



## Correlation of *Core Knowledge® Sequence* & Colorado Grade Level Expectations

Core Knowledge® Content (Language Arts-Grade 4)	Colorado Grade Level Expectations (Grade 4-Reading & Writing)
<b>I. Writing, Grammar, and Usage</b>	
<b>A. Writing and Research</b>	
▪	4.2.A generate topics and develop ideas for a variety of writing and speaking purposes (for example, telling a story, publishing a class newsletter, writing a letter to an adult, writing or orally presenting a book report, creating and producing a play, introducing a speaker or an event, narrating a presentation) 4.2.B organize their writing 4.2.C choose vocabulary that communicates their messages clearly and precisely 4.2.D revise and edit speech and writing 4.2.E create readable documents with legible handwriting or word processing at the appropriate time
▪	4.5.A use organizational features of printed texts (for example, page numbering, alphabetizing, glossaries, chapter heading, tables of contents, indexes, captions) 4.5.D take notes, outline, and identify main ideas in resource materials 4.5.E sort information as it relates to a specific topic or purpose 4.5.F give credit for borrowed information by telling or listing sources
▪	
<b>B. Grammar and Usage</b>	
▪	
▪	4.3.A know and use correct subject/verb agreement
▪	
▪	
▪	4.3.C know and use correct capitalization, punctuation, and abbreviations
▪	
▪	
▪	
<b>II. Poetry</b>	
<b>A. Poems</b>	
▪	4.1.A use a full range of strategies to comprehend a variety of texts, such as non-fiction, rhymes, poems, and stories (for example, skim and scan, self-monitor for understanding)
<b>B. Terms</b>	
▪	
<b>III. Fiction</b>	
<b>A. Stories</b>	
▪	4.1.A use a full range of strategies to comprehend a variety of texts, such as non-fiction, rhymes, poems, and stories (for example, skim and scan, self-monitor for understanding) 4.1.B identify supporting details and main ideas 4.1.C summarize long text passages 4.1.D draw inferences using contextual clues

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	<p>4.1.E set purpose for reading</p> <p>4.1.F use bold print, italics, titles, sub-titles, quotations, and underlined words to comprehend texts</p> <p>4.4.A recognize an author's point of view</p> <p>4.4.B predict and draw conclusions about stories</p> <p>4.4.C differentiate between fact and opinion in written and spoken forms</p> <p>4.6.A read, respond to, and discuss a variety of literature such as folk tales, legends, myths, fiction, rhymes and poems, non-fiction, and content-area reading</p> <p>4.6.B read, respond to, and discuss literature as a way to explore the similarities and differences among stories and the ways in which those stories reflect the ethnic background of the author and the culture in which they were written</p> <p>4.6.C recognize the concept of classic or enduring literature, and reading and listening to classic works</p> <p>4.6.E use new vocabulary from literature in other context</p>
<b>B. Myths and Mythical Characters</b>	
▪	<p>4.1.A use a full range of strategies to comprehend a variety of texts, such as non-fiction, rhymes, poems, and stories (for example, skim and scan, self-monitor for understanding)</p> <p>4.1.B identify supporting details and main ideas</p> <p>4.1.C summarize long text passages</p> <p>4.1.D draw inferences using contextual clues</p> <p>4.1.E set purpose for reading</p> <p>4.1.F use bold print, italics, titles, sub-titles, quotations, and underlined words to comprehend texts</p> <p>4.6.A read, respond to, and discuss a variety of literature such as folk tales, legends, myths, fiction, rhymes and poems, non-fiction, and content-area reading</p>
<b>C. Literary Terms</b>	
▪	4.6.D use literary terminology such as setting, plot, character, problem, and solution
<b>IV. Speeches</b>	
▪	4.1.A use a full range of strategies to comprehend a variety of texts, such as non-fiction, rhymes, poems, and stories (for example, skim and scan, self-monitor for understanding)
<b>V. Sayings and Phrases</b>	
<b>Grade level or other area Grade Level Expectations are covered in the <i>Core Knowledge Sequence</i></b>	<b>Grade Level Expectations not directly covered in the <i>Core Knowledge Sequence</i>, but can be covered in other areas</b>
This can be covered in many other areas	4.1.G identify sequential order in expository text
Grade 7: English: Grammar	4.3.B know and use correct modifiers
Grade 3: Language Arts: Spelling, Grammar, and Usage	4.3.D spell frequently used words correctly using phonics rules and exceptions
This can be covered in many other areas	4.4.D use reading, writing, speaking, and listening to define and solve problems
This can be covered in many other areas	4.4.E respond to written and oral presentations as a reader, listener, and articulate speaker
This can be covered in many other areas	4.4.F use listening skills to understand directions
This can be covered in many other areas	4.5.B recognize organizational features of electronic information (for example, pull-down menus, icons, key word searches)
This can be covered in many other areas	4.5.C use organizational features of media or electronic information (for example, passwords, entry menu features, pull-down menus, icons, key word searches)
<b>Core Knowledge<sup>®</sup> Content (History &amp; Geography-Grade 4)</b>	<b>Colorado Grade Level Expectations (Grade 4- History, Geography, &amp; Civics)</b>
<b>World History and Geography</b>	
<b>I. Geography</b>	
<b>A. Spatial Sense (working with maps, globes, and</b>	

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other geographic tools)	
▪	GEO.4.1.1.A measure various distances using map scales
▪	GEO.4.1.1.B read maps and globes using longitude and latitude, coordinates, degrees
▪	GEO.4.1.1.C understand meridians and time zones (the International Date Line)
▪	GEO.4.1.1.D understand relief maps – elevation and depressions
<b>B. Mountains and Mountain Ranges</b>	
▪	GEO.4.1.2.A locate and discuss major mountain ranges throughout the world
▪	GEO.4.1.2.B discuss the altitude of high mountains throughout the world
<b>II. Europe in the Middle Ages</b>	
<b>A. Background</b>	
▪	
<b>B. Geography Related to the Development of Western Europe</b>	
▪	GEO.4.1.2.C demonstrate knowledge of the geography of countries in Europe, Asia, the Middle East and Africa
<b>C. Developments in History of the Christian Church</b>	
▪	
<b>D. Feudalism</b>	
▪	
<b>E. The Norman Conquest</b>	
▪	
<b>F. Growth of Towns</b>	
▪	GEO.1-4.4.4.D guess and/or explain the reasons for the location of certain cities/settlements in relation to the relief and resources available in the area
<b>G. England in the Middle Ages</b>	
▪	
<b>III. The Spread of Islam and the “Holy Wars”</b>	
<b>A. Islam</b>	
▪	
<b>B. Development of Islamic Civilization</b>	
▪	
<b>C. Wars Between Muslims and Christians</b>	
▪	
<b>IV. Early and Medieval African Kingdoms</b>	
<b>A. Early African Kingdoms</b>	
▪	
<b>B. Medieval Kingdoms of the Sudan</b>	
▪	
<b>C. Geography of Africa</b>	
▪	GEO.4.1.2.C demonstrate knowledge of the geography of countries in Europe, Asia, the Middle East and Africa GEO.1-4.2.1.B demonstrate deeper knowledge about particular large geographic areas, such as the Sahara Desert, the

