



ORANGEBURG CONSOLIDATED SCHOOL DISTRICT FIVE



MIDDLE SCHOOL PARENT HANDBOOK

www.ocsd5.net

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Mission

Orangeburg Consolidated School District Five exists to ensure academic success for all students.

Vision

Working Together Building a World-Class School System



Beliefs

- ❖ Student learning in a safe environment is our primary focus
- ❖ Embracing change creates an environment for growth
- ❖ Proficient use of technology is essential to success in a global society
- ❖ Building positive character is essential
- ❖ We support the development of professional learning communities



Goals

GOAL 1: INCREASE STUDENT LEARNING

By the 2015-2016 school year, OCSD5 will meet performance standards yearly on local, state and national tests while closing the achievement gap.

Strategies:

- Train and implement structured Response to Intervention model to assist students who are experiencing learning or behavior issues.
- Train and implement a comprehensive literacy and numeracy/mathematics program in grades pre-k through 12.
- Create a College-Bound Culture for all students by preparing them to make college and career choices after graduation.
- Increase student enrollment in Pre-Advanced and Advanced Placement courses and participation in AP exams; develop monitoring processes to compare enrollment projections with actual campus enrollment.
- Explore Early Childhood Education opportunities to include establishing tuition-based, space-available programs for four-year-old students who currently do not attend our programs.
- Hire and recruit campus teaching and learning coaches to model research-based instructional approaches and collaborate with all teachers to implement approaches that best meet student needs and monitor the student progress.
- Create, train and implement the teaching and learning framework.
- Develop a plan for implementation of the Common Core Standards.
- Implement an ongoing comprehensive PSAT and SAT preparation program for middle school students to increase the number of Duke TIP.
- Investigate the implementation of the IBO's primary years program and the middle years program.
- Investigate the implementation of the IB Career Certificate as an addition to the IB diploma program.

GOAL 2: IMPROVE RESOURCE MANAGEMENT

The district will base all financial decisions on an annual zero based budget protocol to ensure they are matched with district goals.

Strategies:

- Build easily accessible and accurate data systems for district wide use in academic and business departments.
- Initiate an annual zero based budget protocol to allow opportunities to review financial resources that are matched with district goals that have been identified in the Five-Year Strategic Plan.
- Establish a process to monitor, evaluate and communicate changes in the district wide budget; forecast if changes occur in state or national funding.
- Prioritize spending goals across the district and align them with student learning goals.
- Research, select, and implement a district-wide data management system.
- Initiate an annual zero-based budget protocol to allow opportunities to review financial resources that are matched with district goals that have been identified in the Five-Year Strategic Plan.
- Establish procedures to monitor, evaluate, predict, and communicate changes in the district-wide budget due to changes in state and national funding.
- Prioritize spending goals across the district and align them with student learning goals.
- Provide comprehensive management training.

GOAL 3: IMPROVE HUMAN CAPITAL

The district will focus on retaining, training, and developing the best personnel at all levels by utilizing a yearly evaluation system, as well as recruiting highly-qualified personnel according to national, state, and district guidelines.

Strategies:

- Strengthen teacher recruiting, selection, and staffing policies to attract and retain highly-qualified and highly-effective educators.
- Build leadership capacity in administrators and other staff members across the district.
- Establish accountability measures for all employees based on established goals and objectives as outlined in the job description.
- Evaluate all employees based on accountability measures contained in their respective job descriptions.

GOAL 4: INCREASE ENGAGEMENT

By the school year 2015-2016, the district will increase opportunities that promote stakeholder involvement and engagement each year.

Strategies:

- Set aside specific times each month to include meetings with teachers, support staff, students, parents, community, civic, church, political, and business leaders to discuss issues relevant to the district.
- Develop methods to increase mentoring and tutoring opportunities for community members.
- Create opportunities between various school-district partners, such as Chamber of Commerce, elected officials, higher education leaders, clergy and business partners to engage all entities in the success of the Orangeburg Consolidated Five school system.
- Prepare and distribute a weekly newsletter from the Superintendent to board members and a monthly newsletter to the community that summarizes district activities for the past week and includes a calendar of activities for the following week.
- Increase District visibility and engagement at community and school sponsored events.
- Use various media sources as a means publicizing District/student accomplishments and upcoming events.
- Utilize OCSD5 website and local county channels to televise school and District events.

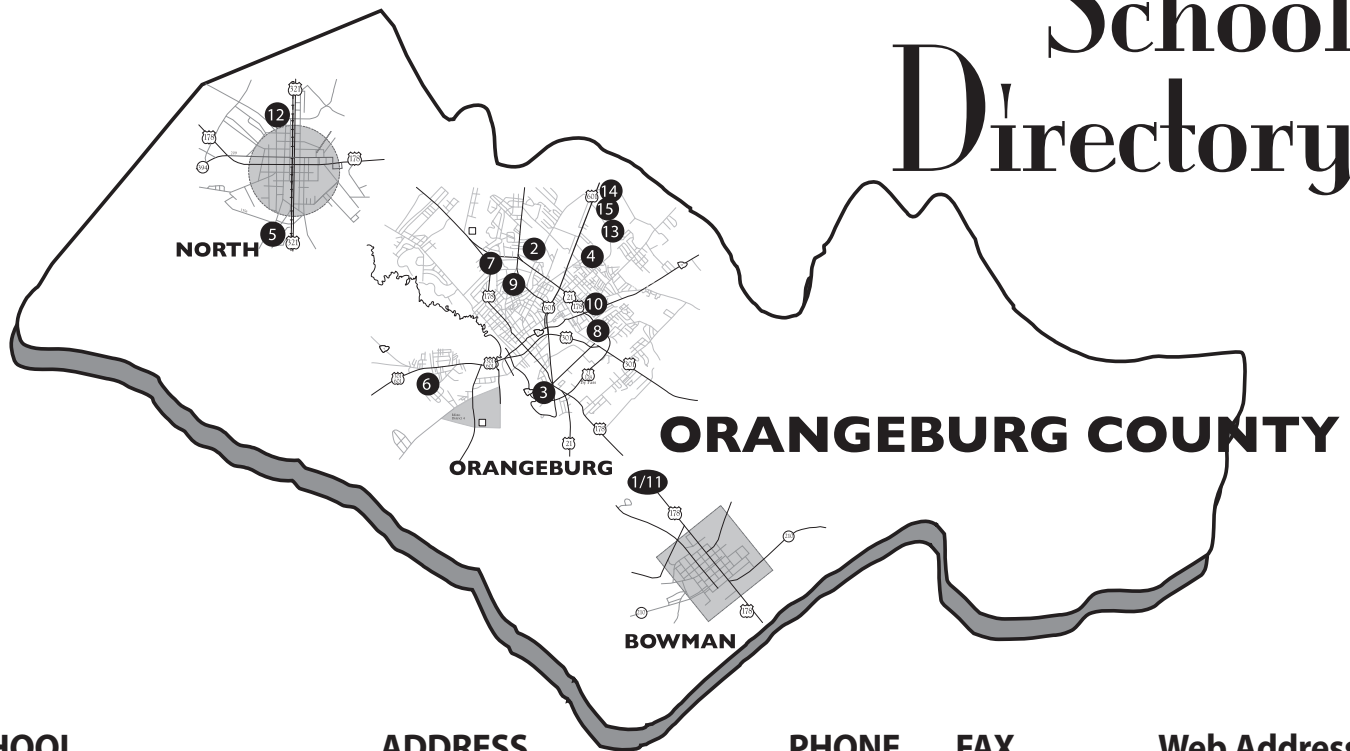
GOAL 5: SAFETY ABOVE ALL ELSE

By the year 2016, all stakeholders will be satisfied with the safety and security of the school climate in OCSD5 as measured by national, state, and local data in the areas of learning environment, home-school relations, social, and physical environment.

Strategies:

- Review and revise the Crisis Management Manual (the red book) for schools and facilities based on district and county emergency preparedness procedures.
- Provide training for all district personnel on the national, state, county and district emergency preparedness plans.
- Review, evaluate, upgrade and install security monitoring systems at all district facilities ensuring that the public is aware of these measures.
- Develop, adopt, implement, and publicize to all stakeholders a Zero Tolerance policy for all individuals who threaten the safety and security of our schools.
- Review, evaluate, update, adopt and publicize to all stakeholders a Code of Student conduct to guide our uniform collective response to student behavioral issues.
- Hold a community awareness session to garner feedback on the proposed new code of conduct prior to adopting.
- Train school-based staff in Crisis Prevention Institute (CPI) or other behavioral intervention models to respond to student behavioral issues.
- Continue to work with local law enforcement entities to collaborate on procedures that will assist in providing a safe and secure environment for students, employees and the community at large.

School Directory



SCHOOL

Elementary Schools

1. Bethune-Bowman Elementary School
2. Brookdale Elementary School
3. Dover Elementary School
4. Marshall Elementary School
5. Mellichamp Elementary School
6. Rivelon Elementary School
7. Sheridan Elementary School
8. Whittaker Elementary School

Middle Schools

9. William J. Clark Middle School
10. Robert E. Howard Middle School

High Schools

11. Bethune-Bowman Middle/High School
12. North Middle/High School
13. Orangeburg-Wilkinson High School
14. The Technology Center
15. Nelson C. Nix Center of Excellence
16. High School for Health Professions

ADDRESS

4857 Charleston Highway
Rowesville, SC 29133

394 Brookdale Drive
Orangeburg, SC 29115

1411 Bedford Avenue
North, SC 29112

1441 Marshall Avenue
Orangeburg, SC 29118

350 Murray Road
Orangeburg, SC 29115

350 Thomas B. Eklund Circle
Orangeburg, SC 29115

1139 Hillsboro Road
Orangeburg, SC 29115

790 Whittaker Parkway
Orangeburg, SC 29115

919 Bennett Avenue
Orangeburg, SC 29118

1255 Belleville Road
Orangeburg, SC 29115

4857 Charleston Highway
Rowesville, SC 29133

692 Cromer Avenue
North, SC 29112

601 Bruin Parkway
Orangeburg, SC 29115

3720 Magnolia Street
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3720 Magnolia Street
Orangeburg, SC 29115

3720 Magnolia Street
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247-5010

535-1645

533-6492

533-6540

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Web Address

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English

TO SPEAKERS OF OTHER
LANGUAGES (ESOL)



LISTENING (L)

Standard L1: The student will comprehend instructions given orally in English.

INDICATORS

- L1.1 Follow one-step directions.
- L1.2 Follow two-step directions.
- L1.3 Follow multiple-step directions.

Standard L2: The student will comprehend essential elements of oral discourse in such forms as speeches, conversations, and texts read aloud in English.

INDICATORS

- L2.1 Comprehend words, phrases, and simple sentences.
- L2.2 Recognize and understand the main idea, purpose, or theme.
- L2.3 Recognize and understand important supporting ideas and details.
- L2.4 Identify the setting and the various characters who appear.
- L2.5 Understand the figurative language and idiomatic expressions used.

Standard L3: The student will determine the attitude and/or perspective of a speaker who is using the English language.

INDICATORS

- L3.1 Distinguish between fact and opinion.
- L3.2 Identify the speaker's point of view, motivation, tone, stance, or position with regard to an issue.
- L3.3 Draw inferences and conclusions and make predictions.

SPEAKING (S)

Standard S1: The student will establish conversational connections that express concrete information clearly in English.

INDICATORS

- S1.1 Give simple and multiple-step directions.
- S1.2 Provide personal information.
- S1.3 Ask and answer simple questions.
- S1.4 Use common social idioms, basic greetings, and standard repetitive phrases.

Standard S2: The student will participate in a conversation in English by making clear, logical, and detailed responses.

INDICATORS

- S2.1 Identify people, places, objects, and basic concepts (e.g., numbers, days of the week, foods, occupations, time).
- S2.2 Recount personal experiences and tell stories as oral responses to conversational cues.
- S2.3 Summarize information and paraphrase the conversations of others.
- S2.4 Use figurative language and idiomatic expressions.

Standard S3: The student will expand oral information logically and clearly in English.

INDICATORS

- S3.1 Explain the elements of a conversation or a presentation by summarizing or paraphrasing it.
- S3.2 Explain ideas and convey information in both temporal (i.e., sequencing) and spatial order (i.e., positional words).
- S3.3 Clarify and support or refute ideas by using details, examples, and other means of elaboration.

