT DD, MM DD
5. Uses key words, guide words, alphabetical and numerical order. Indexes, cross-references, and letters on volumes to find information for research topics	Compatible with PGD, RM (extensions only), AS, Mw (extension only), E, FC, EP (extensions only), TP
6. Uses multiple representations of information (e.g., maps, charts, photos, diagrams, tables) to find information for research topics	AS, TP (extensions only)
7. Uses strategies to gather and record information for research topics (e.g., uses notes, maps, charts, graphs, tables, and other graphic organizers; paraphrases and summarizes information; gathers direct quotes; provides narrative descriptions)	PGD, RM (extensions only), AS, Mw (extension only), E, FC, EP (extensions only), TP
8. Uses strategies to compile information into written reports or summaries (e.g., incorporates notes into a finished product; includes simple facts, details, explanations, and examples; draws conclusions from relationships and patterns that emerge from data from different sources; uses appropriate visual aids and media)	AS
9. Cites information sources (e.g., quotes or paraphrases information sources, lists resources used by title)	Compatible with PGD, RM (extensions only), AS, Mw (extension only), E, FC, EP (extensions only), TP
Level III (Grade 6-8)	STC and/or STC/MS Unit(s)
1. Gathers data for research topics from interviews (e.g., prepares and asks relevant questions, makes notes of responses, compiles responses)	EP, TP (extensions only)
2. Uses card catalogs and computer databases to locate sources for research topics	Mw, E (extensions only)
3. Uses the Reader's Guide to Periodical Literature and other indexes to gather information for research topics	
4. Uses a variety of resource materials to gather information for research topics (e.g., magazines, newspapers, dictionaries, schedules, journals, phone directories, globes, atlases, almanacs)	All STC/MS units
5. Determines the appropriateness of an information source for a research topic	All STC/MS units
6. Organizes information and ideas from multiple sources in systematic ways (e.g., time lines, outlines, notes, graphic representations)	TP, all STC/MS units
7. Writes research papers (e.g., separates information into major components based on a set of criteria, examines critical relationships between and among elements of a research topic, addresses different perspectives on a topic, achieves balance between research information and original ideas, integrates a variety of information into a whole, draws conclusions)	All STC/MS units

8. Uses appropriate methods to cite and document reference sources (e.g., footnotes, bibliography)	All STC/MS units
Reading	
Standard 5: Uses the general skills and strategies of the reading process	
Level I (Grade K-2)	STC Unit(s)
1. Understands that print conveys meaning (i.e., knows that printed letters and words represent spoken language)	Compatible with all STC units
2. Understands how print is organized and read (e.g., identifies front and back covers, title page, author, and illustrator; follows words from left-to-right and from top-to-bottom; knows the significance of spaces between words, knows the difference between letters, words, and sentences; understands the use of capitalization and punctuation as text boundaries)	Compatible with all STC units
3. Creates mental images from pictures and print	Compatible with all STC units
4. Uses meaning clues (e.g., pictures, picture captions, title, cover, headings, story structure, story topic) to aid comprehension and make predictions about content (e.g., action, events, character's behavior)	
5. Uses basic elements of phonetic analysis (e.g., common letter/sound relationships, beginning and ending consonants, vowel sounds, blends, word patterns) to decode unknown words	
6. Uses basic elements of structural analysis (e.g., syllables, basic prefixes, suffixes, root words, compound words, spelling patterns, contractions) to decode unknown words	
7. Uses a picture dictionary to determine word meaning	
8. Understands level-appropriate sight words and vocabulary (e.g., words for persons, places, things, actions; high frequency words such as said, was, and where)	All STC units (sight words not included)
9. Uses self-correction strategies (e.g., searches for cues, identifies miscues, rereads, asks for help)	
10. Reads aloud familiar stories, poems, and passages with fluency and expression (e.g., rhythm, flow, meter, tempo, pitch, tone, intonation)	LCB, BW
Level II (Grade 3-5)	STC Unit(s)
1. Previews text (e.g., skims material; uses pictures, textual clues, and text format)	