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	Amazon rain forest, the Arctic, the Goby Desert, etc.
<b>V. China: Dynasties and Conquerors</b>	
▪	
<b>American History and Geography</b>	
<b>I. The American Revolution</b>	
<b>A. Background: The French and Indian War</b>	
▪	
<b>B. Causes and Provocations</b>	
▪	
<b>C. The Revolution</b>	
▪	GEO.4.1.2.D demonstrate knowledge of the geography of the areas significant from the perspective of the American Revolution and the formation of the United States GEO.1-4.4.5.C understand that all human conflicts are based on competition for land and its resources and can give examples from the content of their history lessons
<b>II. Making a Constitutional Government</b>	
<b>A. Main Ideas Behind the Declaration of Independence</b>	
▪	CIV.4.1.4 Analyze some great American reformers, documents, and symbols in American political culture – Declaration of Independence, “Spirit of ’76,” Frederick Douglass, Susan B. Anthony, Abraham Lincoln, the White House, and the great Seal of the U.S. CIV.4.4.3 Explain the rights expressed in the Declaration of Independence
<b>B. Making a New Government: From the Declaration of Independence to the Constitution</b>	
▪	CIV.4.1.1 Define “democracy” and “republican government” and explain the purpose of the Colorado Constitution
<b>C. The Constitution of the United States</b>	
▪	HI S.4.5.B identify and study the contents of the Constitution of Colorado and the United States Constitution as important documents (discuss ways in which these documents affect our lives)
▪	CIV.4.2.2 Explain how the types of law (juvenile, criminal, civil) promote the common good and protect individual rights
▪	
▪	CIV.4.1.2 Explain three limits on government, e.g.: search warrants required; fair trials required; quartering soldiers in people’s homes prohibited CIV.4.1.3 Write the main reason for each of the Bill of Rights CIV.4.1.5 Compare a posted copy of the Bill of Rights with a posted copy of the Grade Four constitution
<b>D. Levels and Functions of Government (National, State, Local)</b>	
▪	
▪	HI S.4.5.D describe the purpose, structure, and functions of state government HI S.4.5.E explain why rules and laws have been established and enforced in states and nations

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<b>III. Early Presidents and Politics</b>	
▪	
<b>IV. Reformers</b>	
▪	HI S.4.5.A identify historical figures from diverse backgrounds in the United States who have advanced the rights of individuals, and promoted the common good
<b>V. Symbols and Figures</b>	
▪	HI S.4.5.C explain the importance of national celebrations, symbols, and ideas in their historical context as well as today (also covered in previous grades, American History: Symbols and Figures) CIV.4.1.4 Analyze some great American reformers, documents, and symbols in American political culture - Declaration of Independence, "Spirit of '76," Frederick Douglass, Susan B. Anthony, Abraham Lincoln, the White House, and the great Seal of the U.S.
<b>Grade level or other area Grade Level Expectations are covered in the <i>Core Knowledge Sequence</i></b>	<b>Grade Level Expectations not directly covered in the <i>Core Knowledge Sequence</i>, but can be covered in other areas</b>
This can be covered in many other areas	HI S.4.1.A construct time lines of significant historical developments in Colorado, identifying the dates at which each occurred, and place them sequentially along a date line that marks at evenly spaced intervals the years, decades, and/or centuries of the time period under investigation
This can be covered in many other areas	HI S.4.1.B create a brief historical narrative that chronologically organizes people and events in a select period of Colorado history
This can be covered in many of the History units	HI S.4.1.C create time lines that show people and events in sequence by years, decades, centuries
This can be covered in many of the History units	HI S.4.1.D describe a cause and effect relationship in a sequence of events
This can be covered in many of the History units	HI S.4.2.A gather historical data from oral history, interviews, diaries, letters, newspapers, speeches, texts, maps, photographs, and artwork (topics may vary widely, but techniques for verifying information should be constant)
This can be covered in many of the History units	HI S.4.2.B use available technology to obtain historical information
This can be covered in many other areas	HI S.4.2.C identify, analyze, and make generalizations about life in Colorado history using primary sources including artifacts, diaries, letters, photographs, art, documents and newspaper archives
This can be covered in many of the History units	HI S.4.2.D distinguish fact from fiction by comparing documentary sources addressing historical figures and events with fictionalized characters and events of common eras
This can be covered in many other areas	HI S.4.2.E summarize and sequence major events in Colorado history from 1876 to the present and locate significant places and events on a map of the state
This can be covered in many other areas	HI S.4.3.A recognize how the presence, interactions, and contributions of various groups and cultures have affected the school, neighborhood, community, and state
Grade 3: American History: The Earliest Americans	HI S.4.3.B describe the history, interactions, and contributions of various people and cultures that have lived in or migrated to the area that is now Colorado (e.g. Anasazi [cliff dwellers], early Hispanic)
This can be covered in many other areas	HI S.4.3.C identify the location of Mexican and other settlements in Colorado (e.g. Bent's Fort, Ft. Garland, etc.)
This can be covered in many other areas	HI S.4.3.D compare how and why people traveled to Colorado; and the major trails (Santa Fe, Smoky Hill, Overland, etc.) which they used
This can be covered in many other areas	HI S.4.3.E identify reasons for living in social groups
This can be covered in many other areas	HI S.4.3.F describe important components of the common cultural heritage of the United States as a whole (e.g., English language, government, family structure, and education)
This can be covered in many of the History units from previous grades	HI S.4.4.A compare the lives of groups affected by changes and developments in tools and equipment (e.g., "hunters and gatherers" in contrast to the lives of people who cultivated plants and raised domesticated animals for food.) Were the