Standard S4: The student will correctly and effectively convey his or her attitude and/or perspective in English in conversations and other forms of oral communication.

INDICATORS

- S4.1 Express and establish his or her point of view by using clear and precise language.
- S4.2 Defend his or her point of view by using forms of evidence such as specific details and concrete examples.
- S4.3 Defend his or her point of view by making valid and appropriate appeals to the listener's reason and emotions.

READING (R)

Standard R1: The student will demonstrate pre-/early English reading skills.

INDICATORS

- R1.1 Identify high-frequency words, including irregular verbs such as said, was, and is and irregular plural nouns such as mice and geese.
- R1.2 Identify frequently used compound words and contractions.
- R1.3 Identify relationships between words by using onsets and rimes (word families).
- R1.4 Comprehend simple phrases and sentences.
- R1.5 Use word clues such as the relationships between words, syntax, morphology, and cognates to decipher the meaning of unfamiliar words in phrases and sentences.

Standard R2: The student will understand key words and phrases in English.

INDICATORS

- R2.1 Understand that words can have multiple meanings, both denotative and connotative.
- R2.2 Use an understanding of key words and phrases to derive the meaning of simple passages.
- R2.3 Use one or more strategies to determine the meanings of unfamiliar words and phrases (e.g., background or prior knowledge; contextual clues and illustrations; knowledge of morphology, syntax, phonics, word relationships; knowledge of synonyms, antonyms, homophones, homographs, cognates, and false cognates).

Standard R3: The student will comprehend instructions written in English.

INDICATORS

- R3.1 Follow one-step instructions.
- R3.2 Follow two-step instructions.
- R3.3 Follow multiple-step instructions.

Standard R4: The student will determine the major elements of a text written in English.

INDICATORS

- R4.1 Identify the central theme or problem.
- R4.2 Identify the author's main purpose.
- R4.3 Identify the main characters and the nature of their conflicts.
- R4.4 Identify the setting.

Standard R5: The student will recognize important details in texts written in English.

INDICATORS

- R5.1 Identify important supporting ideas and themes.
- R5.2 Understand the meaning of information conveyed through various graphic sources (e.g., diagrams, charts, tables, simple illustrations).

Standard R6: The student will understand the content and the methodology used in texts written in English.

INDICATORS

- R6.1 Draw inferences and conclusions and make predictions about main ideas, characters, and setting.
- R6.2 Understand the relationship between cause and effect.
- R6.3 Understand the use of compare/contrast strategies.
- R6.4 Understand the chronological ordering of ideas and information.

Standard R7: The student will determine the attitude or perspective of the author and/or the characters in a text written in English.

INDICATORS

- R7.1 Distinguish between fact and opinion in texts.
- R7.2 Identify the author's point of view, motivation, tone, stance, or position with regard to an issue.
- R7.3 Analyze the characters to determine their motivations, intentions, prejudices, and general outlook; the changes in opinion and behavior they undergo; and the nature of their interactions with the other characters.

Standard R8: The student will analyze various writing styles and forms in English texts.

INDICATORS

- R8.1 Identify analogies (e.g., metaphors), symbols, patterns such as rhyming and repetition, and other rhetorical devices.
- R8.2 Apply an understanding of the structure of English

sentences to derive meaning from a text.

- R8.3 Understand a variety of forms of writing such as personal and fictional narratives and persuasive, descriptive, and expository compositions.

WRITING (W)

Standard W1: The student will demonstrate pre-/early English writing skills.

INDICATORS

- W1.1 Identify a relationship between oral and/or visual communication and written words.
- W1.2 Use correct letter formation.
- W1.3 Use word boundaries and directionality.
- W1.4 Use high frequency words and functional vocabulary in labeling graphics and in forming phrases and sentences that express concrete as well as abstract information.

Standard W2: The student will use graphic organizers or outlines to plan, organize, and develop his or her writing in English.

INDICATORS

- W2.1 Use graphic organizers or outlines to decide on appropriate content and titles for his or her compositions.
- W2.2 Use graphic organizers or outlines to organize information logically.
- W2.3 Use graphic organizers or outlines to write appropriate topic sentences for paragraphs on the basis of the particular subject.
- W2.4 Use graphic organizers or outlines to determine the validity and appropriateness of particular details.

Standard W3: The student will write English compositions in a variety of forms.

INDICATORS

- W3.1 Write personal or fictional narratives that trace a sequence of events and contain details about character and setting.
- W3.2 Write persuasive and expository compositions that establish the validity of a thesis through the development of logical supporting points and concrete details.
- W3.3 Write descriptive compositions that express ideas with enough clarity and detail to give the reader a clear impression of the object, person, or place described.

Standard W4: The student will revise his or her writing as well as that of others for logic, consistency, and clarity.

INDICATORS

- W4.1 Revise drafts to improve coherence and the logical progression of ideas by rewriting and sharpening the focus of the topic and/or concluding sentences of key paragraphs.
- W4.2 Revise drafts to improve coherence and the logical progression of ideas by adding appropriate transition words and phrases.
- W4.3 Revise drafts for appropriate word choice.
- W4.4 Revise drafts to achieve a consistency of style, tone, and point of view that is appropriate for the particular topic as well as the intended audience.
- W4.5 Revise drafts to include a variety of sentence types as appropriate.

Standard W5: The student will correct the grammar and mechanics of his or her writing as well as that of others.

INDICATORS

- W5.1 Recognize and correct word errors such as the misuse of the parts of speech (e.g., a noun incorrectly used as a verb), the inappropriate use of capitalization, and the misuse of the apostrophe.
- W5.2 Recognize and correct grammatical and structural problems such as subject-verb and pronoun-antecedent agreement errors, pronoun case errors, and dangling and misplaced modifiers.
- W5.3 Recognize and correct punctuation errors such as run-on sentences, comma splices, and misuse of quotation marks and the hyphen.

COMMON CORE STATE STANDARDS

READING / LANGUAGE ARTS
GRADES 6-8



INTRODUCTION

On June 2, 2010, the National Governors Association Center for Best Practices (NGA Center) and the Council of Chief State School Officers (CCSSO) released a set of state-led education standards, called the Common Core State Standards. 48 states, 2 territories and the District of Columbia have adopted these national standards. The state of South Carolina adopted the Common Core State Standards in July 2010.

The Common Core State Standards were written for English-language arts and mathematics for grades K-12. The Common Core State Standards provide a consistent, clear understanding of what students are expected to learn, so teachers and parents have a roadmap for what they need to do to help them. The purpose of the standards is to create college and career ready students.

Most people are under the misunderstanding that the Common Core State Standards Initiative is driven by federal legislation. This initiative is a state-led effort that is not part of No Child Left Behind and adoption of the Standards is in no way mandatory. States began the work to create clear, consistent standards before the Recovery Act or the Elementary and Secondary Education Act blueprint was released because this work is being driven by the needs of the states, not the federal government.

Timeline for the common core standards

2010 - 2011 – Adoption of Common Core State Standards

2011 - 2012 – Professional Development on the Common Core

2012 - 2013 – Transition Year

2013 - 2014 – State Test will be comprised of the standards that are common to our state standards and the Common Core Standards

2014 - 2015 – Common Core State Standards Assessment

GRADE 6

READING STANDARDS FOR LITERATURE

Key Ideas and Details

1. Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
2. Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.
3. Describe how a particular story's or drama's plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution.

Craft and Structure

4. Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone.
5. Analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a text and contributes to the development of the theme, setting, or plot.
6. Explain how an author develops the point of view of the narrator or speaker in a text.

Integration of Knowledge and Ideas

7. Compare and contrast the experience of reading a story, drama, or poem to listening to or viewing an audio, video, or live version of the text, including contrasting what they "see" and "hear" when reading the text to what they perceive when they listen or watch.
8. (Not applicable to literature)
9. Compare and contrast texts in different forms or genres (e.g., stories and poems; historical novels and fantasy stories) in terms of their approaches to similar themes and topics.

Range of Reading and Level of Text Complexity

10. By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.

READING STANDARDS: INFORMATIONAL TEXT

Key Ideas and Details

1. Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
2. Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.
3. Analyze in detail how a key individual, event, or idea is introduced, illustrated, and elaborated in a text (e.g., through examples or anecdotes).

Craft and Structure

4. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.
5. Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas.
6. Determine an author's point of view or purpose in a text and explain how it is conveyed in the text.

Integration of Knowledge and Ideas

7. Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.
8. Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not.
9. Compare and contrast one author's presentation of events with that of another (e.g., a memoir written by and a biography on the same person).

Range of Reading and Level of Text Complexity

10. By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.

WRITING STANDARDS

Text Types and Purposes

1. Write arguments to support claims with clear reasons and relevant evidence.
 - a. Introduce claim(s) and organize the reasons and evidence clearly.

- b. Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text.
- c. Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons.
- d. Establish and maintain a formal style.
- e. Provide a concluding statement or section that follows from the argument presented.

2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
 - a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.
 - b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.
 - c. Use appropriate transitions to clarify the relationships among ideas and concepts.
 - d. Use precise language and domain-specific vocabulary to inform about or explain the topic.
 - e. Establish and maintain a formal style.
 - f. Provide a concluding statement or section that follows from the information or explanation presented.
3. Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.
 - a. Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically.
 - b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters.
 - c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another.
 - d. Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events.
 - e. Provide a conclusion that follows from the narrated experiences or events.

Production and Distribution of Writing

4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
5. With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach. (Editing for conventions should demonstrate command of Language standards 1–3 up to and including grade 6.)
6. Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of three pages in a single sitting.

Research to Build and Present Knowledge

7. Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.
8. Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.
9. Draw evidence from literary or informational texts to support analysis, reflection, and research.
 - a. Apply grade 6 Reading standards to literature (e.g., "Compare and contrast texts in different forms or genres [e.g., stories and poems; historical novels and fantasy stories] in terms of their approaches to similar themes and topics").
 - b. Apply grade 6 Reading standards to literary nonfiction (e.g., "Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not").

Range of Writing

10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or

two) for a range of discipline-specific tasks, purposes, and audiences.

SPEAKING AND LISTENING STANDARDS

Comprehension and Collaboration

1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.
 - a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.
 - b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed.
 - c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.
 - d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.
2. Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.
3. Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.

Presentation of Knowledge and Ideas

4. Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.
5. Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.
6. Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade 6 Language standards 1 and 3 for specific expectations.)

LANGUAGE STANDARDS

Conventions of Standard English

1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
 - a. Ensure that pronouns are in the proper case (subjective, objective, possessive).
 - b. Use intensive pronouns (e.g., myself, ourselves).
 - c. Recognize and correct inappropriate shifts in pronoun number and person.*
 - d. Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).*
 - e. Recognize variations from standard English in their own and others' writing and speaking, and identify and use strategies to improve expression in conventional language.*
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
 - a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.*
 - b. Spell correctly.

Knowledge of Language

3. Use knowledge of language and its conventions when writing, speaking, reading, or listening.
 - a. Vary sentence patterns for meaning, reader/ listener interest, and style.*
 - b. Maintain consistency in style and tone.*

Vocabulary Acquisition and Use

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies.
 - a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.
 - b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., audience, auditory, audible).
 - c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.

d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).

5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
 - a. Interpret figures of speech (e.g., personification) in context.
 - b. Use the relationship between particular words (e.g., cause/effect, part/whole, item/category) to better understand each of the words.
 - c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., stingy, scrimping, economical, unwasteful, thrifty).
6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

GRADE 7

READING STANDARDS FOR LITERATURE

Key Ideas and Details

1. Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
2. Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text.
3. Analyze how particular elements of a story or drama interact (e.g., how setting shapes the characters or plot).

Craft and Structure

4. Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of rhymes and other repetitions of sounds (e.g., alliteration) on a specific verse or stanza of a poem or section of a story or drama.
5. Analyze how a drama's or poem's form or structure (e.g., soliloquy, sonnet) contributes to its meaning.
6. Analyze how an author develops and contrasts the points of view of different characters or narrators in a text.

Integration of Knowledge and Ideas

7. Compare and contrast a written story, drama, or poem to its audio, filmed, staged, or multimedia version, analyzing the effects of techniques unique to each medium (e.g., lighting, sound, color, or camera focus and angles in a film).
8. (Not applicable to literature)
9. Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history.