2. Establishes a purpose for reading (e.g., for information, for pleasure, to understand a specific viewpoint)	Compatible with LCB, S, C, BW, PGD, RM, CT, So, AS, LW, EC, MD, Mw, E, FC, FS, EP, MT, MM, TP, and all Discovery Decks
3. Represents concrete information (e.g., persons, places, things, events) as explicit mental pictures	Compatible with all STC units and Discovery Decks
4. Makes, confirms, and revises simple predictions about what will be found in a text (e.g., uses prior knowledge and ideas presented in text, illustrations, titles, topic sentences, key words, and foreshadowing clues)	
5. Uses phonetic and structural analysis techniques, syntactic structure, and semantic context to decode unknown words (e.g., vowel patterns, complex word families, syllabication, root words, affixes)	
6. Use a variety of context clues to decode unknown words (e.g., draws on earlier reading, reads ahead)	

7. Uses word reference materials (e.g., glossary, dictionary, thesaurus) to determine the meaning, pronunciation, and derivations of unknown words	Compatible with all STC and STC/MS units
8. Understands level-appropriate reading vocabulary (e.g., synonyms, antonyms, homophones, multi-meaning words)	Compatible with all STC units
9. Monitors own reading strategies and makes modifications as needed (e.g., recognizes when he or she is confused by a section of text, questions whether the text makes sense)	Compatible with all STC units, Discovery Decks, and STC/MS units
10. Adjusts speed of reading to suit purpose and difficulty of the material	Compatible with all STC units, Discovery Decks, and STC/MS units
11. Understands the author's purpose (e.g., to persuade, to inform)	
12. Uses personal criteria to select reading material (e.g., personal interest, knowledge of authors and genres, text difficulty, recommendations of others)	
Level III (Grade 6-8)	STC and/or STC/MS Unit(s)
1. Establishes and adjusts purposes for reading (e.g., to understand, interpret, enjoy, solve problems, predict outcomes, answer a specific question, form an opinion, skim for facts; to discover models for own writing)	
2. Uses word origins and derivations to understand word meaning (e.g., Latin and Greek roots, meanings of foreign words frequently used in the English language, historical influences on English word meanings)	E, FC, HBS, CE, POM, OMM, ES (extension only)
3. Uses a variety of strategies to extend reading vocabulary (e.g., uses analogies, idioms, similes, metaphors to infer the meaning of literal and figurative phrases; uses definition, restatement, example, comparison and contrast to verify word meanings; identifies shades of meaning; knows denotative and connotative meanings; knows vocabulary related to different content areas and current events; uses rhyming dictionaries, classification books, etymological dictionaries)	OMM
4. Uses specific strategies to clear up confusing parts of a text (e.g., pauses, rereads the text, consults another source, represents abstract information as mental pictures, draws upon background knowledge, asks for help)	Compatible with all STC units, Discovery Decks, and STC/MS units
5. Understands specific devices an author uses to accomplish his or her purpose (e.g., persuasive techniques, style, literary form or genre, portrayal of themes, language)	
6. Reflects on what has been learned after reading and formulates ideas, opinions, and personal responses to texts	E, FC, FS, MM, MT, TP, all Discovery Decks, POM, ES, EECD
Standard 6: Uses reading skills and strategies to understand and interpret a variety of literary texts	
Level I (Grade K-2)	STC Unit(s)
1. Uses reading skills and strategies to understand a variety of familiar literary passages and texts (e.g., fairy tales, folktales, fiction, nonfiction, legends, fables, myths, poems, nursery rhymes, picture books, predictable books)	All STC units (literary passages not included)
2. Knows setting, main characters, main events, sequence, and problems in stories	
3. Makes simple inferences regarding the order of events and possible outcomes	
4. Knows the main ideas or theme of a story	

5. Relates stories to personal experiences (e.g., events, characters, conflicts, themes)	C
Level II (Grade 3-5)	STC Unit(s)
1. Uses reading skills and strategies to understand a variety of literary passages and texts (e.g., fairy tales, folktales, fiction, nonfiction, myths, poems, fables, fantasies, historical fiction, biographies, autobiographies, chapter books)	All STC units (literary passages not included)
2. Knows the defining characteristics of a variety of literary forms and genres (e.g., fairy tales, folk tales, fiction, nonfiction, myths, poems, fables, fantasies, historical fiction, biographies, autobiographies, chapter books)	