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	tools different? Why?
Grade 4: Science: Science Biographies	HI S.4.4.B identify or describe individual achievements of scientists and inventors from many cultures
This can be covered in many of the History units	HI S.4.4.C describe the economic reasons why people move to and from a location
This can be covered in many other areas	HI S.4.5.F give examples of how individuals in various groups have gained, lost, or maintained political rights, freedoms, and power in the history of Colorado
This can be covered in many other areas	HI S.4.5.G give examples of how states and regions have become interdependent
This can be covered in many other areas	HI S.4.5.H predict how Colorado's expanding role in a world economy might affect the future of the state (e.g., Denver International Airport)
This can be covered in many of the History units	HI S.4.6.A recognize that peoples develop traditions that transmit their beliefs and ideas (e.g., marriage ceremonies, feasts, naming of infants)
This can be covered in many of the History units	HI S.4.6.B give examples of how the beliefs of people are reflected in the celebrations and practices of their communities
This can be covered in many other areas	HI S.4.6.C give examples of religious beliefs of Native Americans in Colorado
This can be covered in many of the History units	HI S.4.6.D give examples of forms of expressions that depict the history, daily life, and beliefs of various peoples (e.g., folk tales, ballads, dance and architecture)
This can be covered in many other areas	GEO.4.1.3.A understand how latitude affects climate, and demonstrate his/her understanding through examples
This can be covered in many other areas	GEO.4.1.3.B understand how the availability of water affects human lifestyles
This can be covered in many other areas	GEO.4.1.3.C discuss the relationship between climate and human development in the "Cradle of Civilization" – Mesopotamia, and, later, in Egypt, in Central America, and elsewhere
This can be covered in many other areas	GEO.1-4.2.1.A demonstrate expanding ability to differentiate between natural and human characteristics of places
This can be covered in many other areas	GEO.1-4.2.2.A and 5.1.A begin to understand why some regions are populated by many people, and others – by few, or none
This can be covered in many other areas	GEO.1-4.2.2.B and 5.1.B understand how human activities (such as deforestation, the building of dams, irrigation, etc.) can change the nature of regions
This can be covered in many of the History units	GEO.1-4.2.3.A identify characteristics of the lifestyles of peoples who live in particular regions
This can be covered in many of the History units	GEO.1-4.2.3.B understand why peoples like living in places that others find inhospitable (the Eskimos, the Bedouins, for example)
Grade 1: American History: Early People and Civilizations	GEO.1-4.3.1.A demonstrate understanding that the Earth's climate is subject to cycles of higher or lower temperatures; and that such a cycle, known as the Ice Age, for example, has made possible for the first humans to arrive in America (from Asia) through a land bridge
Grade 1: Science: The Earth and Grade 4: Science: Geology	GEO. 1-4.3.1.B understand how physical processes from within and without the Earth affect the Earth's surface and climate
Grade 1: Science: Living Things and Their Environments	GEO. 1-4.3.2.A demonstrate understanding of how climate influences vegetation patterns, and how that, in turn, influences animal and human life
Grade 1: Science: Living Things and Their Environments	GEO. 1-4.3.2.B demonstrate understanding of the ability of plants, animals, and humans to adapt to living in various and changing environments
This can be covered in many of the History units	GEO. 1-4.3.2.C describe the environment of the area where they live and areas they have visited or heard about, or have studied about
This can be covered in many other areas	GEO.1-4.4.1.A discuss the countries of origin of their ancestors, and locate them
This can be covered in many other areas	GEO.1-4.4.1.B identify and locate cities with large populations in this country
This can be covered in many other areas	GEO.1-4.4.1.C identify and locate countries with large populations
This can be covered in many other areas	GOE.1-4.4.1.D use maps to describe and explain population densities in parts of the world
This can be covered in many of the History units	GEO.1-4.4.2.A understand a greater number of the elements of culture, and how many of them are shaped by the geography of the regions where people live (recreation, religion, arts, etc.)
This can be covered in many other areas	GEO.1-4.4.3.A identify major economic activities in Colorado and other states, and in other countries

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This can be covered in many other areas	GEO.1-4.4.3.B describe economic networks used in daily life, such as transportation, banking, telephone system, etc.
This can be covered in many of the History units	GEO.1-4.4.3.C identify major economic activities in the countries that they have studied about
This can be covered in many other areas	GEO.1-4.4.4.A discuss differences between prehistoric and modern human settlements in this part of the country
This can be covered in many other areas	GEO.1-4.4.4.B discuss differences between rural and urban human settlements
This can be covered in many other areas	GEO.1-4.4.4.C demonstrate understanding of spatial characteristics of parts of the city (residential, central business, recreational, etc.)
This can be covered in many other areas	GEO.1-4.4.5.A understand that today's residents of Colorado/the U.S. are relative newcomers
This can be covered in many other areas	GEO.1-4.4.5.B understand the meaning of country boundaries and why people have created them
This can be covered in many other areas	GEO.1-4.4.5.D understand the configuration of a town/city within a country, within a state, within a country, a continent, the Earth
Grade 1: Science: Environmental Change and Habitat Destruction	GEO.1-4.5.1.C understand how human activities impact the lives of animals, and of other people
This can be covered in many other areas	GEO.1-4.5.2.A understand that surface relief has a major impact on human activities
	GEO.1-4.5.2.B understand that climatic changes over time bring changes in human habitations and activities
Grade 1: Science: The Earth and Grade 4: Science: Geology: The Earth and Its Changes	GEO.1-4.5.2.C understand the causes of natural disasters
This can be covered in many of the History units	GEO.1-4.5.3.A understand what kinds of resources are necessary for human existence
This can be covered in many of the History units	GEO.1-4.5.3.B understand that resources are not distributed equally everywhere
Kindergarten: Science: Taking Care of the Earth	GEO.1-4.5.3.C understand the difference between renewable and non-renewable resources
Kindergarten: Science: Taking Care of the Earth	GEO.1-4.5.3.D begin to understand that existing resources are not unlimited, and will not last forever
This can be covered in many other areas	GEO.1-4.5.3.E begin to understand that, as some resources are depleted, people develop technologies to use different resources
Kindergarten: Science: Taking Care of the Earth	GEO.1-4.5.3.F understand the need for careful management of resources
This can be covered in many other areas	GEO.1-4.5.3.G understand the need for exploration for new resources
This can be covered in many of the History units	GEO.1-4.6.1.B understand that changing environments have influenced and are influencing people and events in the past and present
This can be covered in many of the History units	GEO.1-4.6.1.C use maps to describe the human and environmental factors that have marked the history of various regions
This can be covered in many other areas	GEO.1-4.6.2.A observe and describe community issues from a spatial perspective: the building of new houses in the neighborhood, heavy traffic, etc.
This can be covered in many other areas	GEO.1-4.6.2.B explain how human-induced factors can change the environment (development versus conservation)
This can be covered in many other areas	GEO.1-4.6.2.C compare attitudes of people from different cultures towards social issues, including the role of the two sexes and make projections about the future
This can be covered in many other areas	CIV.4.2.1 Define and explain the role of a "conflict mediator"
This can be covered in many other areas	CIV.4.2.3 Predict what might happen in a school for one day if no rules or laws were enforced and suggest two ways the school might ensure order
This can be covered in many other areas	CIV.4.3.1 Explain a current event involving Colorado and an Eastern Hemisphere country, example: Colorado trade with Japan
This can be covered in many other areas	CIV.4.3.2 Calculate the value of \$1000 in Mexican pesos and Canadian dollars using the current exchange rate – discuss where they could get more for their money, where less
This can be covered in many other areas	CIV.4.3.3 Describe a major U.S., Mexico, and Canada treaty – NAFTA, others
This can be covered in many other areas	CIV.4.4.1 Collect and explain a display of symbols of citizenship – birth certificate, school ID card, social security card, passport
This can be covered in many other areas	CIV.4.4.2 Identify official sites where the Colorado flag flies and the reasons citizens show honor at these sites
This can be covered in many other areas	CIV.4.4.4 Write a paragraph to the Colorado Governor about how to preserve public parks