Range of Reading and Level of Text Complexity

10. By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.

READING STANDARDS: INFORMATIONAL TEXT

Key Ideas and Details

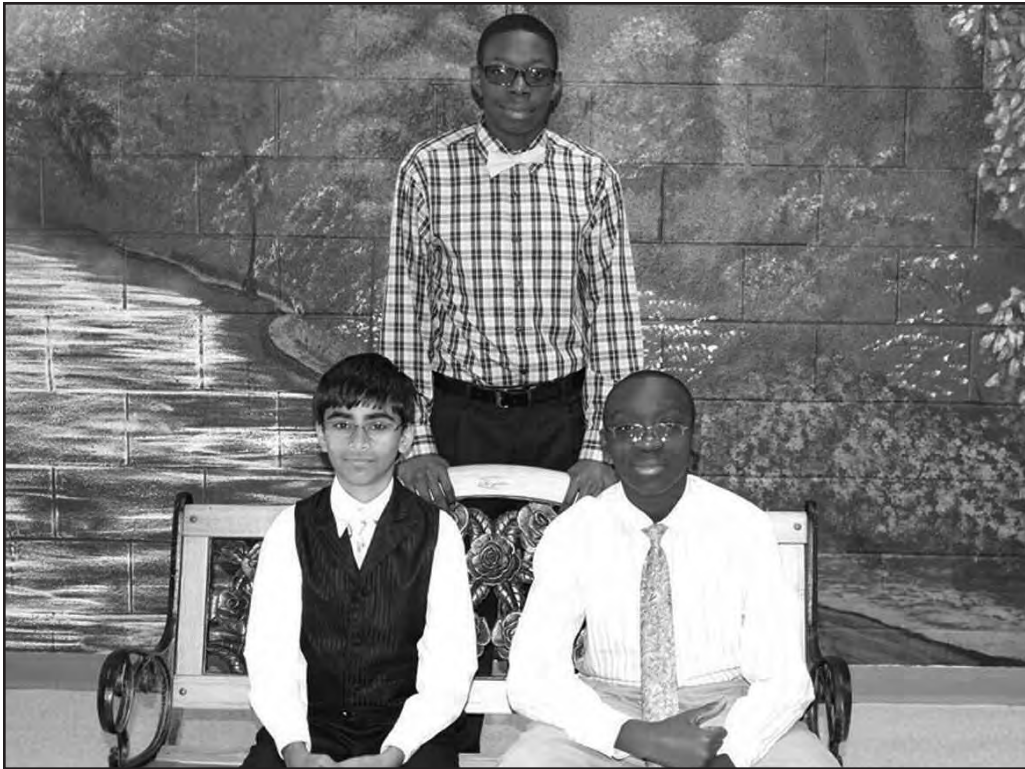
1. Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
2. Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text.
3. Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).

Craft and Structure

4. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone.
5. Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to the development of the ideas.
6. Determine an author's point of view or purpose in a text and analyze how the author distinguishes his or her position from that of others.

Integration of Knowledge and Ideas

7. Compare and contrast a text to an audio, video, or multimedia version of the text, analyzing each medium's portrayal of the subject (e.g., how the delivery of a speech affects the impact of the words).
8. Trace and evaluate the argument and specific claims in a text, assess-



structured event sequences.

a. Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically.

b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters.

c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another.

d. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events.

e. Provide a conclusion that follows from and reflects on the narrated experiences or events.

Production and Distribution of Writing

4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)

5. With some guidance and support from peers and adults, develop and

ing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims.

9. Analyze how two or more authors writing about the same topic shape their presentations of key information by emphasizing different evidence or advancing different interpretations of facts.

Range of Reading and Level of Text Complexity

10. By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.

WRITING STANDARDS

Text Types and Purposes

1. Write arguments to support claims with clear reasons and relevant evidence.
 - a. Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically.
 - b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.
 - c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence.
 - d. Establish and maintain a formal style.
 - e. Provide a concluding statement or section that follows from and supports the argument presented.
2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
 - a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/ effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.
 - b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.
 - c. Use appropriate transitions to create cohesion and clarify the relationships among ideas and concepts.
 - d. Use precise language and domain-specific vocabulary to inform about or explain the topic.
 - e. Establish and maintain a formal style.
 - f. Provide a concluding statement or section that follows from and supports the information or explanation presented.
3. Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-

strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. (Editing for conventions should demonstrate command of Language standards 1–3 up to and including grade 7.)

6. Use technology, including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.

Research to Build and Present Knowledge

7. Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.
8. Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
9. Draw evidence from literary or informational texts to support analysis, reflection, and research.
 - a. Apply grade 7 Reading standards to literature (e.g., “Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history”).
 - b. Apply grade 7 Reading standards to literary nonfiction (e.g. “Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims”).

Range of Writing

10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

SPEAKING AND LISTENING STANDARDS

Comprehension and Collaboration

1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 7 topics, texts, and issues, building on others’ ideas and expressing their own clearly.
 - a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.
 - b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed.

- c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.
 - d. Acknowledge new information expressed by others and, when warranted, modify their own views.
2. Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.
 3. Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.

Presentation of Knowledge and Ideas

4. Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.
5. Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.
6. Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade 7 Language standards 1 and 3 for specific expectations.)

LANGUAGE STANDARDS

Conventions of Standard English

1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
 - a. Explain the function of phrases and clauses in general and their function in specific sentences.
 - b. Choose among simple, compound, complex, and compound-complex sentences to signal differing relationships among ideas.
 - c. Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.*
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
 - a. Use a comma to separate coordinate adjectives (e.g., It was a fascinating, enjoyable movie but not He wore an old[,] green shirt).
 - b. Spell correctly.

Knowledge of Language

3. Use knowledge of language and its conventions when writing, speaking, reading, or listening.
 - a. Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.*

Vocabulary Acquisition and Use

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7 reading and content, choosing flexibly from a range of strategies.
 - a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.
 - b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., belligerent, bellicose, rebel).
 - c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.
 - d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).
5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.

- a. Interpret figures of speech (e.g., literary, biblical, and mythological allusions) in context.
 - b. Use the relationship between particular words (e.g., synonym/-antonym, analogy) to better understand each of the words.
 - c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., refined, respectful, polite, diplomatic, condescending).
6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

GRADE 8

READING STANDARDS FOR LITERATURE

Key Ideas and Details

1. Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.
2. Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text.
3. Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision.

Craft and Structure

4. Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.
5. Compare and contrast the structure of two or more texts and analyze how the differing structure of each text contributes to its meaning and style.
6. Analyze how differences in the points of view of the characters and the audience or reader (e.g., created through the use of dramatic



irony) create such effects as suspense or humor.

Integration of Knowledge and Ideas

7. Analyze the extent to which a filmed or live production of a story or drama stays faithful to or departs from the text or script, evaluating the choices made by the director or actors.
8. (Not applicable to literature)
9. Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new.

Range of Reading and Level of Text Complexity

10. By the end of the year, read and comprehend literature, including stories, dramas, and poems, at the high end of grades 6–8 text complexity band independently and proficiently.

READING STANDARDS: INFORMATIONAL TEXT

Key Ideas and Details

1. Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.
2. Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.
3. Analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories).

Craft and Structure

4. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.
5. Analyze in detail the structure of a specific paragraph in a text, including the role of particular sentences in developing and refining a key concept.
6. Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.

Integration of Knowledge and Ideas

7. Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea.
8. Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.
9. Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation.

Range of Reading and Level of Text Complexity

10. By the end of the year, read and comprehend literary nonfiction at the high end of the grades 6–8 text complexity band independently and proficiently.

WRITING STANDARDS

Text Types and Purposes

1. Write arguments to support claims with clear reasons and relevant evidence.
 - a. Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.
 - b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.
 - c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.
 - d. Establish and maintain a formal style.
 - e. Provide a concluding statement or section that follows from and supports the argument presented.
2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
 - a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories; include formatting (e.g., headings), graphics (e.g., charts, tables), and

multimedia when useful to aiding comprehension.

- b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.
 - c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.
 - d. Use precise language and domain-specific vocabulary to inform about or explain the topic.
 - e. Establish and maintain a formal style.
 - f. Provide a concluding statement or section that follows from and supports the information or explanation presented.
3. Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.
 - a. Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically.
 - b. Use narrative techniques, such as dialogue, pacing, description, and reflection, to develop experiences, events, and/or characters.
 - c. Use a variety of transition words, phrases, and clauses to convey sequence, signal shifts from one time frame or setting to another, and show the relationships among experiences and events.
 - d. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events.
 - e. Provide a conclusion that follows from and reflects on the narrated experiences or events.

Production and Distribution of Writing

4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
5. With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. (Editing for conventions should demonstrate command of Language standards 1–3 up to and including grade 8.)
6. Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.

Research to Build and Present Knowledge

7. Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
8. Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
9. Draw evidence from literary or informational texts to support analysis, reflection, and research.

- a. Apply grade 8 Reading standards to literature (e.g., “Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new”).
- b. Apply grade 8 Reading standards to literary nonfiction (e.g., “Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced”).

Range of Writing

10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

SPEAKING AND LISTENING STANDARDS

Comprehension and Collaboration

1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.
 - a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evi-

dence on the topic, text, or issue to probe and reflect on ideas under discussion.

- b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.
 - c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas.
 - d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.
2. Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.
 3. Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.

Presentation of Knowledge and Ideas

4. Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.
5. Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.
6. Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade 8 Language standards 1 and 3 for specific expectations.)

LANGUAGE STANDARDS

Conventions of Standard English

1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
 - a. Explain the function of verbals (gerunds, participles, infinitives) in general and their function in particular sentences.
 - b. Form and use verbs in the active and passive voice.
 - c. Form and use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood.
 - d. Recognize and correct inappropriate shifts in verb voice and mood.*
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
 - a. Use punctuation (comma, ellipsis, dash) to indicate a pause or break.

b. Use an ellipsis to indicate an omission.

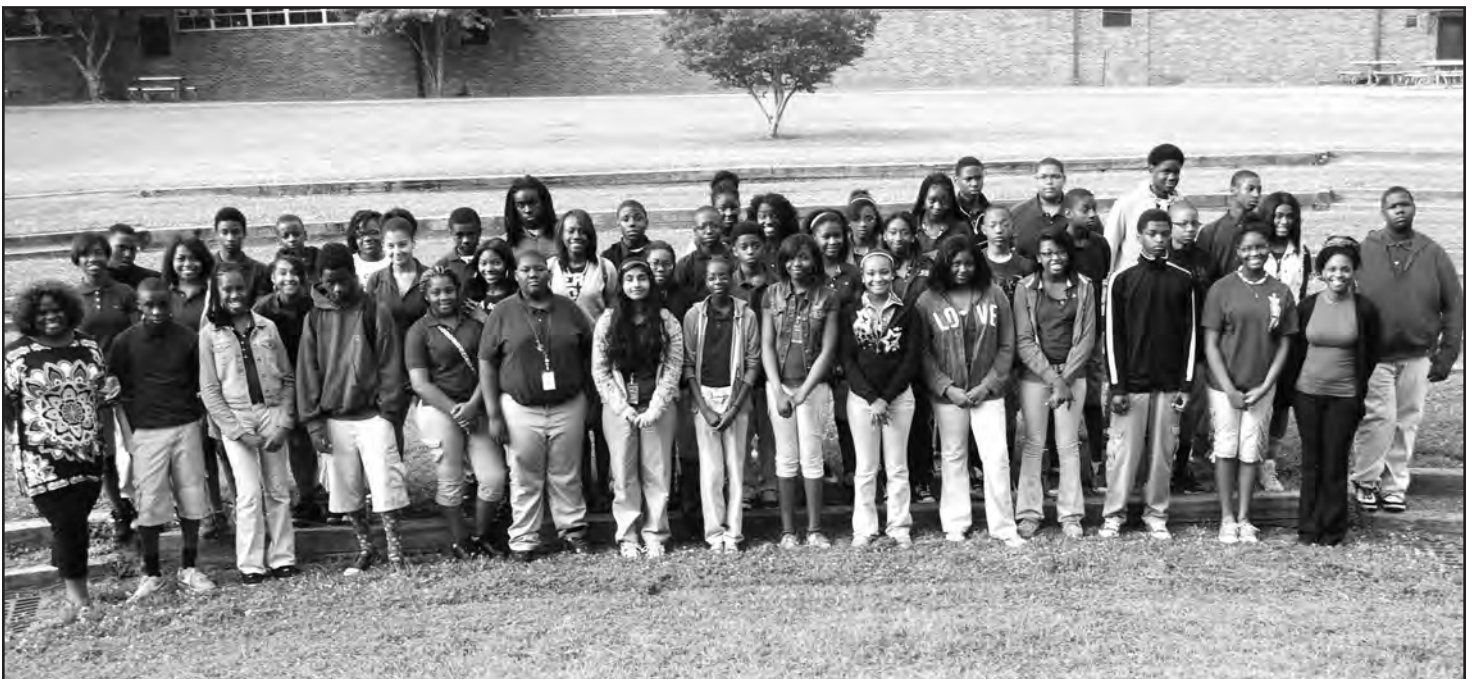
c. Spell correctly.