3. Understands the basic concept of plot (e.g., main problem, conflict, resolution, cause-and-effect)	S (extension only)
4. Understands similarities and differences within and among literary works from various genre and cultures (e.g., in terms of settings, character types, events, point of view; role of natural phenomena)	
5. Understands elements of character development in literary works (e.g., differences between main and minor characters; stereotypical characters as opposed to fully developed characters; changes that characters undergo; the importance of a character’s actions, motives, and appearance to plot and theme)	
6. Makes inferences or draws conclusions about characters’ qualities and actions (e.g., based on knowledge of plot, setting, characters’ motives, characters’ appearances, other characters’ responses to a character)	
7. Knows themes that recur across literary works	
8. Understands the ways in which language is used in literary texts (e.g., personification, alliteration, onomatopoeia, simile, metaphor, imagery, hyperbole, beat, rhythm)	
9. Makes connections between characters or simple events in a literary work and people or events in his or her own life	
Level III (Grade 6-8)	STC and/or STC/MS Unit(s)
1. Uses reading skills and strategies to understand a variety of literary passages and texts (e.g., fiction, nonfiction, myths, poems, fantasies, biographies, autobiographies, science fiction, tall tales, supernatural tales)	All STC and STC/MS units (literary passages not included)
2. Knows the defining characteristics of a variety of literary forms and genres (e.g., fiction, nonfiction, myths, poems, fantasies, biographies, autobiographies, science fiction, tall tales, supernatural tales)	
3. Understands complex elements of plot development (e.g., cause-and-effect relationships; use of subplots, parallel episodes, and climax; development of conflict and resolution)	
4. Understands elements of character development (e.g., character traits and motivations; stereotypes; relationships between character and plot development; development of characters through their words, speech patterns, thoughts, actions, narrator’s description, and interaction with other characters; how motivations are revealed)	
5. Makes inferences and draws conclusions about story elements (e.g., main and subordinate characters; events; setting; theme; missing details; relationships among story elements, such as the relevance of setting to mood and meaning in text)	

6. Understands the use of specific literary devices (e.g., foreshadowing, flashback, progressive and digressive time, suspense)	
7. Understands the use of language in literary works to convey mood, images, and meaning (e.g., dialect; dialogue; symbolism; irony; rhyme; voice; tone; sound; alliteration; assonance; consonance; onomatopoeia; figurative language such as similes, metaphors, personification, hyperbole, allusion; sentence structure; punctuation)	
8. Understands the effects of an author's style (e.g., word choice, speaker, imagery, genre, perspective) on the reader	
9. Understands point of view in a literary text (e.g., first and third person, limited and omniscient, subjective and objective)	
10. Understands inferred and recurring themes in literary works (e.g., bravery, loyalty, friendship, good v. evil; historical, cultural, and social themes)	
11. Makes connections between the motives of characters or the causes for complex events in texts and those in his or her own life	
Standard 7: Uses reading skills and strategies to understand and interpret a variety of informational texts	
Level I (Grade K-2)	STC Unit(s)
1. Uses reading skills and strategies to understand a variety of informational texts (e.g., written directions, signs, captions, warning labels, informational books)	All STC units
2. Understands the main idea and supporting details of simple expository information	
3. Summarizes information found in texts (e.g., retells in own words)	RM, CT, So
4. Relates new information to prior knowledge and experience	Compatible with all STC units
Level II (Grade 3-5)	STC Unit(s)
1. Uses reading skills and strategies to understand a variety of informational texts (e.g., textbooks, biographical sketches, letters, diaries, directions, procedures, magazines)	All STC units
2. Knows the defining characteristics of a variety of informational texts (e.g., textbooks, biographical sketches, letters, diaries, directions, procedures, magazines)	
3. Uses text organizers (e.g., headings, topic and summary sentences, graphic features, typeface, chapter titles) to determine the main ideas and to locate information in a text	