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Core Knowledge® Content (Visual Arts-Grade 4)	Colorado Grade Level Expectations (Grade 4-Visual Arts)
<b>I. Art of the Middle Ages in Europe</b>	
<ul style="list-style-type: none"> <li>▪</li> </ul>	<p>4.8 Recognize and apply the Principles of Design: Contrast, Rhythm (regular, random, alternating), Repetition, Pattern (simple and complex), Proportion (size relationships, exaggeration), Balance (asymmetry and symmetry, radial), Emphasis (focal point)</p> <p>4.16 Compare and contrast artwork of different times and places. (S=4)</p> <p>4.17 Use historical and cultural themes as a basis for creating art. (S=4)</p> <p>4.18 Become familiar with names of artists and their art style. (S=5)</p> <p>4.19 Use art vocabulary and terminology to describe artworks. (S=5)</p> <p>4.20 Compare and contrast how feelings and attitudes change when looking at various works of art. (S=5)</p> <p>4.21 Use selected criteria as the basis of making judgments about works of art. (S=5)</p>
<ul style="list-style-type: none"> <li>▪</li> </ul>	
<b>II. Islamic Art and Architecture</b>	
<ul style="list-style-type: none"> <li>▪</li> </ul>	<p>4.16 Compare and contrast artwork of different times and places. (S=4)</p> <p>4.17 Use historical and cultural themes as a basis for creating art. (S=4)</p> <p>4.18 Become familiar with names of artists and their art style. (S=5)</p> <p>4.19 Use art vocabulary and terminology to describe artworks. (S=5)</p> <p>4.20 Compare and contrast how feelings and attitudes change when looking at various works of art. (S=5)</p> <p>4.21 Use selected criteria as the basis of making judgments about works of art. (S=5)</p>
<ul style="list-style-type: none"> <li>▪</li> </ul>	
<b>III. The Art of Africa</b>	
<ul style="list-style-type: none"> <li>▪</li> </ul>	
<ul style="list-style-type: none"> <li>▪</li> </ul>	<p>4.16 Compare and contrast artwork of different times and places. (S=4)</p> <p>4.17 Use historical and cultural themes as a basis for creating art. (S=4)</p> <p>4.18 Become familiar with names of artists and their art style. (S=5)</p> <p>4.19 Use art vocabulary and terminology to describe artworks. (S=5)</p> <p>4.20 Compare and contrast how feelings and attitudes change when looking at various works of art. (S=5)</p> <p>4.21 Use selected criteria as the basis of making judgments about works of art. (S=5)</p>
<b>IV. The Art of China</b>	
<ul style="list-style-type: none"> <li>▪</li> </ul>	<p>4.16 Compare and contrast artwork of different times and places. (S=4)</p> <p>4.17 Use historical and cultural themes as a basis for creating art. (S=4)</p> <p>4.18 Become familiar with names of artists and their art style. (S=5)</p> <p>4.19 Use art vocabulary and terminology to describe artworks. (S=5)</p> <p>4.20 Compare and contrast how feelings and attitudes change when looking at various works of art. (S=5)</p> <p>4.21 Use selected criteria as the basis of making judgments about works of art. (S=5)</p>
<b>V. The Art of a New Nation: The United States</b>	
<ul style="list-style-type: none"> <li>▪</li> </ul>	<p>4.8 Recognize and apply the Principles of Design: Contrast, Rhythm (regular, random, alternating), Repetition, Pattern (simple and complex), Proportion (size relationships, exaggeration), Balance (asymmetry and symmetry, radial), Emphasis (focal point)</p> <p>4.16 Compare and contrast artwork of different times and places. (S=4)</p> <p>4.17 Use historical and cultural themes as a basis for creating art. (S=4)</p> <p>4.18 Become familiar with names of artists and their art style. (S=5)</p> <p>4.19 Use art vocabulary and terminology to describe artworks. (S=5)</p> <p>4.20 Compare and contrast how feelings and attitudes change when looking at various works of art. (S=5)</p>

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	4.21 Use selected criteria as the basis of making judgments about works of art. (S=5)
■	
<b>Grade level or other area Grade Level Expectations are covered in the <i>Core Knowledge Sequence</i></b>	<b>Grade Level Expectations not directly covered in the <i>Core Knowledge Sequence</i>, but can be covered in other areas</b>
This can be covered in may other areas	4.1 State the rational for the choices or options selected in resolving the artistic problem. (S=1)
This can be covered in may other areas	4.2 Create a work of art based upon an interpretation of a sensory experience. (S=1)
This can be covered in may other areas	4.3 Recognize that there are various solutions to a single art problem. (S=1)
This can be covered in may other areas	4.4 Create art to communicate real and imaginary sources. (S=1)
Grade 4: Language Arts: Stories and Poetry	4.5 Create works of art inspired by spoken and written stories and poems. (S=1)
This can be covered in may other areas	4.6 Use brainstorming as a mean to generate ideas for works of art. (S=1)
This can be covered in may other areas	4.7 Use various art techniques and media to communicate ideas and feelings. (S=1)
This can be covered in may other areas	4.9.A Recognize and apply the Elements of Art: Lines (Types-straight, curved, zigzag, wavy, horizontal, vertical, diagonal, spiral, broken, contour, horizon; Variation-width and length, depth, thick and thin)
This can be covered in may other areas	4.9.B Recognize and apply the Elements of Art: Shape (Types-geometric-square, circle, rectangle, oval, triangle; organic shapes-free- form, open and closed, simple and complex)
This can be covered in may other areas	4.9.C Recognize and apply the Elements of Art: Form (Types-geometric, sphere, organic; Variation-size, length, width, depth, thick and thin, simple and complex)
This can be covered in may other areas	4.9.D Recognize and apply the Elements of Art: Texture (Types-visual and tactile; Variation-rough, smooth, hard, soft)
This can be covered in may other areas	4.9.E Recognize and apply the Elements of Art: Space (Types-actual and implied; Concepts-overlapping, object size, positive and negative, empty and full, near and far, point of view-foreground, middleground, background, composition)
This can be covered in may other areas	4.9.F Recognize and apply the Elements of Art: Color (Types-primary, secondary, intermediate, neutral; Schemes-monochromatic, complementary, warm and cool; Concepts-color wheel, hue, value, opaque, transparent)
This can be covered in may other areas	4.9.G Recognize and apply the Elements of Art: Value (Types-light, medium and dark)
This can be covered in may other areas	4.10 Create a contour line drawing using a variety of drawing materials and tools. (S=3)
This can be covered in may other areas	4.11 Make appropriate choices with building techniques to create a three-dimensional artwork. (S=3)
This can be covered in may other areas	4.12 Utilizing a variety of brushstrokes paint a two-dimensional painting. (S=3)
This can be covered in may other areas	4.13 Become familiar with the process of printing with a press. (S=3)
This can be covered in may other areas	4.14 Create a textile with different types of textiles and a variety of materials. (S=3)
This can be covered in may other areas	4.15 Follow directions for the safe use of tools, materials and procedures. Wear appropriate protection such as smocks, safety glass, gloves, and hair ties when necessary. When appropriate, pass a safety assessment. (S=3)
This can be covered in may other areas	4.22 Defend personal preference of a favorite work of art. (S=5)
This can be covered in may other areas	4.23 Develop and describe personal reasons for valuing artworks. (S=5)
<b>Core Knowledge® Content (Music-Grade 4)</b>	<b>Colorado Grade Level Expectations (Grade 4-Music)</b>
<b>I. Elements of Music</b>	
■	4.1 sing and play instruments with acceptable tone quality and proper posture, songs in an age-appropriate range (S1) 4.2 sing their part in two-part rounds (S1) 4.5 read, notate, and perform rhythmic patterns using quarter notes, quarter rests, eighth notes, eighth rests, half notes, half rests, whole notes, whole rests, and dotted half notes (S1, S2) 4.8 demonstrate the use of introduction, interlude, and coda (S1, S4) 4.12 distinguish the principal theme in theme and variation form and compare the variations as contrast to the theme (S4)
■	4.5 read, notate, and perform rhythmic patterns using quarter notes, quarter rests, eighth notes, eighth rests, half notes, half rests, whole notes, whole rests, and dotted half notes (S1, S2)