Knowledge of Language

3. Use knowledge of language and its conventions when writing, speaking, reading, or listening.
 - a. Use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact).

Vocabulary Acquisition and Use

4. Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on grade 8 reading and content, choosing flexibly from a range of strategies.
 - a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.
 - b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., precede, recede, secede).
 - c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.
 - d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).
5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
 - a. Interpret figures of speech (e.g. verbal irony, puns) in context.
 - b. Use the relationship between particular words to better understand each of the words.
 - c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., bullheaded, willful, firm, persistent, resolute).
6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.



COMMON CORE STATE STANDARDS

MATHEMATICS GRADES 6-8



SIXTH GRADE

MATHEMATICAL PRACTICES

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

STANDARDS

Ratios and Proportional Relationships

Understand ratio concepts and use ratio reasoning to solve problems.

- 6.RP.1: Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. For example, "The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak." "For every vote candidate A received, candidate C received nearly three votes."
- 6.RP.2: Understand the concept of a unit rate a/b associated with a ratio $a:b$ with $b \neq 0$, and use rate language in the context of a ratio relationship. For example, "This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is $3/4$ cup of flour for each cup of sugar." "We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger." (Note: Expectations for unit rates in this grade are limited to non-complex fractions.)
- 6.RP.3: Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.
- a. Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.
 - b. Solve unit rate problems including those involving unit pricing and constant speed. For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?
 - c. Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means $30/100$ times the quantity); solve problems involving finding the whole, given a part and the percent.
 - d. Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.

The Number System

Apply and extend previous understandings of multiplication and division to divide fractions by fractions.

- 6.NS.1: Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. For example, create a story context for $(2/3) \div (3/4)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $(2/3) \div (3/4) = 8/9$ because $3/4$ of $8/9$ is $2/3$. (In general, $(a/b) \div (c/d) = ad/bc$.) How much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $3/4$ -cup servings are in $2/3$ of a cup of yogurt? How wide is a rectangular strip of land with length $3/4$ mi and area $1/2$ square mi? Compute fluently with multi-digit numbers and find common factors and multiples.
- 6.NS.2: Fluently divide multi-digit numbers using the standard algorithm.
- 6.NS.3: Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.
- 6.NS.4: Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. For example, express $36 + 8$ as $4(9 + 2)$.

Apply and extend previous understandings of numbers to the system of rational numbers.

- 6.NS.5: Understand that positive and negative numbers are used together to describe quantities having opposite directions or

values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.

- 6.NS.6: Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.
- Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., $-(-3) = 3$, and that 0 is its own opposite.
 - Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.
 - Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.
- 6.NS.7: Understand ordering and absolute value of rational numbers.
- Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. *For example, interpret $-3 > -7$ as a statement that -3 is located to the right of -7 on a number line oriented from left to right.*
 - Write, interpret, and explain statements of order for rational numbers in real-world contexts. *For example, write $-3^{\circ}\text{C} > -7^{\circ}\text{C}$ to express the fact that -3°C is warmer than -7°C .*
 - Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. *For example, for an account balance of -30 dollars, write $|-30| = 30$ to describe the size of the debt in dollars.*
 - Distinguish comparisons of absolute value from statements about order. *For example, recognize that an account balance less than -30 dollars represents a debt greater than 30 dollars.*
- 6.NS.8: Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.

Expressions and Equations

Apply and extend previous understandings of arithmetic to algebraic expressions.

- 6.EE.1: Write and evaluate numerical expressions involving whole-number exponents.
- 6.EE.2: Write, read, and evaluate expressions in which letters stand for numbers.
- Write expressions that record operations with numbers and with letters standing for numbers. *For example, express the calculation "Subtract y from 5" as $5 - y$.*
 - Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. *For example, describe the expression $2(8 + 7)$ as a product of two factors; view $(8 + 7)$ as both a single entity and a sum of two terms.*
 - Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). *For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = 1/2$.*
- 6.EE.3: Apply the properties of operations to generate equivalent expressions. *For example, apply the distributive property to the expression $3(2 + x)$ to produce the equivalent expression $6 + 3x$; apply the distributive property to the expression $24x + 18y$ to produce the equivalent expression $6(4x + 3y)$; apply properties of operations to $y + y + y$ to produce the equivalent expression $3y$.*
- 6.EE.4: Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). *For example, the expressions $y + y + y$ and*

$3y$ are equivalent because they name the same number regardless of which number y stands for.

Reason about and solve one-variable equations and inequalities.

- 6.EE.5: Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.
- 6.EE.6: Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, a number in a specified set.
- 6.EE.7: Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p , q and x are all nonnegative rational numbers.
- 6.EE.8: Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.

Represent and analyze quantitative relationships between dependent and independent variables.

- 6.EE.9: Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. *For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.*

Geometry

Solve real-world and mathematical problems involving area, surface area, and volume.

- 6.G.1: Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.
- 6.G.2: Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = lwh$ and $V = bh$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.
- 6.G.3: Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.
- 6.G.4: Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.

Statistics and Probability.

Develop understanding of statistical variability.

- 6.SP.1: Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. *For example, "How old am I?" is not a statistical question, but "How old are the students in my school?" is a statistical question because one anticipates variability in students' ages.*
- 6.SP.2: Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.
- 6.SP.3: Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.

Summarize and describe distributions.

- 6.SP.4: Display numerical data in plots on a number line, including dot plots, histograms, and box plots.
- 6.SP.5: Summarize numerical data sets in relations to their context, such as by:
- Reporting the number of observations.
 - Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.
 - Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.
 - Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.

SEVENTH GRADE MATHEMATICAL PRACTICES

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

STANDARDS

Ratios and Proportional Relationships

Analyze proportional relationships and use them to solve real-world and mathematical problems.

- 7.RP.1: Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. *For example, if a person walks $\frac{1}{2}$ mile in each $\frac{1}{4}$ hour, compute the unit rate as the complex fraction $(\frac{1}{2})/(\frac{1}{4})$ miles per hour, equivalently 2 miles per hour.*
- 7.RP.2: Recognize and represent proportional relationships between quantities.
- Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.
 - Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.
 - Represent proportional relationships by equations. For example, if total cost t is proportional to the number n of items purchased at a constant price p , the relationship between the total cost and the number of items can be expressed as $t = pn$.
 - Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate.
- 7.RP.3: Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.

The Number System

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

- 7.NS.1: Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.
- Describe situations in which opposite quantities combine to make 0. *For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.*
 - Understand $p + q$ as the number located a distance $|q|$ from p , in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational

numbers by describing real-world contexts.

c. Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.

d. Apply properties of operations as strategies to add and subtract rational numbers.

- 7.NS.2: Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.
- Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts.
 - Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then $- (p/q) = (-p)/q = p/(-q)$. Interpret quotients of rational numbers by describing real-world contexts.
 - Apply properties of operations as strategies to multiply and divide rational numbers.
 - Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.
- 7.NS.3: Solve real-world and mathematical problems involving the four operations with rational numbers. (NOTE: Computations with rational numbers extend the rules for manipulating fractions to complex fractions.)

Expressions and Equations

Use properties of operations to generate equivalent expressions.

- 7.EE.1: Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.
- 7.33.2: Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. *For example, $a + 0.05a = 1.05a$ means that "increase by 5%" is the same as "multiply by 1.05."*

Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

- 7.EE.3: Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. *For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional $\frac{1}{10}$ of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar $9\frac{3}{4}$ inches long in the center of a door that is $27\frac{1}{2}$ inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.*
- 7.EE.4: Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.
- Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p , q , and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. *For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?*
 - Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p , q , and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. *For example: As a salesperson, you are paid \$50 per week plus \$3 per sale. This week you want your pay to be at least \$100. Write an inequality for the number of sales you need to make, and describe the solutions.*

Geometry

Draw, construct, and describe geometrical figures and describe the relationships between them.

- 7.G.1: Solve problems involving scale drawings of geometric figures,

including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.

7.G.2: Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.

7.G.3: Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.

Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.

7.G.4: Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.

7.G.5: Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.

7.G.6: Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.

Statistics and Probability

Use random sampling to draw inferences about a population.

7.SP.1: Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.

7.SP.2: Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to

gauge the variation in estimates or predictions. For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.

Draw informal comparative inferences about two populations.

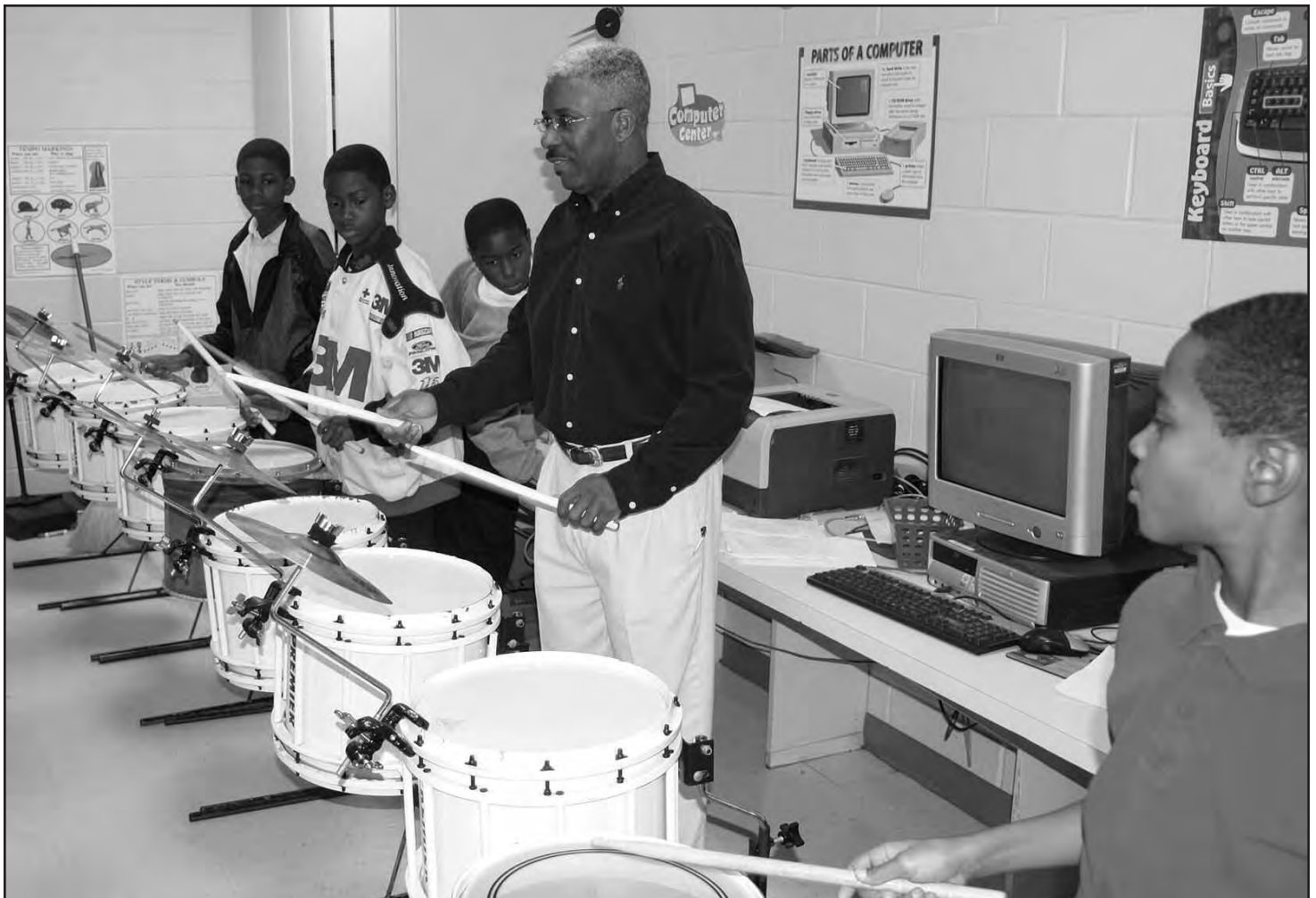
7.SP.3: Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. *For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.*

7.SP.4: Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. *For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.*

Investigate chance processes and develop, use, and evaluate probability models.