4. Uses the various parts of a book (e.g., index, table of contents, glossary, appendix, preface) to locate information	Compatible with all STC units
5. Summarizes and paraphrases information in texts (e.g., includes the main idea and significant supporting details of a reading selection)	RM, CT, So, TP
6. Uses prior knowledge and experience to understand and respond to new information	Compatible with all STC units
7. Understands the author's viewpoint in an informational text	
8. Understands structural patterns or organization in informational texts (e.g., chronological, logical, or sequential order; compare-and-contrast; cause-and-effect; proposition and support)	

Level III (Grade 6-8)	STC and/or STC/MS Unit(s)
1. Uses reading skills and strategies to understand a variety of informational texts (e.g., textbooks; biographical sketches; letters; diaries; directions; procedures; magazines; essays; primary source historical documents; editorials; news stories; periodicals; bus routes; catalogs; technical directions; consumer, workplace, and public documents)	All STC and STC/MS units
2. Knows the defining characteristics of a variety of informational texts (e.g., textbooks; biographical sketches; letters; diaries; directions; procedures; magazines; essays; primary source historical documents; editorials; news stories; periodicals; bus routes; catalogs; technical directions; consumer, workplace, and public documents)	OMM (extension, letters, and essays only)
3. Summarizes and paraphrases information in texts (e.g., arranges information in chronological, logical, or sequential order; conveys main ideas, critical details, and underlying meaning; uses own words or quoted materials; preserves author's perspective and voice)	TP, HBS, CE, EMM, OMM (extension only), EECD (summarizes only)
4. Uses new information to adjust and extend personal knowledge base	Compatible with all STC and STC/MS units
5. Understands techniques used to convey viewpoint (e.g., word choice, language structure, context)	
6. Draws conclusions and makes inferences based on explicit and implicit information in texts	E, FC, TP, all STC/MS units
7. Differentiates between fact and opinion in informational texts	
Listening and Speaking	
Standard 8: Uses listening and speaking strategies for different purposes	
Level I (Grade K-2)	STC Unit(s)
1. Makes contributions in class and group discussions (e.g., recounts personal experiences, reports on ideas and personal knowledge about a topic, initiates conversations, connects ideas and experiences with those of others)	All STC units
2. Asks and responds to questions	All STC units
3. Follows rules of conversation (e.g., takes turns, raises hand to speak, stays on topic, focuses attention on speaker)	All STC units
4. Uses different voice level, phrasing, and intonation for different situations (e.g., small group settings, informal discussions, reports to the class)	Compatible with all STC units
5. Uses level-appropriate vocabulary in speech (e.g., number words; words that describe people, places, things, events, shape, color, size, location, actions; synonyms, antonyms; homonyms, word analogies, common figures of speech)	Compatible with all STC units
6. Gives and responds to oral directions	All STC units
7. Recites and responds to familiar stories, poems, and rhymes with patterns (e.g., retells in sequence; relates information to own life; describes character, setting, plot)	O, W, SL, CM, LCB, S, C, BW, PGD (extensions only and rhymes not included)
8. Listens and responds to a variety of media (e.g., books, audio tapes, videos)	All STC units
9. Knows differences between language used at home and language used in school	
Level II (Grade 3-5)	STC Unit(s)
1. Contributes to group discussions	All STC units

2. Asks questions in class (e.g., when he or she is confused, to seek others' opinions and comments)	All STC units
3. Responds to questions and comments (e.g., gives reasons in support of opinions, responds to others' ideas)	All STC units
4. Listens to classmates and adults (e.g., does not interrupt, faces the speaker, asks questions, summarizes or paraphrases to confirm understanding, gives feedback, eliminates barriers to effective listening)	All STC units
5. Uses strategies to convey a clear main point when speaking (e.g., expresses ideas in a logical manner, uses specific vocabulary to establish tone and present information)	Compatible with all STC units
6. Uses level-appropriate vocabulary in speech (e.g., familiar idioms, similes, word play)	Compatible with all STC units