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	4.9 name the notes of a musical example using letters, syllables, and/or numbers (S2) 4.10 demonstrate how meter effects neat by inserting bar lines into a notated musical example (S2)
<b>II. Listening and Understanding</b>	
<b>A. The Orchestra</b>	
▪	4.3 watch a conductor (S1) 4.4 respond to a conductor's cues for expressive elements (S1) 4.11 match the sound of instruments, played alone or with simple accompaniments, with the picture of the instrument and the name and family of the instrument (S4)
<b>B. Vocal Ranges</b>	
▪	4.13 recognize and name the different vocal classifications when given a recorded or live example of two-part or four-part vocal music (S4)
<b>C. Composers and Their Music</b>	
▪	
<b>D. Musical Connections</b>	
▪	
<b>III. Songs</b>	
▪	
<b>Grade level or other area Grade Level Expectations are covered in the <i>Core Knowledge Sequence</i></b>	<b>Grade Level Expectations not directly covered in the <i>Core Knowledge Sequence</i>, but can be covered in other areas</b>
This skill can be covered in many other areas	4.6 notate and perform a two measure pattern when given a dictated rhythmic pattern in duple and triple meter (S1, S2)
This skill can be covered in many other areas	4.7 create, notate, and perform an original eight-measure composition for a melodic instrument (S1, S2, S3)
This skill can be covered in many other areas	4.14 be familiar with ethnic instruments that are representative of various cultures (S5)
This skill can be covered in many other areas	4.15 demonstrate appropriate audience behavior (S5)
<b>Core Knowledge® Content (Mathematics-Grade 4)</b>	<b>Colorado Grade Level Expectations (Grade 4-Mathematics)</b>
<b>I. Numbers and Number Sense</b>	
▪	4.1.2.A read and write numerals from 0 to 1,000,000 in meaningful contexts 4.1.2.B read the number words for selected numbers from zero to one million 4.1.2.C write the number words for selected numbers from zero to one hundred thousand
▪	4.1.2.D order according to place value (for example, given 9 ones, 5 tens, 4 hundreds, 7 thousands, and 8 hundred thousands, the student can write the number 807, 459; given the number 807, 459, the student can show 8 hundred thousands, 7 thousands, 4 hundreds, 5 tens, and 9 ones) 4.1.2.E identify place value through hundred thousands (for example, in 807,459, '8' is in the hundred thousands place)
▪	4.1.1.B apply equalities and inequalities with whole numbers from 0 to 1,000,000 using the symbols =, <, > 4.1.3.B sequence selected whole numbers from 0 to 100,000
▪	4.1.2.F write six-digit numbers in expanded form (for example, 807,459 = 800,000 + 7,000 + 400 + 50 + 9)
▪	4.1.3.C locate and label ½'s and multiples of ¼'s and 1/3's between whole numbers on the number line
▪	4.1.5.A estimate sums and differences by rounding to the nearest ten, hundred, and thousand prior to performing the operation, and then using the estimate to determine the reasonableness of the solution 4.1.5.B estimate products first by rounding to the nearest ten and hundred prior to performing the operation and, then, using the estimate to determine the reasonableness of the solution
▪	

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▪	
▪	4.3.1.A select the appropriate type of graph to use in various problem-solving situations
▪	4.1.3.D locate and label a point in the first quadrant of the coordinate plane (for example, locates the point (27,15)) and on a city map (for example, (E23, 11)) 4.3.1.C use graph paper using the horizontal and vertical axes appropriately 4.5.1.J determine the distance between points on vertical and horizontal line segments on a coordinate plane 4.5.1.K given a distance, find pairs of points on the coordinate plane separated by that distance
▪	
<b>II. Fractions and Decimals</b>	
<b>A. Fractions</b>	
▪	
▪	
▪	
▪	
▪	
▪	
▪	4.1.1.C using concrete materials (for example, fraction strips), compare and order fractions with like and unlike denominators, such as halves, thirds, fourths, eighths, and tenths
▪	
▪	4.6.2.A using concrete materials, demonstrate addition and subtraction of proper fractions with common denominators of ten or less
▪	
<b>B. Decimals</b>	
▪	4.1.1.D using concrete materials (for example, base ten blocks), represent the decimal fractions of tenths and hundredths
▪	4.1.2.G relate decimals and fractions (that is, tenths and hundredths) to one another using objects and pictures 4.1.1.E using concrete materials, equate terminating decimals to their common fraction equivalents (for example, $0.25 = \frac{1}{4}$ )
▪	
▪	
▪	
▪	
▪	
▪	4.6.2.C add and subtract decimals to the one-hundredths
<b>III. Money</b>	
▪	4.6.2.E determine change received for \$10.00 or less 4.1.1.G using concrete materials, count change from the cost of the item, where the item costs no more than \$10.00, up to the amount of the money received
▪	
<b>IV. Computation</b>	
<b>A. Multiplication</b>	
<u>Teachers:</u> By this grade level, children should have mastered all basic	4.6.3.C continue automatic recall of basic addition and subtraction facts