7.SP.5: Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.

7.SP.6: Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. *For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.*



- 7.SP.7: Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.
- Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. *For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.*
 - Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. *For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?*
- 7.SP.8: Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.
- Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs.
 - Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., “rolling double sixes”), identify the outcomes in the sample space which compose the event.
 - Design and use a simulation to generate frequencies for compound events. *For example, use random digits as a simulation tool to approximate the answer to the question: If 40% of donors have type A blood, what is the probability that it will take at least 4 donors to find one with type A blood?*

EIGHTH GRADE

MATHEMATICAL PRACTICES

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

STANDARDS

The Number System

Know that there are numbers that are not rational, and approximate them by rational numbers.

- 8.NS.1: Understand informally that every number has a decimal expansion; the rational numbers are those with decimal expansions that terminate in 0s or eventually repeat. Know that other numbers are called irrational.
- 8.NS.2: Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., π^2). *For example, by truncating the decimal expansion of $\sqrt{2}$, show that $\sqrt{2}$ is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations.*

Equations and Expressions

Work with radicals and integer exponents.

- 8.EE.1: Know and apply the properties of integer exponents to generate equivalent numerical expressions. *For example, $3^2 \times 3^{-5} = 3^{-3} = 1/3^3 = 1/27$.*
- 8.EE.2: Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational.
- 8.EE.3: Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. *For example, estimate the population of the United States*

as 3×10^8 and the population of the world as 7×10^9 , and determine that the world population is more than 20 times larger.

- 8.EE.4: Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology.

Understand the connections between proportional relationships, lines, and linear equations.

- 8.EE.5: Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. *For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.*
- 8.EE.6: Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b .

Analyze and solve linear equations and pairs of simultaneous linear equations.

- 8.EE.7: Solve linear equations in one variable.
- Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers).
 - Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.
- 8.EE.8: Analyze and solve pairs of simultaneous linear equations.
- Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.
 - Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. *For example, $3x + 2y = 5$ and $3x + 2y = 6$ have no solution because $3x + 2y$ cannot simultaneously be 5 and 6.*
 - Solve real-world and mathematical problems leading to two linear equations in two variables. *For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.*

Functions

Define, evaluate, and compare functions.

- 8.F.1: Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output. (Note: Function notation is not required in Grade 8.)
- 8.F.2: Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). *For example given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.*
- 8.F.3: Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. *For example, the function $A = s^2$ giving the area of a square as a function of its side length is not linear because its graph contains the points (1,1), (2,4) and (3,9), which are not on a straight line.*

Use functions to model relationships between quantities.

- 8.F.4: Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph.

Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.

- 8.F.5: Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.

Geometry

Understand congruence and similarity using physical models, transparencies, or geometry software.

- 8.G.1: Verify experimentally the properties of rotations, reflections, and translations:
- Lines are taken to lines, and line segments to line segments of the same length.
 - Angles are taken to angles of the same measure.
 - Parallel lines are taken to parallel lines.
- 8.G.2: Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.
- 8.G.3: Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.
- 8.G.4: Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.
- 8.G.5: Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. *For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.*

Understand and apply the Pythagorean Theorem.

- 8.G.6: Explain a proof of the Pythagorean Theorem and its converse.
- 8.G.7: Apply the Pythagorean Theorem to determine unknown side

lengths in right triangles in real-world and mathematical problems in two and three dimensions.

- 8.G.8: Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.

Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.

- 8.G.9: Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.

Statistics and Probability

Investigate patterns of association in bivariate data.

- 8.SP.1: Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.
- 8.SP.2: Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.
- 8.SP.3: Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. *For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.*
- 8.SP.4: Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. *For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?*



Curriculum Standards

SCIENCE GRADES 6-8



GRADE 6

SCIENTIFIC INQUIRY

The skills of scientific inquiry, including a knowledge of the use of tools, will be assessed cumulatively on statewide tests. Students will therefore be responsible for the scientific inquiry indicators from all of their earlier grade levels.

Standard 6-1: The student will demonstrate an understanding of technological design and scientific inquiry, including process skills, mathematical thinking, controlled investigative design and analysis, and problem solving.

Indicators

- 6-1.1 Use appropriate tools and instruments (including a spring scale, beam balance, barometer, and sling psychrometer) safely and accurately when conducting a controlled scientific investigation.
- 6-1.2 Differentiate between observation and inference during the analysis and interpretation of data.
- 6-1.3 Classify organisms, objects, and materials according to their physical characteristics by using a dichotomous key.
- 6-1.4 Use a technological design process to plan and produce a solution to a problem or a product (including identifying a problem, designing a solution or a product, implementing the design, and evaluating the solution or the product).
- 6-1.5 Use appropriate safety procedures when conducting investigations.

Structures, Processes, and Responses of Plants

Standard 6-2: The student will demonstrate an understanding of structures, processes, and responses of plants that allow them to survive and reproduce. (Life Science)

Indicators

- 6-2.1 Summarize the characteristics that all organisms share (including the obtainment and use of resources for energy, the response to stimuli, the ability to reproduce, and process of physical growth and development).
- 6-2.2 Recognize the hierarchical structure of the classification (taxonomy) of organisms (including the seven major levels or categories of living things—namely, kingdom, phylum, class, order, family, genus, and species).
- 6-2.3 Compare the characteristic structures of various groups of plants (including vascular or non-vascular, seed or spore-producing, flowering or cone-bearing, and monocot or dicot).
- 6-2.4 Summarize the basic functions of the structures of a flowering plant for defense, survival, and reproduction.
- 6-2.5 Summarize each process in the life cycle of flowering plants (including germination, plant development, fertilization, and seed production).
- 6-2.6 Differentiate between the processes of sexual and asexual reproduction of flowering plants.
- 6-2.7 Summarize the processes required for plant survival (including photosynthesis, respiration, and transpiration).
- 6-2.8 Explain how plants respond to external stimuli (including dormancy and the forms of tropism known as phototropism, gravitropism, hydrotropism, and thigmotropism).
- 6-2.9 Explain how disease-causing fungi can affect plants.

Structures, Processes, and Responses of Animals

Standard 6-3: The student will demonstrate an understanding of structures, processes, and responses of animals that allow them to survive and reproduce. Life Science)

Indicators

- 6-3.1 Compare the characteristic structures of invertebrate animals (including sponges, segmented worms, echinoderms, mollusks, and arthropods) and vertebrate animals (fish, amphibian, reptiles, birds, and mammals).
- 6-3.2 Summarize the basic functions of the structures of animals that allow them to defend themselves, to move, and to obtain resources.
- 6-3.3 Compare the response that a warm-blooded (endothermic) animal makes to a fluctuation in environmental temperature with the response that a cold-blooded (ectothermic) animal makes to such a fluctuation.
- 6-3.4 Explain how environmental stimuli cause physical responses in

- animals (including shedding, blinking, shivering, sweating, panting, and food gathering).
- 6-3.5 Illustrate animal behavioral responses (including hibernation, migration, defense, and courtship) to environmental stimuli.
- 6-3.6 Summarize how the internal stimuli (including hunger, thirst, and sleep) of animals ensure their survival.
- 6-3.7 Compare learned to inherited behaviors in animals.

Earth's Atmosphere and Weather

Standard 6-4: The student will demonstrate an understanding of the relationship between Earth's atmospheric properties and processes and its weather and climate. (Earth Science)

Indicators

- 6-4.1 Compare the composition and structure of Earth's atmospheric layers (including the gases and differences in temperature and pressure within the layers).
- 6-4.2 Summarize the interrelationships among the dynamic processes of the water cycle (including precipitation, evaporation, transpiration, condensation, surface-water flow, and groundwater flow).
- 6-4.3 Classify shapes and types of clouds according to elevation and their associated weather conditions and patterns.
- 6-4.4 Summarize the relationship of the movement of air masses, high and low pressure systems, and frontal boundaries to storms (including thunderstorms, hurricane, and tornadoes) and other weather conditions.
- 6-4.5 Use appropriate instruments and tools to collect weather data (including wind speed and direction, air temperature, humidity, and air pressure).
- 6-4.6 Predict weather conditions and patterns based on weather data collected from direct observations and measurements, weather maps, satellites, and radar.
- 6-4.7 Explain how solar energy affects Earth's atmosphere and surface (land and water).
- 6-4.8 Explain how convection affects weather patterns and climate.
- 6-4.9 Explain the influence of global winds and the jet stream on weather and climatic conditions.

Conservation of Energy

Standard 6-5: The student will demonstrate an understanding of the law of conservation of energy and the properties of energy and work. (Physical Science)

Indicators

- 6-5.1 Identify the sources and properties of heat, solar, chemical, mechanical, and electrical energy.
- 6-5.2 Explain how energy can be transformed from one form to another (including the two types of mechanical energy, potential and kinetic, as well as chemical and electrical energy) in accordance with the law of conservation of energy.
- 6-5.3 Explain how magnetism and electricity are interrelated by using descriptions, models, and diagrams of electromagnets, generators, and simple electrical motors.
- 6-5.4 Illustrate energy transformations (including the production of light, sound, heat, and mechanical motion) in electrical circuits.
- 6-5.5 Illustrate the directional transfer of heat energy through convection, radiation, and conduction.
- 6-5.6 Recognize that energy is the ability to do work (force exerted over a distance).
- 6-5.7 Explain how the design of simple machines (including levers, pulleys, and inclined planes) helps reduce the amount of force required to do work.
- 6-5.8 Illustrate ways that simple machines exist in common tools and in complex machines.

GRADE 7

SCIENTIFIC INQUIRY

The skills of scientific inquiry, including a knowledge of the use of tools, will be assessed cumulatively on statewide tests. Students will therefore be responsible for the scientific inquiry indicators from all of their earlier grade levels.

Standard 7-1: The student will demonstrate an understanding of technological design and scientific inquiry, including process skills, mathematical thinking, controlled investigative design and analysis, and

problem solving.

Indicators

- 7-1.1 Use appropriate tools and instruments (including a microscope) safely and accurately when conducting a controlled scientific investigation.
- 7-1.2 Generate questions that can be answered through scientific investigation.
- 7-1.3 Explain the reasons for testing one independent variable at a time in a controlled scientific investigation.
- 7-1.4 Explain the importance that repeated trials and a well-chosen sample size have with regard to the validity of a controlled scientific investigation.
- 7-1.5 Explain the relationships between independent and dependent variables in a controlled scientific investigation through the use of appropriate graphs, tables, and charts.
- 7-1.6 Critique a conclusion drawn from a scientific investigation.
- 7-1.7 Use appropriate safety procedures when conducting investigations.

Cells and Heredity

Standard 7-2: The student will demonstrate an understanding of the structure and function of cells, cellular reproduction, and heredity. (Life Science)

Indicators

- 7-2.1 Summarize the structures and functions of the major components of plant and animal cells (including the cell wall, the cell membrane, the nucleus, chloroplast, mitochondria, and vacuoles).
- 7-2.2 Compare the major components of plant and animal cells.
- 7-2.3 Compare the body shapes of bacteria (spiral, coccus, and bacillus) and the body structures that protist (euglena, paramecium, amoeba) use for food gathering and locomotion.
- 7-2.4 Explain how cellular processes (including respiration, photosynthesis in plants, mitosis, and waste elimination) are essential to the survival of the organism.
- 7-2.5 Summarize how genetic information is passed from parent to offspring by using the terms genes, chromosomes, inherited traits, genotype, phenotype, dominant traits, and recessive traits.
- 7-2.6 Use Punnett squares to predict inherited monohybrid traits.
- 7-2.7 Distinguish between inherited traits and those acquired from environmental factors.