7. Makes basic oral presentations to class (e.g., uses subject-related information and vocabulary; includes content appropriate to the audience; relates ideas and observations; incorporates visual aids or props; incorporates several sources of information)	S (extension only), RM, So, AS, LW, EC, MD, E, FC (extension only), EP, MT, MM, TP
8. Uses a variety of nonverbal communication skills (e.g., eye contact, gestures, facial expressions, posture)	Compatible with all STC units
9. Uses a variety of verbal communication skills (e.g., projection, tone, volume, rate, articulation, pace, phrasing)	Compatible with all STC units
10. Organizes ideas for oral presentations (e.g., uses an introduction and conclusion; uses notes or other memory aids; organizes ideas around major points, in sequence, or chronologically; uses traditional structures, such as cause-and-effect, similarity and difference, posing and answering a question; uses details, examples, and anecdotes to clarify information)	S (extension only), RM, So, AS, LW, EC, MD, E, FC (extension only), EP, MT, MM, TP
11. Listens for specific information in spoken texts (e.g., plot details or information about a character in a short story read aloud, information about a familiar topic from a radio broadcast)	
12. Understands the main ideas and supporting details in spoken texts (e.g., presentations by peers or guest speakers, a current affairs report on the radio)	Compatible with all STC units
13. Listens to and understands persuasive messages (e.g., television commercials, commands and requests, pressure from peers)	
14. Interprets the use of nonverbal cues used in conversation	
15. Knows specific ways in which language is used in real-life situations (e.g., buying something from a shopkeeper, requesting something from a parent, arguing with a sibling, talking to a friend)	
16. Understands that language reflects different regions and cultures (e.g., sayings; expressions; usage; oral traditions and customs; historical, geographical, and societal influences on language)	
Level III (Grade 6-8)	STC and/or STC/MS Unit(s)
1. Plays a variety of roles in group discussions (e.g., active listener, discussion leader, facilitator)	All STC and STC/MS units
2. Asks questions to seek elaboration and clarification of ideas	All STC and STC/MS units
3. Uses strategies to enhance listening comprehension (e.g., takes notes; organizes, summarizes, and paraphrases spoken ideas and details)	Compatible with all STC and STC/MS units
4. Listens in order to understand topic, purpose, and perspective in spoken texts (e.g., of a guest speaker, of an informational video, of a televised interview, of radio news programs)	E, FC (extension only), EP, MT, MM, TP, all STC/MS units

5. Conveys a clear main point when speaking to others and stays on the topic being discussed	E, FC (extension only), EP, MT, MM, TP, all STC/MS units
6. Uses level-appropriate vocabulary in speech (e.g., metaphorical language, specialized language, sensory details)	All STC and STC/MS units
7. Makes oral presentations to the class (e.g., uses notes and outlines; uses organizational pattern that includes preview, introduction, body, transitions, conclusion; and point of view; uses evidence and arguments to support opinions; uses visual media)	E, FC (extension only), EP, MT, MM, TP, all STC/MS units
8. Uses appropriate verbal and nonverbal techniques for oral presentations (e.g., modulation of voice, inflection, tempo, word choice, grammar, feeling, expression, tone, volume, enunciation, physical gestures, body movement, eye contact, posture)	Compatible with E, FC (extension only), EP, MT, MM, TP, all STC/MS units
9. Evaluates strategies used by speakers in oral presentations (e.g., persuasive techniques, verbal messages supported by nonverbal techniques, effect of word choice, use of slanted or biased material)	
10. Understands the ways in which language differs across a variety of social situations (e.g., formal and informal speech in different social situations, use of jargon by sports commentators to make listeners feel like insiders)	
11. Understands implicit statements of attitude and opinion (e.g., implicit point of view conveyed by tone of voice and expression in a television interview)	
12. Understands elements of persuasion and appeal in spoken texts (e.g., purpose and impact of pace, volume, tone, stress, music in radio announcements; images conveyed by vocabulary and ideas)	
Viewing	
Standard 9: Uses viewing skills and strategies to understand and interpret visual media	
Level I (Grade K-2)	STC Unit(s)
1. Understands the main idea or message in visual media (e.g., pictures, cartoons, weather reports on television, newspaper photographs, visual narratives)	W