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whole number operations for addition and subtraction. Review and reinforce topics from previous grades as necessary.	
▪	4.6.3.A demonstrate understanding of basic multiplication and division facts through 100 4.6.3.B demonstrate automatic recall of basic multiplication and division facts through 100
▪	
▪	
▪	4.6.4.B using paper-and-pencil, demonstrate the four basic operations of whole numbers including: a) multiplication of two digits by two digits and three digits by one digit with regrouping and b) division of two digits by a one-digit divisor
▪	
▪	4.1.5.B estimate products first by rounding to the nearest ten and hundred prior to performing the operation and, then, using the estimate to determine the reasonableness of the solution 4.6.4.A use estimation techniques such as front-end rounding, rounding, compatible numbers (numbers whose sum is 10, 100, 1,000...) and clustering (for example, $27 + 28 + 30 + 31$ equals approximately $4 \times 30 = 120$ ) before performing operations
▪	
▪	
▪	
▪	
<b>B. Division</b>	
▪	4.6.1.B demonstrate the inverse relationship of multiplication and division of whole numbers
▪	
▪	4.6.3.A demonstrate understanding of basic multiplication and division facts through 100 4.6.3.B demonstrate automatic recall of basic multiplication and division facts through 100
▪	4.1.4.A verify division of whole numbers is not commutative
▪	
▪	
▪	
▪	4.6.4.B using paper-and-pencil, demonstrate the four basic operations of whole numbers including: a) multiplication of two digits by two digits and three digits by one digit with regrouping and b) division of two digits by a one-digit divisor
▪	
▪	
<b>C. Solving Problems and Equations</b>	
▪	
▪	
▪	
▪	4.2.3.A identify a rule using addition, subtraction, or multiplication, and solve a problem using the rule
▪	
<b>V. Measurement</b>	
▪	4.4.3.A measure the sides and perimeters of geometric shapes to the nearest fourth inch and centimeter 4.5.1.D estimate the perimeters of similarly-sized figures (for example, trapezoids, parallelograms, and rectangles), measure the sides, and determine the perimeters 4.5.1.F measure the lengths of the sides of cubes and determine the volumes
▪	4.5.1.H estimate and weigh objects on a balance to the nearest ounce and gram
▪	4.5.1.G estimate and measure the capacity of containers

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▪	<p>4.5.1.L describe the units for measuring length, area, volume, capacity, and temperature in U.S. customary and metric units</p> <p>4.5.1.M know the number of years in a decade and a century, feet in a mile, millimeters and centimeters in a meter, ounces in a pound, and pounds in a ton</p> <p>4.5.2.A compare objects according to the measurable attributes of length, area, volume, capacity, weight, and temperature in U.S. customary and metric units</p> <p>4.5.2.B order objects according to the measurable attributes of length, area, volume, capacity, weight, and temperature in U.S. customary and metric units</p> <p>4.5.5.B select the appropriate units of measurement of length, area, volume, capacity, weight, and temperature in U.S. customary and metric units</p>
▪	<p>4.5.1.L describe the units for measuring length, area, volume, capacity, and temperature in U.S. customary and metric units</p> <p>4.5.1.M know the number of years in a decade and a century, feet in a mile, millimeters and centimeters in a meter, ounces in a pound, and pounds in a ton</p> <p>4.5.2.A compare objects according to the measurable attributes of length, area, volume, capacity, weight, and temperature in U.S. customary and metric units</p> <p>4.5.2.B order objects according to the measurable attributes of length, area, volume, capacity, weight, and temperature in U.S. customary and metric units</p> <p>4.5.5.B select the appropriate units of measurement of length, area, volume, capacity, weight, and temperature in U.S. customary and metric units</p>
▪	<p>4.5.2.C compare and order various times</p> <p>4.5.5.A select the appropriate units of measurement of time</p>
<b>VI. Geometry</b>	
▪	
▪	4.4.2.A identify parallel, perpendicular, and intersecting lines
▪	<p>4.4.2.G classify triangles by their angles (obtuse, acute, right)</p> <p>4.4.4.B investigate and predict the changing of angles (for example, those made from the hands of a clock over time)</p>
▪	<p>4.4.2.C recognize and identify polygons including quadrilaterals such as trapezoids, parallelograms, and rhombuses</p> <p>4.4.3.D draw geometric polygons including quadrilaterals such as trapezoids, parallelograms, and rhombuses</p> <p>4.4.2.E describe squares as rectangles</p>
▪	
▪	4.4.2.B identify attributes of closed curves
▪	<p>4.4.1.A define similarity and congruence</p> <p>4.4.4.C investigate and predict what must occur for similar figures to become congruent figures</p>
▪	<p>4.4.3.B measure the area of geometric figures using standard units</p> <p>4.5.1.E measure the lengths of the sides of squares and rectangles and determine the areas</p> <p>4.5.5.B select the appropriate units of measurement of length, area, volume, capacity, weight, and temperature in U.S. customary and metric units</p>
▪	<p>4.4.2.J identify rectangular prisms</p> <p>4.5.1.F measure the lengths of the sides of cubes and determine the volumes</p> <p>4.5.5.B select the appropriate units of measurement of length, area, volume, capacity, weight, and temperature in U.S. customary and metric units</p>
<b>Grade level or other area Grade Level Expectations are covered in the <i>Core Knowledge Sequence</i></b>	<b>Grade Level Expectations not directly covered in the <i>Core Knowledge Sequence</i>, but can be covered in other areas</b>
Grade 3: Mathematics: Numbers and Number Sense	4.1.1.A using objects and pictures, represent whole numbers including odds and evens from 0 to 1,000,000