Human Body Systems and Disease

Standard 7-3: The student will demonstrate an understanding of the functions and interconnections of the major human body systems, including the breakdown in structure or function that disease causes. (Life Science)

Indicators

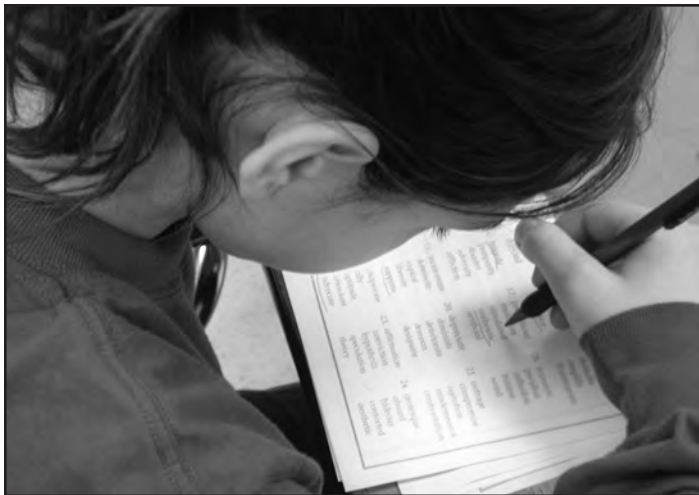
- 7-3.1 Summarize the levels of structural organization within the human body (including cells, tissues, organs, and systems).
- 7-3.2 Recall the major organs of the human body and their function within their particular body system.
- 7-3.3 Summarize the relationships of the major body systems (including the circulatory, respiratory, digestive, excretory, nervous, muscular, and skeletal systems).
- 7-3.4 Explain the effects of disease on the major organs and body systems (including infectious diseases such as colds and flu, AIDS, and athlete's foot and non-infectious diseases such as diabetes, Parkinson's, and skin cancer).

Ecology: The Biotic and Abiotic Environment

Standard 7-4: The student will demonstrate an understanding of how organisms interact with and respond to the biotic and abiotic components of their environment. (Earth Science, Life Science)

Indicators

- 7-4.1 Summarize the characteristics of the levels of organization within ecosystems (including populations, communities, habitats, niches, and biomes).
- 7-4.2 Illustrate energy flow in food chains, food webs, and energy pyramids.
- 7-4.3 Explain the interaction among changes in the environment due to natural hazards (including landslides, wildfires, and floods), changes in population, and limiting factors (including climate and



- the availability of food and water, space, and shelter).
- 7-4.4 Explain the effect of soil quality on the characteristics of an ecosystem.
 - 7-4.5 Summarize how the location and movement of water on Earth's surface through groundwater zones and surface-water drainage basins, called watersheds, are important to ecosystems and to human activities.
 - 7-4.6 Classify resources as renewable or non-renewable and explain the implications of their depletion and the importance of conservation.

The Chemical Nature of Matter

Standard 7-5: The student will demonstrate an understanding of the classifications and properties of matter and the changes that matter undergoes. (Physical Science)

Indicators

- 7-5.1 Recognize that matter is composed of extremely small particles called atoms.
- 7-5.2 Classify matter as element, compound, or mixture on the basis of its composition.
- 7-5.3 Compare the physical properties of metals and non-metal.
- 7-5.4 Use the periodic table to identify the basic organization of elements and groups of elements (including metals, non-metal, and families).
- 7-5.5 Translate chemical symbols and the chemical formulas of common substances to show the component parts of the substances (including NaCl [table salt], H₂O [water], C₆H₁₂O₆ [simple sugar], O₂ [oxygen gas], CO₂ [carbon dioxide], and N₂ [nitrogen gas]).
- 7-5. Distinguish between acids and bases and use indicators (including litmus paper, pH paper, and phenolphthalein) to determine their relative pH.
- 7-5.7 Identify the reactants and products in chemical equations.
- 7-5.8 Explain how a balanced chemical equation supports the law of conservation of matter.
- 7-5.9 Compare physical properties of matter (including melting or boiling point, density, and color) to the chemical property of reactivity with a certain substance (including the ability to burn or to rust).
- 7-5.10 Compare physical changes (including changes in size, shape, and state) to chemical changes that are the result of chemical reactions (including changes in color or temperature and formation of a precipitate or gas).

GRADE 8 SCIENTIFIC INQUIRY

The skills of scientific inquiry, including a knowledge of the use of tools, will be assessed cumulatively on statewide tests. Students will therefore be responsible for the scientific inquiry indicators from all of their earlier grade levels.

Standard 8-1: The student will demonstrate an understanding of technological design and scientific inquiry, including process skills, mathematical thinking, controlled investigative design and analysis, and prob-

lem solving.

Indicators

- 8-1.1 Design a controlled scientific investigation.
- 8-1.2 Recognize the importance of a systematic process for safely and accurately conducting investigations.
- 8-1.3 Construct explanations and conclusion from interpretations of data obtained during a controlled scientific investigation.
- 8-1.4 Generate questions for further study on the basis of prior investigations.
- 8-1.5 Explain the importance of and requirements for replication of scientific investigations.
- 8-1.6 Use appropriate tools and instruments (including convex lenses, plane mirrors, color filters, prisms, and slinky springs) safely and accurately when conducting a controlled scientific investigation.
- 8-1.7 Use appropriate safety procedures when conducting investigations.

Earth's Biological History

Standard 8-2: The student will demonstrate an understanding of Earth's biological diversity over time. (Life Science, Earth Science)

Indicators

- 8-2.1 Explain how biological adaptations of populations enhance their survival in a particular environment.
- 8-2.2 Summarize how scientists study Earth's past environment and diverse life-forms by examining different types of fossils (including molds, casts, petrified fossils, preserved and carbonized remains of plants and animals, and trace fossils).
- 8-2.3 Explain how Earth's history has been influenced by catastrophes (including the impact of an asteroid or comet, climatic changes, and volcanic activity) that have affected the conditions on Earth and the diversity of its life-forms.
- 8-2.4 Recognize the relationship among the units-era, epoch, and period-into which the geologic time scale is divided.
- 8-2.5 Illustrate the vast diversity of life that has been present on Earth over time by using the geologic time scale.
- 8-2.6 Infer the relative age of rocks and fossils from index fossils and the ordering of the rock layers.
- 8-2.7 Summarize the factors, both natural and man-made, that can contribute to the extinction of a species.

Earth's Structure and Processes

Standard 8-3: The student will demonstrate an understanding of materials that determine the structure of Earth and the processes that have altered this structure. (Earth Science)

Indicators

- 8-3.1 Summarize the three layers of Earth-crust, mantle, and core-on the basis of relative position, density, and composition.
- 8-3.2 Explain how scientists use seismic waves-primary, secondary, and surface waves-and Earth's magnetic fields to determine the internal structure of Earth.
- 8-3.3 Infer an earthquake's epicenter from seismographic data.
- 8-3.4 Explain how igneous, metamorphic, and sedimentary rocks are interrelated in the rock cycle.
- 8-3.5 Summarize the importance of minerals, ores, and fossil fuels as Earth resources on the basis of their physical and chemical properties.
- 8-3.6 Explain how the theory of plate tectonics accounts for the motion of the lithospheric plates, the geologic activities at the plate boundaries, and the changes in land form areas over geologic time.
- 8-3.7 Illustrate the creation and changing of landforms that have occurred through geologic processes (including volcanic eruptions and mountain-building forces).
- 8-3.8 Explain how earthquakes result from forces inside Earth.
- 8-3.9 Identify and illustrate geologic features of South Carolina and other regions of the world through the use of imagery (including aerial photograph and satellite imagery) and topographic maps.

Astronomy: Earth and Space Systems

Standard 8-4: The student will demonstrate an understanding of the characteristics, structure, and predictable motions of celestial bodies. (Earth Science)

Indicators

- 8-4.1 Summarize the characteristics and movements of objects in the solar system (including planets, moons, asteroids, comets, and meteors).
- 8-4.2 Summarize the characteristics of the surface features of the Sun: photosphere, corona, sunspots, prominences, and solar flares.
- 8-4.3 Explain how the surface features of the Sun may affect Earth.
- 8-4.4 Explain the motions of Earth and the Moon and the effects of these motions as they orbit the Sun (including day, year, phases of the Moon, eclipses, and tides).
- 8-4.5 Explain how the tilt of Earth's axis affects the length of the day and the amount of heating on Earth's surface, thus causing the seasons of the year.
- 8-4.6 Explain how gravitational forces are influenced by mass and distance.
- 8-4.7 Explain the effects of gravity on tides and planetary orbits.
- 8-4.8 Explain the difference between mass and weight by using the concept of gravitational force.
- 8-4.9 Recall the Sun's position in the universe, the shapes and composition of galaxies, and the distance measurement unit (light year) needed to identify star and galaxy locations.
- 8-4.10 Compare the purposes of the tools and the technology that scientists use to study space (including various types of telescopes, satellites, space probes, and spectrosopes).

Forces and Motion

Standard 8-5: The student will demonstrate an understanding of the effects of forces on the motion of an object. (Physical Science)

Indicators

- 8-5.1 Use measurement and time-distance graphs to represent the motion of a object in terms of its position, direction, or speed.

- 8-5.2 Use the formula for average speed, $v = d/t$, to solve real-world problems.
- 8-5.3 Analyze the effects of forces (including gravity and friction) on the speed and direction of an object.
- 8-5.4 Predict how varying the amount of force or mass will affect the motion of an object.
- 8-5.5 Analyze the resulting effect of balanced and unbalanced forces on an object's motion in terms of magnitude and direction.
- 8-5.6 Summarize and illustrate the concept of inertia.

Waves

Standard 8-6: The student will demonstrate an understanding of the properties and behaviors of waves. (Physical Science)

Indicators

- 8-6.1 Recall that waves transmit energy but not matter.
- 8-6.2 Distinguish between mechanical and electromagnetic waves.
- 8-6.3 Summarize factors that influence the basic properties of waves (including frequency, amplitude, wavelength, and speed).
- 8-6.4 Summarize the behaviors of waves (including refraction, reflection, transmission, and absorption).
- 8-6.5 Explain hearing in terms of the relationship between sound waves and the ear.
- 8-6.6 Explain sight in terms of the relationship between the eye and the light waves emitted or reflected by an object.
- 8-6.7 Explain how the absorption and reflection of light waves by various materials result in the human perception of color.
- 8-6.8 Compare the wavelength and energy of waves in various parts of the electromagnetic spectrum (including visible light, infrared, and ultraviolet radiation).



S.C. SOCIAL STUDIES ACADEMIC STANDARDS

GRADES 6-8



GRADE 6

EARLY CULTURES TO 1600

Social studies in grade six develops and enhances the student's understanding of history through the study of people and events from earliest man to the era of European exploration. This course focuses on the significance of geography, economics, and government in the development of the human story, including the conflicts and accomplishments of the people and their roles in developing the social, economic, and political structures of the major civilizations.

Instruction should utilize the social studies literacy skills for the twenty-first century that are enunciated in chart format in Appendix A. These statements represent a continuum of tools, strategies, and perspectives that are necessary for the student's understanding of social studies material that is taught at each grade level. Beginning at kindergarten and progressing to graduation, each statement is a developmentally appropriate iteration of the same skill as it is being further honed at each grade band (K-3, 4-5, 6-8, and high school). While most of these skills can be utilized in the teaching of every standard, the most appropriate skills for each standard are repeated in a bulleted list at the bottom of the page for that particular standard.

EARLY CULTURES TO 1600

Standard 6-1: The student will demonstrate an understanding of the development of the cradles of civilization as people moved from a nomadic existence to a settled life.

Enduring Understanding

The first humans were nomads who continually traveled in search of food. As these hunter-gatherers developed better ways of doing things, they began to develop into the world's earliest civilizations. Civilized societies have established written languages, permanent structures, forms of government, dependence on agriculture, and specializations of labor. These societies have also developed customs such as formal religions and traditions in family structure, food, and clothing that have endured. To understand how early civilizations evolved, the student will utilize the knowledge and skills set forth in the following indicators:

Indicators

- 6-1.1 Explain the characteristics of hunter-gatherer groups and their relationship to the natural environment.
- 6-1.2 Explain the emergence of agriculture and its effect on early human communities, including the domestication of plants and animals, the impact of irrigation techniques, and subsequent food surpluses.
- 6-1.3 Compare the river valley civilizations of the Tigris and Euphrates (Mesopotamia), the Nile (Egypt), the Indus (India), and the Huang He (China), including the evolution of written language, government, trade systems, architecture, and forms of social order.
- 6-1.4 Explain the origins, fundamental beliefs, and spread of Eastern religions, including Hinduism (India), Judaism (Mesopotamia), Buddhism (India), and Confucianism and Taoism (China).

Standard 6-2: The student will demonstrate an understanding of life in ancient civilizations and their contributions to the modern world.