2. Uses a variety of strategies to predict content and meaning in visual media (e.g., uses knowledge of the structure of television programs: for cartoons, make predictions based on program length, experience that a resolution will be reached and that main characters will overcome difficulties to return to the next episode; uses knowledge of cause-and-effect relationships to predict plot development)	
3. Knows how different elements help to establish plot, setting, and character in visual narratives (e.g., action, dialogue, music, clothing, facial expressions)	
4. Knows different features (e.g., facial expressions, body language, gesture, clothing, actions, relationships, dialogue) that affect a viewer's perceptions of characters in visual media (e.g., qualities that identify a hero or a villain)	
5. Knows different elements from films, videos, television, and other visual media that appeal to him or her (e.g., scary parts, action segments, particular characters, color, sound effects, animation, layout, music)	

6. Understands the similarities and differences between real life and life depicted in visual media (e.g., compares own family to families represented in television cartoons or films; knows that there is a difference between a character in a program and the actor)	
Level II (Grade 3-5)	STC Unit(s)
1. Understands different messages conveyed through visual media (e.g., main ideas and supporting details; facts and opinions; main characters, setting, and sequence of events in visual narratives)	
2. Understands techniques used to convey messages in visual media (e.g., animation; different tones of voice in audio productions; adjusting messages for different audiences)	
3. Knows that film and television have features that identify different genres (e.g., style of dress, setting in a western or a drama)	
4. Understands the different ways in which people are stereotyped in visual media (e.g., clever people wearing glasses, mothers working at home, scientists wearing white coats; super heroes; people from different socio-cultural or minority groups) and understands that people could have been represented differently	
5. Understands techniques used to establish mood in visual media (e.g., use of camera angles and distances to create a specific feeling or point of view, tension heightened by dramatic music, sound effects such as a heartbeat or squeaking chair, use of a deep voice, somber lighting to imply mystery or fear)	
6. Understands the use and meaning of symbols and images in visual media (e.g., the use of color, such as red to represent emotion, anger, or excitement; the use of expressions, such as smiling to mean happiness; the dependence of symbols on shared social and cultural understandings; symbolic links between product names or logos and products)	
7. Understands basic elements of advertising in visual media (e.g., sales approaches and techniques aimed at children, appealing elements used in memorable commercials, possible reasons for the choice of specific visual images)	
Level III (Grade 6-8)	STC and/or STC/MS Unit(s)
1. Understands a variety of messages conveyed by visual media (e.g., main concept, details, themes or lessons, viewpoints)	
2. Uses a variety of criteria to evaluate and form viewpoints of visual media (e.g., evaluates the effectiveness of informational media, such as web sites, documentaries, news programs; recognizes a range of viewpoints and arguments; establishes criteria for selecting or avoiding specific programs)	
3. Knows typical genre of different visual media (e.g., in television: sitcoms, talk shows, news broadcasts, interviews, children's programs; in film: westerns, musicals, horror, gangster)	
4. Understands the use of stereotypes and biases in visual media (e.g., distorted representations of society; imagery and stereotyping in advertising; elements of stereotypes such as physical characteristics, manner of speech, beliefs and attitudes)	
5. Understands how language choice is used to enhance visual media (e.g., language of particular television or film genres, the use of emotional or logical arguments in commercials)	

6. Understands how symbols, images, sound, and other conventions are used in visual media (e.g., time lapse in films; set elements that identify a particular time period or culture; short cuts used to construct meaning, such as the scream of brakes and a thud to imply a car crash; sound and image used together; the use of close-ups to convey drama or intimacy; the use of long camera shots to establish setting; sequences or groups of images that emphasize specific meaning)	