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Grade 2: Mathematics: Money	4.1.1.F demonstrate different combinations of currency and coins for change (for example, \$2.39 = 2 dollar bills, 1 quarter, 1 dime, and 4 pennies)
Grade 3: Mathematics: Numbers and Number Sense	4.1.3.A count forward from any number by 2's, 3's, 5's, 10's, and 100's
Grade 1: Mathematics: Computation and Grade 5: Mathematics: Computation	4.1.4.B continue to verify number properties from previous grades
Grade 1: Mathematics: Patterns and Classification and Grade 2: Mathematics: Numbers and Number Sense	4.2.1.A reproduce, extend, create, and describe patterns, such as in common fractions, geometric shapes, measurement, addition, subtraction, multiplication, and division facts
Grade 1: Mathematics: Patterns and Classification and Grade 2: Mathematics: Numbers and Number Sense	4.2.1.B find missing elements of a complex repeating pattern (for example, 1,1,2,3,5,__,13,..)
This can be covered in many areas	4.2.2.A match tables, graphs, and open sentences that represent the same numerical pattern
This can be covered in many areas	4.2.4.A determine how the change in one variable affects the change in the other by addition, subtraction, or multiplication
Grade 6: Mathematics: Probability and Statistics	4.3.1.D explain the basic concepts of sample bias and sample size when designing a survey
Grade 6: Mathematics: Probability and Statistics	4.3.2.A choose between median and mode to best describe the "middle" of a data set
Grade 6: Mathematics: Probability and Statistics	4.3.2.B transfer the use of median and mode to other curricular areas
Grade 5: Mathematics: Probability and Statistics	4.3.2.C using various displays of data, formulate questions, interpret, and draw conclusions
Grade 5 and 6: Mathematics: Probability and Statistics	4.3.3.A uses survey data to make and justify real-world decisions
Grade 3, 5 and 6: Mathematics: Probability and Statistics	4.3.3.B compare the outcomes of flipping a coin, spinning a spinner with four congruent sectors, and rolling a number cube
Grade 3, 5 and 6: Mathematics: Probability and Statistics	4.3.3.C analyze and predict which outcome is more likely from several events such as obtaining "heads" when flipping a coin, the spinner landing in one of its sectors, or rolling a "1" on a number cube
Grade 5 and 6: Mathematics: Probability and Statistics	4.3.3.D analyze the fairness of various chance devices
Grade 3, 5 and 6: Mathematics: Probability and Statistics	4.3.4.A determine the number of outcomes obtained from a variety of chance devices
Grade 6: Mathematics: Probability and Statistics	4.3.4.B using paper-and-pencil techniques (for example, tree diagrams), display the possible combinations of matching two sets of elements
Grade 7: Mathematics: Geometry	4.4.1.B identify the transformation that occurs when a figure is translated, reflected, or rotated
Grade 6: Mathematics: Geometry	4.4.1.C identify the lines of symmetry of an equilateral triangle, parallelogram, and rhombus
Grade 5: Mathematics: Geometry	4.4.2.F describe a right angle as having a measure of 90E
Grade 5: Mathematics: Geometry	4.4.2.H draw obtuse, acute, and right triangles on a coordinate plane and identify the vertices with coordinates
Grade 7: Mathematics: Geometry	4.4.2.I compare what is the same and what is different between two-dimensional figures and three-dimensional figures
Grade 7: Mathematics: Geometry	4.4.2.K recognize and identify in three-dimensional figures the vertices, edges, and faces
Grade 7: Mathematics: Geometry	4.4.2.L build cubes, prisms, and pyramids (for example, using straws and string)
Grade 3: Mathematics: Geometry	4.4.4.D investigate and predict the geometric figures that result from cutting along a line of symmetry
This can be covered in many areas	4.4.4.C draw a picture of diagram to solve a problem (for example, uses triangular pattern blocks to create a star; uses pattern blocks to tile a plane)
Grade 3: Mathematics: Measurement	4.5.1.A tell time to the nearest minute, using an analog and digital clock
Grade 3: Mathematics: Measurement	4.5.1.B tell the number of minutes is a day, days in a year and when a leap year occurs
Grade 3: Mathematics: Measurement	4.5.1.C describes the units for measuring time
Grade 3: Mathematics: Measurement	4.5.1.I compare the relationship between the temperature in Fahrenheit and Celsius
This can be covered in many areas	4.5.4.A use familiar objects as referents for measurement (for example, one paper clip equals one gram; the length of the arm span equals approximately one meter)
This can be covered in many areas	4.6.1.A explain in writing what addition, subtraction, multiplication, and division of whole numbers means
This can be covered in many areas	4.6.1.C demonstrate division of whole numbers as repeated subtraction
Grade 5: Mathematics: Fractions and Decimals	4.6.2.B using concrete materials, demonstrate addition and subtraction of mixed numerals with common denominators of twelve or less

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Grade 3: Mathematics: Money	4.6.2.D compute the total cost of items to \$10.00
This can be covered in many areas	4.6.5.A given a real-world problem-solving situation, use the correct operation (addition, subtraction, multiplication, or division) and appropriate method (mental arithmetic, estimation, paper-and-pencil, calculator, or computer) to solve the problem
This can be covered in many areas	4.6.5.B determine from real-world problems whether an estimated or exact sum, difference, product, or quotient is acceptable
<b>Core Knowledge<sup>®</sup> Content (Science-Grade 4)</b>	<b>Colorado Grade Level Expectations (Grade 4-Science)</b>
<p><b>Teachers:</b> Effective instruction in science requires hands-on experience and observation. In the words of the 1993 report from the American Association for the Advancement of Science, <i>Benchmarks for Science Literacy</i>, "From their very first day in school, students should be actively engaged in learning to view the world scientifically. That means encouraging them to ask question about nature and to seek answers, collect things, count and measure things, make qualitative observations, organize collections and observations, discuss findings, etc."</p> <p>While experience counts for much, book learning is also important, for it helps bring coherence and order to a child's scientific knowledge. Only when topics are presented systematically and clearly can children make steady and secure progress in their scientific learning. The child's development of scientific knowledge and understanding is in some ways a very disorderly and complex process, different for each child. But a systematic approach to the exploration of science, one that combines experience with book learning, can help provide essential building blocks for deeper understanding at a later time.</p>	
<b>I. The Human Body</b>	
<b>A. The Circulatory System</b>	
▪	
<b>B. The Respiratory System</b>	
▪	
<b>II. Chemistry: Basic Terms and Concepts</b>	
<b>A. Atoms</b>	
▪	
▪	
▪	
▪	
<b>B. Properties of Matter</b>	
▪	4.2.A understand that materials can exist in different forms, (solid, liquid, gas) and can be changed from one form to another, also covered in Grade 1: Science: Matter 4.4.M identify and describe the states (e.g. solid, liquid, gas) in which water can be found on Earth
<b>C. Elements</b>	
▪	
<b>D. Solutions</b>	
▪	
▪	
<b>III. Electricity</b>	
▪	4.2.F apply knowledge of simple circuits to create a new circuit that involves more components (using batteries, wires,