Enduring Understanding

The foundations of government, science, technology, and the arts are legacies of ancient civilizations. To understand that the contributions of these ancient civilizations have endured and are evident in our society today, the student will utilize the knowledge and skills set forth in the following indicators:

Indicators

- 6-2.1 Describe the development of ancient Greek **culture** (the Hellenic period), including the concept of citizenship and the early forms of **democracy** in Athens.
- 6-2.2 Analyze the role of Alexander the Great (Hellenistic period), Socrates, Plato, Archimedes, Aristotle, and others in the creation and spread of Greek governance, literature, philosophy, the arts, math, and science.
- 6-2.3 Describe the development of Roman civilization, including language, government, architecture, and engineering.
- 6-2.4 Describe the expansion and transition of the Roman government from **monarchy** to republic to empire, including the roles of Julius Caesar and Augustus Caesar (Octavius).
- 6-2.5 Explain the decline and collapse of the Roman Empire and the impact of the Byzantine Empire, including the Justinian Code and the preservation of ancient Greek and Roman learning,

- architecture, and government.
- 6-2.6 Compare the polytheistic belief systems of the Greeks and the Romans with the origins, foundational beliefs, and spread of Christianity.

Standard 6-3: The student will demonstrate an understanding of changing political, social, and economic **cultures** in Asia.

Enduring Understanding

Asian **cultures** were developing in ways both similar to and different from those in other parts of the world. The **cultures** of China, India, Japan, and the Middle East influenced each other's growth and development as well as that of the rest of the world. To understand the contributions of Asian societies that have endured and are evident in our society today, the student will utilize the knowledge and skills set forth in the following indicators:

Indicators

- 6-3.1 Summarize the major contributions of the Chinese civilization from the Qing dynasty through the Ming dynasty, including the golden age of art and literature, the invention of gunpowder and woodblock printing, and the rise of trade via the Silk Road.
- 6-3.2 Summarize the major contributions of the Japanese civilization, including the Japanese **feudal system**, the Shinto traditions, and works of art and literature.
- 6-3.3 Summarize the major contributions of India, including those of the Gupta dynasty in mathematics, literature, religion, and science.
- 6-3.4 Explain the origin and fundamental beliefs of Islam and the geographic and economic aspects of its expansion.

Standard 6-4: The student will demonstrate an understanding of the changing political, social, and economic **cultures** in Africa and the Americas.

Enduring Understanding

African and American **cultures** were developing independently in ways similar to and different from those in other parts of the world. These **cultures** also influenced the development of the rest of the world. To understand that the contributions of African and American **cultures** have endured and are evident in our society today, the student will utilize the knowledge and skills set forth in the following indicators:

Indicators

- 6-4.1 Compare the major contributions of the African civilizations of Ghana, Mali, and Songhai, including the impact of Islam on the **cultures** of these kingdoms.
- 6-4.2 Describe the influence of geography on trade in the African kingdoms, including the salt and gold trades.
- 6-4.3 Compare the contributions and the decline of the Maya, Aztec, and Inca civilizations in Central and South America, including their forms of government and their contributions in mathematics, astronomy, and architecture.
- 6-4.4 Explain the contributions, features, and rise and fall of the North American ancestors of the numerous Native American tribes, including the Adena, Hopewell, Pueblo, and Mississippian **cultures**.

Standard 6-5: The student will demonstrate an understanding of the Middle Ages and the emergence of **nation-states** in Europe.

Enduring Understanding

Political systems are made up of the people, practices, and institutions that use power to make and enforce decisions. Feudalism during the Middle Ages in Europe was a political and economic system in which control of land was the main source of power. To understand feudalism and its relationship to the development of the European **nation-states**, the student will utilize the knowledge and skills set forth in the following indicators:

Indicators

- 6-5.1 Explain feudalism and its relationship to the development of European monarchies and **nation-states**, including feudal relationships, the daily lives of peasants and serfs, and the economy under the manorial system.
- 6-5.2 Explain the effects of the Magna Carta on European society, its effect on the **feudal system**, and its contribution to the development of representative government in England.
- 6-5.3 Summarize the course of the **Crusades** and explain their effects on feudalism and their role in spreading Christianity.
- 6-5.4 Explain the role and influence of the Roman Catholic Church in medieval Europe.
- 6-5.5 Summarize the origins and impact of the bubonic plague (Black Death) on feudalism.

Standard 6-6: The student will demonstrate an understanding of the

impact of the Renaissance, the Reformation, and the Age of Exploration on Europe and the rest of the world.

Enduring Understanding

The Renaissance, the Reformation, and the Age of Exploration were times of great discovery and learning that affected the way individuals viewed themselves and the world around them. To understand the connections among the Renaissance, the Reformation, and the exploration of the world, the student will utilize the knowledge and skills set forth in the following indicators:

Indicators

- 6-6.1 Summarize the contributions of the Italian Renaissance, including the importance of Florence, the influence of humanism and the accomplishments of the Italians in art, music, literature, and architecture.
- 6-6.2 Identify key figures of the Renaissance and the Reformation and their contributions (e.g., Leonardo da Vinci, Michelangelo, Johannes Gutenberg, John Calvin, and Martin Luther).
- 6-6.3 Explain the causes, events, and points of contention and denominational affiliations (of nations) of the Reformation and the Catholic Reformation (Counter Reformation).
- 6-6.4 Compare the economic, political, and religious incentives of the various European countries to explore and settle new lands.
- 6-6.5 Identify the origin and destinations of the voyages of major European explorers.
- 6-6.6 Explain the effects of the exchange of plants, animals, diseases, and technology throughout Europe, Asia, Africa, and the Americas (known as the Columbian Exchange).

GRADE 7

CONTEMPORARY CULTURES: 1600 TO THE PRESENT

Social studies in the seventh grade is a course in contemporary **cultures** that continues from the examination of early **cultures** in grade six. In grade seven, students examine the history and geography of human societies from 1600 to the present. They learn about the growing interaction among these societies as well as the exchange of ideas, beliefs, technologies, and commodities among them. Students also address the continuing growth of the political and economic ideas that shaped the modern world. They study the concepts of reason and authority, the natural rights of human beings, the divine right of kings, experimentalism in science, the development of limited **government**, and the roots of modern-day tensions and issues.

CONTEMPORARY CULTURES: 1600 TO THE PRESENT

Standard 7-1: The student will demonstrate an understanding of the growth and impact of global trade on world civilizations after 1600.

Enduring Understanding

European expansion during the 1600s and 1700s was often driven by economic and technological forces. To understand the influence of these forces, the student will utilize the knowledge and skills set forth in the following indicators:

Indicators

- 7-1.1 Compare the colonial claims and the expansion of European powers through 1770.
- 7-1.2 Explain how technological and scientific advances contributed to the power of European nations.
- 7-1.3 Summarize the policy of **mercantilism** as a way of building a nation's wealth, including government policies to control trade.
- 7-1.4 Analyze the beginnings of **capitalism** and the ways that it was affected by **mercantilism**, the developing **market economy**, international trade, and the rise of the middle class.
- 7-1.5 Compare the differing ways that European nations developed political and economic influences, including trade and settlement patterns, on the continents of Asia, Africa, and the Americas.

Standard 7-2: The student will demonstrate an understanding of the concepts of **limited government** and **unlimited government** as they functioned in Europe in the seventeenth and eighteenth centuries.

Enduring Understanding

The relationship between citizens and their government is a fundamental component of political rule. To understand the role of **constitutions**, the characteristics of shared powers, the protection of individual rights, and the promotion of the common good by government, the student will utilize the knowledge and skills set forth in the following indicators:

Indicators

- 7-2.1 Analyze the characteristics of **limited government** and **unlimit-**



- ed government** that evolved in Europe in the 1600s and 1700s.
- 7-2.2 Explain how the scientific revolution challenged authority and influenced **Enlightenment** philosophers, including the importance of the use of reason, the challenges to the Catholic Church, and the contributions of Galileo and Sir Isaac Newton.
- 7-2.3 Analyze the **Enlightenment** ideas of John Locke, Jean-Jacques Rousseau, Montesquieu, and Voltaire that challenged **absolutism** and influenced the development of **limited government**.
- 7-2.4 Explain the effects of the English Civil War and the Glorious Revolution on the power of the **monarchy** in England and on limited government.
- 7-2.5 Explain how the **Enlightenment** influenced the American and French revolutions leading to the formation of limited forms of government, including the relationship between people and their government, the role of **constitutions**, the characteristics of shared powers, the protection of individual rights, and the promotion of the common good.

Standard 7-3: The student will demonstrate an understanding of independence movements that occurred throughout the world from 1770 through 1900.

Enduring Understanding

The global spread of democratic ideas and nationalist movements occurred during the nineteenth century. To understand the effects of nationalism, industrialism, and **imperialism**, the student will utilize the knowledge and skills set forth in the following indicators:

Indicators

- 7-3.1 Explain the causes, key events, and outcomes of the French Revolution, including the storming of the Bastille, the Reign of Terror, and Napoleon's rise to power.
- 7-3.2 Analyze the effects of the Napoleonic Wars on the development and spread of nationalism in Europe, including the Congress of Vienna, the revolutionary movements of 1830 and 1848, and the unification of Germany and Italy.
- 7-3.3 Explain how the Haitian, Mexican, and South American revolutions were influenced by **Enlightenment** ideas as well as by the spread of nationalism and the revolutionary movements in the United States and Europe.
- 7-3.4 Explain how the Industrial Revolution caused economic, cultural, and political changes around the world.
- 7-3.5 Analyze the ways that industrialization contributed to **imperialism** in India, Japan, China, and African regions, including the need for new markets and raw materials, the Open Door Policy, and the Berlin Conference of 1884.
- 7-3.6 Explain reactions to **imperialism** that resulted from growing nationalism, including the Zulu wars, the Sepoy Rebellion, the

Opium Wars, the Boxer Rebellion, and the Meiji Restoration.

- 7-3.7 Explain the causes and effects of the Spanish-American War as a reflection of American imperialist interests, including acquisitions, military occupations, and status as an emerging world power.

Standard 7-4: The student will demonstrate an understanding of the causes and effects of world conflicts in the first half of the twentieth century.

Enduring Understanding

The influence of both world wars and the worldwide Great Depression are still evident. To understand the effects these events had on the modern world, the student will utilize the knowledge and skills set forth in the following indicators:

Indicators

- 7-4.1 Explain the causes and course of World War I, including militarism, alliances, **imperialism**, nationalism, the assassination of Archduke Franz Ferdinand, the impact of Russia's withdrawal from, and the United States entry into the war.
- 7-4.2 Explain the outcomes of World War I, including the creation of President Woodrow Wilson's Fourteen Points, the Treaty of Versailles, the shifts in national borders, and the League of Nations.
- 7-4.3 Explain the causes and effects of the worldwide **depression** that took place in the 1930s, including the effects of the economic crash of 1929.
- 7-4.4 Compare the ideologies of **socialism**, **communism**, fascism, and Nazism and their influence on the rise of **totalitarian** governments after World War I in Italy, Germany, Japan, and the Soviet Union as a response to the worldwide **depression**.
- 7-4.5 Summarize the causes and course of World War II, including drives for empire, appeasement and **isolationism**, the invasion of Poland, the Battle of Britain, the invasion of the Soviet Union, the "Final Solution," the Lend-Lease program, Pearl Harbor, Stalingrad, the campaigns in North Africa and the Mediterranean, the D-Day invasion, the island-hopping campaigns, and the bombing of Hiroshima and Nagasaki.
- 7-4.6 Analyze the Holocaust and its impact on European society and Jewish culture, including Nazi policies to eliminate the Jews and other minorities, the Nuremberg trials, the Universal Declaration of Human Rights, the rise of nationalism in Southwest Asia (Middle East), the creation of the state of Israel, and the resultant conflicts in the region.

Standard 7-5: The student will demonstrate an understanding of international developments during the **Cold War** era.

Enduring Understanding

Events during the **Cold War** affected the world politically, socially, and economically. To understand the significance of the **Cold War**, the student will utilize the knowledge and skills set forth in the following indicators:

Indicators

- 7-5.1 Compare the political and economic ideologies of the United States and the Soviet Union during the **Cold War**.
- 7-5.2 Summarize the impact of the Truman Doctrine, the Marshall Plan, the North Atlantic Treaty Organization (NATO), the United Nations, and the Warsaw Pact on the course of the **Cold War**.
- 7-5.3 Explain the spread of **communism** in Eastern Europe, Asia, Africa, and Latin America, including the ideas of the satellite state **containment**, and the domino theory.
- 7-5.4 Analyze the political and technological competition between the Soviet Union and the United States for global influence, including the Korean Conflict, the Berlin Wall, the Vietnam War, the Cuban missile crisis, the "space race," and the threat of nuclear annihilation.
- 7-5.5 Analyze the events that contributed to the collapse of the Soviet Union and other communist governments in Europe, including the growth of resistance movements in Eastern Europe, the policies of Mikhail Gorbachev and Ronald Reagan, and the failures of communist economic systems.