7. Understands reasons for varied interpretations of visual media (e.g., different purposes or circumstances while viewing, influence of personal knowledge and experiences, focusing on different stylistic features)	
8. Knows that people with special interests and expectations are the target audience for particular messages or products in visual media; and knows that design, language, and content reflect this (e.g., in advertising and sales techniques aimed specifically towards teenagers; in products aimed towards different classes, races, ages, genders; in the appeal of popular television shows and films for particular audiences)	
9. Understands techniques used in visual media to influence or appeal to a particular audience (e.g., production techniques, such as designing a news program as entertainment; persuasive techniques, such as exaggerated claims, portrayal of appealing lifestyles, bandwagon, glittering generalities; subliminal messages; narrative style)	FC
Media	
Standard 10: Understands the characteristics and components of the media	
Level I (Grade K-2)	STC Unit(s)
1. Knows the various types of media (e.g., newspapers, radio, television, billboards)	W (newspapers only)
2. Knows that there are different types of media categories (e.g., news programs, sports programs, commercials)	
3. Understands that there are common conventions used in media (e.g., the layout of a newspaper, including headlines, photographs, and different sections; how theme music, sound effects, titles, and graphics represent the beginning and ending of a television program)	S (extension and the layout of a newspaper only)
4. Understands that media messages and products are created by people (e.g., individuals and groups) and represent real and imaginary experience	Compatible with C (extension only)
Level II (Grade 3-5)	STC Unit(s)
1. Knows the main formats and characteristics of familiar media (e.g., the format of quiz shows on television: host/hostess, contestants, competition for prizes of commercial value; types of advertising such as billboards, T-shirts, or commercials; characteristics of films and magazines)	
2. Understands similarities and differences among a variety of media (e.g., ways in which documentary films, the Internet, and the radio present similar information; similar categories, such as news and feature stories in magazines, tabloid newspapers, and on television; literary elements in film and written stories)	
3. Knows that a variety of people are involved in the creation of media messages and products (e.g., actors, directors, cinematographers, producers, scriptwriters, graphic artists, illustrators, news photographers)	FC DD

4. Understands that media messages and products are composed of a series of separate elements (e.g., shots in movies, sections of a newspaper)	FC DD
Level III (Grade 6-8)	STC and/or STC/MS Unit(s)
1. Knows characteristics of a wide range of media (e.g., television news favors messages that are immediate and visual, news photographs favor messages with an emotional component)	
2. Understands the different purposes of various media (e.g., to provide entertainment or information, to persuade, to transmit culture, to focus attention on an issue)	
3. Understands how the type of media affects coverage of events or issues (e.g., how the same event is covered by the radio, television, and newspapers; how each medium shapes facts into a particular point of view; how limitations and advantages of various media affect coverage of events)	
4. Understands various elements that recur across media (e.g., common features found in print and broadcast advertising; the layout of magazines and newspapers, including headlines, photographs, regular columns, feature articles, and editorials)	CE
5. Understands aspects of media production and distribution (e.g., different steps and choices involved in planning and producing various media; various professionals who produce media, such as news writers, photographers, camera operators, film directors, graphic artists, political cartoonists)	
6. Understands the ways in which image-makers carefully construct meaning (e.g., idea and word choice by authors, images created by photographers, television programs created by groups of people, photos or cutlines chosen in newspapers)	
7. Understands influences on the construction of media messages and images (e.g., the historical period or place in which they were made; laws that govern mass media, such as truth in advertising; the socio-cultural background of the target audience; financial factors such as sponsorship; cause-and-effect relationships between mass media coverage and public opinion trends)	