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	light or a buzzer, demonstrate the requirements for a complete circuit)
<b>IV. Geology</b>	
<b>A. The Earth's Layers</b>	
▪	
<b>B. How Mountains Are Formed</b>	
▪	
<b>C. Rocks</b>	
▪	
<b>D. Weathering and Erosion</b>	
▪	
<b>V. Meteorology</b>	
▪	4.4.K identify the water cycle (e.g. evaporation, condensation, transpiration, etc.) 4.4.L recognize the importance of water and its uses
▪	4.4.I know that clouds have properties, locations, and movements that can be observed and described
▪	4.4.J know that weather can be described in measurable quantities, temperature, wind direction, and precipitation
▪	4.4.J know that weather can be described in measurable quantities, temperature, wind direction, and precipitation
▪	4.4.J know that weather can be described in measurable quantities, temperature, wind direction, and precipitation
▪	
▪	4.4.H distinguish between weather and climate
<b>VI. Science Biographies</b>	
▪	
<b>Grade level or other area Grade Level Expectations are covered in the <i>Core Knowledge Sequence</i></b>	<b>Grade Level Expectations not directly covered in the <i>Core Knowledge Sequence</i>, but can be covered in other areas</b>
This can be covered in many other areas, see note to teachers above	4.1.1.A plan, design, predict, and conduct an experiment, collect data, and communicate reasonable explanations
This can be covered in many other areas, see note to teachers above	4.1.1.B using the data from one investigation, generate a prediction for a new investigation
This can be covered in many other areas, see note to teachers above	4.1.1.C conduct a systematic observation over time
Grade 4: Mathematics: Numbers and Number Sense	4.1.1.D organize data into an appropriate format (e.g. bar graph, pie chart, charts, Venn diagram)
Grade 4: Mathematics: Numbers and Number Sense, Fractions and Decimals, Measurement, and Geometry	4.1.1.E select and use mathematical tools to measure, count, sort, identify, describe, label, and communicate information from observations (e.g. whole numbers, simple fractions, geometric figures, representative charts such as pie and bar charts)
Grade 4: Mathematics: Numbers and Number Sense	4.1.1.F analyze data found in graphs, charts, and articles in order to draw and evaluate conclusions
This can be covered in many other areas, see note to teachers above	4.1.1.G develop and evaluate explanations based upon experimental evidence and the experience of others
This can be covered in many other areas, see note to teachers above	4.1.1.H check explanations against scientific knowledge, experiences and observations of others
This can be covered in many other areas, see note to teachers above	4.1.1.I use facts to support and evaluate the fairness of conclusions
Grade 4: Language Arts: Writing and Research	4.1.1.J write instructions for a scientific or experimental procedure that others can follow
This can be covered in many other areas, see note to teachers above	4.1.1.K describe and illustrate the steps taken in solving a problem including the resources used
Grade 4: Mathematics: Measurement	4.1.1.L use appropriate units to add meaning to numbers and when presenting or using numerical data
Grade 4: Mathematics: Numbers and Number Sense, Fractions and Decimals, Measurement, and Geometry	4.1.1.M use geometric figures, number sequences, graphs, diagrams, sketches, number lines, maps, and stories to represent objects, events, and processes
Grade 3 and 4: Mathematics: Measurement	4.1.1.N select and use simple devices to gather data related to an investigation (e.g. ruler, thermometers, watches, magnifying lens, microscopes, calculators, and computers)
This can be covered in many other areas, see note to teachers above	4.1.3.H use knowledge and evidence obtained in experiments, to support explanation

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Grade 2: Science: Simple Machines and Grade 8: Science: Physics: Forces	4.2.B describe the position and motion of an object by pushing and pulling and understanding the size of the change is related to the strength of the push or pull
Grade 3: Science: Sound	4.2.C produce sound with vibrating objects and understand that the pitch of the sound can be varied by changing the rate of the vibration
Grade 3: Science: Light and Grade 8: Science: Electromagnetic Radiation and Light	4.2.D investigate the properties of light as it travels in a straight line until it strikes an object; reflected by a mirror, refracted by a lens, or absorbed by an object
Grade 6: Science: Energy, Heat, and Energy Transfer	4.2.E investigate how heat can move from one object to another by conduction
Grade 8: Science: Physics	4.2.G predict whether objects will sink or float based on a qualitative understanding of the concepts of density and buoyancy
Grade 2: Science: Simple Machines and Grade 8: Science: Physics	4.2.H describe how forces work in common simple machines (e.g. seesaws, crowbar slides)
Grade 5: Science: Chemistry: Matter and Change	4.2.I understand that matter changes in both physical and chemical ways
Grade 7: Science: Cell Division and Genetics	4.3.A recognize that some characteristics of organisms are inherited while others are environmentally influenced
Grade 1: Science: Living Things and Their Environments, Grade 3: Science: Ecology, and Colorado History studies	4.3.B give examples of food chains/webs in Colorado ecosystems (e.g. mountains, plains, plateaus)
Grade 1: Science: Living Things and Their Environments, Grade 3: Science: Ecology, and Colorado History studies	4.3.C describe animal and plant characteristics that allow them to survive and adapt in different life zones in the Rocky Mountains
Grade 3: Science: Ecology	4.3.D give examples of how organisms interact with each other and with other nonliving parts of environment
Grade 1: Science: Living Things and Their Environments, Grade 3: Science: Ecology, and Grade 5: Science: Plant Structure and Processes, Grade 8: Science: Chemistry of Food and Respiration	4.3.E conduct investigations to gather data, information, and ideas related to the energy and nutrients organisms need from their environment in order to survive
Grade 1: Science: Living Things and Their Environments, Grade 3: Science: Ecology, and Grade 5: Science: Plant Structure & Processes	4.3.F explore a simple natural system (e.g. classroom aquarium or outdoor habitat and generate questions about the transfer of energy and use of nutrients)
Grade 1: Science: Living Things and Their Environments, Grade 3: Science: Ecology, and Grade 5: Science: Plant Structure and Processes, Grade 8: Science: Chemistry of Food and Respiration	4.3.G know that all organisms need energy and matter to live and grow
Grade 1: Science: Living Things and Their Environments, Grade 2: Science: Insects, Grade 3: Science: Ecology, and Grade 5: Science: Plant Structure and Processes	4.3.H know that many plants depend on animals for pollination and seed dispersal while animals depend on plants for food and shelter
Grade 1: Science: Astronomy, Grade 3: Science: Astronomy and Grade 6: Science: Astronomy	4.4.A identify the basic components of the solar system
Grade 1: Science: Astronomy, Grade 3: Science: Astronomy and Grade 6: Science: Astronomy	4.4.B describe the motion of the Earth in relation to the sun
Grade 3: Science: Astronomy and Grade 6: Science: Astronomy	4.4.C compare Earth to other planets (e.g. size, distance from the sun and from each other, temperature, length of day)
Grade 3: Science: Astronomy and Grade 6: Science: Astronomy	4.4.D know that the Earth is one of nine planets that orbit the sun and that as the Earth orbits the sun, different patterns of stars can be seen in different seasons
Grade 3: Science: Astronomy and Grade 6: Science: Astronomy	4.4.E explore objects associated with the universe (comets, galaxies, asteroids)
Kindergarten, Grade 1, Grade 2, Grade 3, Grade 4, Grade 5, and Grade 6: History and Geography: World Geography	4.4.F compare and contrast the physical features of Earth (e.g. landforms)
This can be covered during the study of Colorado history	4.4.G identify the main landforms in Colorado (e.g. mountains, plains, plateaus)
This can be covered in many other areas, see note to teachers above	4.5.A identify some causes for recent increases in technological advances
This can be covered in many other areas, see note to teachers above	4.5.B make a plan for building a device considering the limitations of the material and including multiple views
This can be covered in many other areas, see note to teachers above	4.5.C describe and define the invention process (e.g. brainstorm, analyze, combine and create)
This can be covered in many other areas, see note to teachers above	4.6.A recognize that when a science experiment is repeated with the same conditions, the experiment generally works the same way
This can be covered in many other areas, see note to teachers above	4.6.B compare knowledge gained from direct experience to knowledge gained indirectly

Correlation of the *Core Knowledge Sequence* and the Colorado Grade Level Expectations

	This can be covered in many other areas, see note to teachers above	4.6.C identify observable patterns and changes in their lives and predict future events based on those patterns
	This can be covered in many other areas, see note to teachers above	4.6.D describe and compare the components and interrelationships of a simple system
	This can be covered in many other areas, see note to teachers above	4.6.E compare a model with what it represents