Standard 7-6: The student will demonstrate an understanding of the significant political, economic, geographic, scientific, technological, and cultural changes as well as the advancements that have taken place throughout the world from the fall of the Berlin Wall in 1989 to the present day.

Enduring Understanding

Since the fall of the Soviet Union in 1991, the world's attention no longer focuses on the tension between superpowers. Although problems rooted in

the Middle East have captured the world's attention more consistently than the majority of current issues, other concerns have moved to the forefront as well. To understand the modern world, the student will utilize the knowledge and skills set forth in the following indicators:

Indicators

- 7-6.1 Summarize the political and social impact of the collapse/dissolution of the Soviet Union and subsequent changes to European borders, including those of Russia and the Independent Republics, the Czech Republic, and Slovakia; the breakup of Yugoslavia; the reunification of Germany; and the birth of the European Union (EU).
- 7-6.2 Compare features of nationalist and independence movements in different regions in the post-World War II period, including Mohandas Gandhi's role in the non-violence movement for India's independence, the emergence of nationalist movements in African and Asian countries, and the collapse of the apartheid system in South Africa.
- 7-6.3 Explain the ongoing conflicts in the Middle East, including the Persian Gulf War, the terrorist attack on September 11, 2001, and the wars in Iraq and Afghanistan.
- 7-6.4 Compare the social, economic, and political opportunities for women in various nations and societies around the world, including those in developing and industrialized nations and within societies dominated by religions.
- 7-6.5 Explain the significance and impact of the information, technological, and communications revolutions, including the role of television, satellites, computers, and the Internet.
- 7-6.6 Summarize the dangers to the natural environment that are posed by population growth, urbanization, and industrialization, including global influences on the environment and the efforts by citizens and governments to protect the natural environment.

GRADE 8

SOUTH CAROLINA: ONE OF THE UNITED STATES

The focus for social studies in grade eight is the history of South Carolina and the role that the state and its people have played in the development of the United States as a nation. Students learn about the state's development during colonial times; the growth of the American ideal, which led to the break with England; and the rising controversy about slavery, which led to the Civil War. The continued study of South Carolina from Reconstruction to the present, including the struggle for social and economic justice waged by the people of South Carolina, further allows students to see the progress that the state has made and also to visualize the future challenges yet to be met and overcome.

SOUTH CAROLINA: ONE OF THE UNITED STATES

Standard 8-1: The student will demonstrate an understanding of the settlement of South Carolina and the United States by Native Americans, Europeans, and Africans.

Enduring Understanding

The human mosaic of the South Carolina colony was composed of indigenous, immigrant, and enslaved populations. To understand how these differing backgrounds melded into an entirely new and different **culture**, the student will utilize the knowledge and skills set forth in the following indicators:

Indicators

- 8-1.1 Summarize the collective and individual aspects of the Native American **culture** of the Eastern Woodlands tribal group, including the Catawba, Cherokee, and Yemassee.
- 8-1.2 Compare the motives, activities, and accomplishments of the exploration of South Carolina and North America by the Spanish, French, and English.
- 8-1.3 Summarize the history of English settlement in New England, the mid-Atlantic region, and the South, with an emphasis on South Carolina as an example of a distinctly southern colony.
- 8-1.4 Explain the significance of enslaved and free Africans in the developing **culture** and economy of the South and South Carolina, including the growth of the slave trade and resulting population imbalance between African and European settlers; African contributions to agricultural development; and resistance to slavery, including the Stono Rebellion and subsequent laws to control slaves.
- 8-1.5 Explain how South Carolinians used their natural, human, and

political resources uniquely to gain economic prosperity, including settlement by and trade with the people of Barbados, rice and indigo planting, and the practice of **mercantilism**.

- 8-1.6 Compare the development of representative government in South Carolina to representative government in the other colonial regions, including the proprietary regime, the period of royal government, and South Carolina's Regulator Movement.

Standard 8-2: The student will demonstrate an understanding of the causes of the American Revolution and the beginnings of the new nation, with an emphasis on South Carolina's role in the development of that nation.

Enduring Understanding

The events surrounding the American Revolution transformed British colonists into American citizens. To understand South Carolina's pivotal role in this process, the student will utilize the knowledge and skills set forth in the following indicators:

Indicators

- 8-2.1 Explain the political and economic consequences of the French and Indian War on the relationship of the South Carolina colonists with Native Americans and England.
- 8-2.2 Summarize the response of South Carolina to events leading to the American Revolution, including the Stamp Act, the Tea Acts, and the Sons of Liberty.
- 8-2.3 Explain the roles of South Carolinians in the adoption of the Declaration of Independence.
- 8-2.4 Compare the perspectives of different groups of South Carolinians during the American Revolution, including Patriots, Tories/Loyalists, women, enslaved and free Africans, and Native Americans.
- 8-2.5 Summarize the role of South Carolinians in the course of the American Revolution, including the use of partisan warfare and the battles of Charleston, Camden, Cowpens, Kings Mountain and Eutaw Springs.
- 8-2.6 Explain the role of South Carolinians in the establishment of their new state government and the national government after the American Revolution.

Standard 8-3: The student will demonstrate an understanding of South Carolina's role in the development of the new national government.

Enduring Understanding

Independence from Great Britain made the creation of a new national government and individual state governments imperative. To understand how and why these governments were created, the student will utilize the knowledge and skills set forth in the following indicators:

Indicators

- 8-3.1 Explain the tensions between the Upcountry and the Lowcountry of South Carolina, including their economic struggles after the



- 8-3.2 Explain the role of South Carolina and its leaders in the Constitutional Convention, including their support of the Three-Fifths Compromise and the Commerce Compromise as well as the division among South Carolinians over the ratification of the Constitution.
- 8-3.3 Explain the basic principles of government as established in the United States Constitution.
- 8-3.4 Analyze the position of South Carolina on the issues that divided the nation in the early 1800s, including the assumption of state debts, the creation of a national bank, the protective tariff and the role of the United States in the European conflict between France and England and in the War of 1812.

Standard 8-4: The student will demonstrate an understanding of the multiple events that led to the Civil War.

Enduring Understanding

The outbreak of the Civil War was the culminating event in a decades-long series of regional issues that threatened American unity and South Carolina's identity as one of the United States. To understand how South Carolina came to be at the center of this conflict, the student will utilize the knowledge and skills set forth in the following indicators:

Indicators

- 8-4.1 Explain the importance of agriculture in **antebellum** South Carolina, including the plantation system and the impact of the cotton gin on all social classes.
- 8-4.2 Analyze how **sectionalism** arose from racial tension, including the Denmark Vesey plot, slave codes and the growth of the abolitionist movement.
- 8-4.3 Analyze key issues that led to South Carolina's secession from the Union, including the nullification controversy and John C. Calhoun, the extension of slavery and the compromises over westward expansion, the Kansas-Nebraska Act, the Dred Scott decision, and the election of 1860.
- 8-4.4 Evaluate the arguments of unionists, cooperationists, and secessionists on the issues of states' rights and slavery and the ways that these arguments contributed to South Carolina's secession.
- 8-4.5 Compare the military strategies of the North and the South during the Civil War and the fulfillment of these strategies in South Carolina and in the South as a whole, including the attack on Fort Sumter, the Union blockade of Charleston and other ports, the early capture of Port Royal, and the development of the Hunley submarine; the exploits of Robert Smalls; and General William T. Sherman's march through the state.
- 8-4.6 Compare the differing impact of the Civil War on South Carolinians in each of the various social classes, including those groups defined by race, gender, and age.

Standard 8-5: The student will understand the impact of Reconstruction, industrialization, and Progressivism on society and politics in South Carolina in the late nineteenth and early twentieth centuries.

Enduring Understanding

During the periods of Reconstruction, industrial expansion, and the Progressive movement, South Carolina searched for ways to revitalize its economy while maintaining its traditional society. To understand South Carolina's experience as representative of its region and the United States as a whole during these periods, the student will utilize the knowledge and skills set forth in the following indicators:

Indicators

- 8.5.1 Analyze the development of Reconstruction policy and its impact in South Carolina, including the presidential and the congressional reconstruction plans, the role of **black codes**, and the Freedmen's Bureau.
- 8-5.2 Describe the economic impact of Reconstruction on South Carolinians in each of the various social classes.
- 8-5.3 Summarize the successes and failures of Reconstruction in South Carolina, including the creation of political, educational, and social opportunities for African Americans; the rise of discriminatory groups; and the withdrawal of federal protection.
- 8-5.4 Summarize the policies and actions of South Carolina's political leadership in implementing discriminatory laws that established a system of racial segregation, intimidation, and violence.

- 8-5.5 Compare industrial development in South Carolina to industrialization in the rest of the United States, including the expansion of railroads, the development of the phosphate and textile industries, and immigration.
- 8-5.6 Compare the plight of farmers in South Carolina with that of farmers throughout the United States, including the problems of overproduction, natural disasters, and sharecropping and encompassing the roles of Ben Tillman, the Populists, and land-grant colleges.
- 8-5.7 Compare migration patterns of South Carolinians to such patterns throughout the United States, including the movement from rural to urban areas and the migration of African Americans from the South to the North, Midwest, and West.
- 8-5.8 Compare the Progressive movement in South Carolina with the national Progressive movement, including the impact on temperance; women's **suffrage**; labor laws; and educational, agricultural, health, and governmental reform.

Standard 8-6: The student will demonstrate an understanding of the role of South Carolina in the nation in the early twentieth century.

Enduring Understanding

South Carolina's response to national crises during the first half of the twentieth century brought it back into full participation in the national experience. To understand the state's changed status, the student will utilize the knowledge and skills set forth in the following indicators:

Indicators

- 8-6.1 Explain the reasons for United States involvement in World War I and the war's impact on South Carolina and the nation as a whole, including the building of new military bases and the economic impact of emigration to industrial jobs in the North.
- 8-6.2 Explain the causes and effects of changes in South Carolina and the nation as a whole in the 1920s, including Prohibition, the destruction caused by the boll weevil, the rise of mass media, improvements in daily life, increases in tourism and recreation, the revival of the Ku Klux Klan, and the contributions of South Carolinians to the Harlem Renaissance and the Southern Literary Renaissance.
- 8-6.3 Explain the reasons for depressed conditions in the textile mills and on farms in South Carolina and other regions of the United States in the 1920s and the impact of these conditions on the coming of the Great Depression.
- 8-6.4 Explain the effects of the Great Depression and the lasting impact of the New Deal on people and programs in South Carolina, including James F. Byrnes and Mary McLeod Bethune, the Rural Electrification Act, the general textile strike of 1934, the Civilian Conservation Corps, the Works Progress Administration, the Public Works Administration, the Social Security Act, and the Santee Cooper electricity project.
- 8-6.5 Compare the ramifications of World War II on South Carolina and the United States as a whole, including the training of the Doolittle Raiders and the Tuskegee Airmen, the building of additional military bases, the rationing and bond drives, and the return of economic prosperity.

Standard 8-7: The student will demonstrate an understanding of the impact on South Carolina of significant events of the late twentieth and early twenty-first centuries.

Enduring Understanding

Changes that took place in the United States during the late twentieth and early twenty-first centuries revitalized the economy and challenged traditional society and politics in South Carolina. To understand the response of South Carolina to these challenges, the student will utilize the knowledge and skills set forth in the following indicators:

Indicators

- 8-7.1 Summarize the significant aspects of the economic growth experienced by South Carolina during and following World War II, including the contributions of Governor Strom Thurmond in promoting economic growth; the creation of the State Development Board and the technical education system; the benefits of good road systems, a sea port, and the Savannah River site; and the scarcity of labor unions. (H, E, G, P)
- 8-7.5 Explain the economic impact of twentieth century events on South Carolina, including the opening and closing of military bases, the development of industries, the influx of new citizens, and the expansion of port facilities. (E, H, P, G).

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