

LANGUAGE ARTS CONTENT STANDARDS FOR GRADE SEVEN

Reading

1. Word Analysis, Fluency, and Systematic Vocabulary Development

Students use their knowledge of word origins and word relationships, as well as historical and literary context clues, to determine the meaning of specialized vocabulary and to understand the precise meaning of grade-level-appropriate words.

2. Reading Comprehension (Focus on Informational Materials)

Students read and understand grade-level-appropriate material. They describe and connect the essential ideas, arguments, and perspectives of the text by using their knowledge of text structure, organization, and purpose. The selections in *Recommended Readings in Literature, Kindergarten Through Grade Eight* illustrate the quality and complexity of the materials to be read by students. In addition, by grade eight, students read one million words annually on their own, including a good representation of grade-level-appropriate narrative and expository text (e.g., classic and contemporary literature, magazines, newspapers, online information). In grade seven, students make substantial progress toward this goal.

3. Literary Response and Analysis

Students read and respond to historically or culturally significant works of literature that reflect and enhance their studies of history and social science. They clarify the ideas and connect them to other literary works. The selections in *Recommended Readings in Literature, Kindergarten Through Grade Eight* illustrate the quality and complexity of the materials to be read by students.

Writing

1. Writing Strategies

Students write clear, coherent, and focused essays. The writing exhibits students' awareness of the audience and purpose. Essays contain formal introductions, supporting evidence, and conclusions. Students progress through the stages of the writing process as needed.

2. Writing Applications (Genres and Their Characteristics)

Students write narrative, expository, persuasive, and descriptive texts in each genre. The writing demonstrates a command of standard American English and the research, organizational, and drafting strategies outlined in Writing Standard 1.0.

Written and Oral English Language Conventions

The standards for written and oral English language conventions have been placed between those for writing and for listening and speaking because these conventions are essential to both sets of skills.

1. Written and Oral English Language Conventions

Students write and speak with a command of standard English conventions appropriate to the grade level.

Listening and Speaking

1. Listening and Speaking Strategies

Deliver focused, coherent presentations that convey ideas clearly and relate to the background and interests of the audience. Students evaluate the content of oral communication.

2. Speaking Applications (Genres and Their Characteristics)

Students deliver well-organized formal presentations employing traditional rhetorical strategies (e.g., narration, exposition, persuasion, description). Student speaking demonstrates a command of standard American English and the organizational and delivery strategies outlined in Listening and Speaking Standard 1.0.

MATHEMATICS CONTENT STANDARDS FOR GRADE SEVEN

Number Sense

- Standard 1: Students know the properties of and compute with rational numbers expressed in a variety of forms.
- Standard 2: Students use exponents, powers, and roots and use exponents in working with fractions.

Algebra and Functions

- Standard 1: Students express quantitative relationships using algebraic terminology, expressions, equations, inequalities, and their graphs.
- Standard 2: Students interpret and evaluate expressions involving integer powers and simple roots.
- Standard 3: Students graph and interpret linear and some non-linear functions.
- Standard 4: Students solve simple linear equations and inequalities over the rational numbers.

Measurement and Geometry

- Standard 1: Students choose appropriate units of measure and use ratios to convert within and between measurement systems to solve problems.
- Standard 2: Students compute the perimeter, area, and volume of common geometric objects and use these to find measures of less common objects; they know how perimeter, area, and volume are affected under changes of scale.
- Standard 3: Students know the Pythagorean Theorem and deepen their understanding of plane and solid geometric shapes by constructing figures that meet given conditions and by identifying attributes of figures.

Statistics, Data Analysis, and Probability

- Standard 1: Students collect, organize, and represent data sets that have one or more variables and identify relationships among variables within a data set.

Mathematical Reasoning

- Standard 1: Students make decisions about how to approach problems.
- Standard 2: Students use strategies, skills, and concepts in finding solutions.
- Standard 3: Students determine a solution is complete and move beyond a particular problem by generalizing to other situations.

SCIENCE CONTENT STANDARDS FOR GRADE SEVEN

Focus on Life Science

Cell Biology

1. All living organisms are composed of cells, from just one to many trillions, whose details usually are visible only through a microscope.

Genetics

2. A typical cell of any organism contains genetic instructions that specify its traits. Those traits may be modified by environmental influences.

Evolution

3. Biological evolution accounts for the diversity of species developed through gradual processes over many generations.

Earth and Life History (Earth Science)

4. Evidence from rocks allows us to understand the evolution of life on Earth.

Structure and Function in Living Systems

5. The anatomy and physiology of plants and animals illustrate the complementary nature of structure and function.

Physical Principles in Living Systems (Physical Science)

6. Physical principles underlie biological structures and functions.

Investigation and Experimentation

7. Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations.

SOCIAL STUDIES CONTENT STANDARDS FOR GRADE SEVEN

World History and Geography: Medieval and Early Modern Times

Students in grade seven study the social, cultural, and technological changes that occurred in Europe, Africa, and Asia in the years A.D. 500–1789. After reviewing the ancient world and the ways in which archaeologists and historians uncover the past, students study the history and geography of great civilizations that were developing concurrently throughout the world during medieval and early modern times. They examine the growing economic interaction among civilizations as well as the exchange of ideas, beliefs, technologies, and commodities. They learn about the resulting growth of Enlightenment philosophy and the new examination of the concepts of reason and authority, the natural rights of human beings and the divine right of kings, experimentalism in science, and the dogma of belief. Finally, students assess the political forces let loose by the Enlightenment, particularly the rise of democratic ideas, and they learn about the continuing influence of these ideas in the world today.

1. Students analyze the causes and effects of the vast expansion and ultimate disintegration of the Roman Empire.
2. Students analyze the geographic, political, economic, religious, and social structures of the civilizations of Islam in the Middle Ages.
3. Students analyze the geographic, political, economic, religious, and social structures of the civilizations of China in the Middle Ages.
4. Students analyze the geographic, political, economic, religious, and social structures of the sub-Saharan civilizations of Ghana and Mali in Medieval Africa.
5. Students analyze the geographic, political, economic, religious, and social structures of the civilizations of Medieval Japan.
6. Students analyze the geographic, political, economic, religious, and social structures of the civilizations of Medieval Europe.
7. Students compare and contrast the geographic, political, economic, religious, and social structures of the Meso-American and Andean civilizations.
8. Students analyze the origins, accomplishments, and geographic diffusion of the Renaissance.
9. Students analyze the historical developments of the Reformation.
10. Students analyze the historical developments of the Scientific Revolution and its lasting effect on religious, political, and cultural institutions.
11. Students analyze political and economic change in the sixteenth, seventeenth, and eighteenth centuries (the Age of Exploration, the Enlightenment, and the Age of Reason).