

# NC Standard Course of Study

## 4<sup>th</sup> Grade Objectives (For the Year)

### 2008-2009

<b>Math</b>	
Objective	Description
1.01a	Number Sense: Connect model, number word, and number using a variety of representations.
1.01b	Number Sense: Build an understanding of place value (hundredths through ten-thousands)
1.01c	Number Sense: Compare and order rational numbers
1.01d	Number Sense: Make estimates of rational number in appropriate situations.
1.02a	Develop Fluency with multiplication and division: Two-Digit by Two-Digit multiplication (larger numbers with a calculator)
1.02b	Develop Fluency with multiplication and division: Up to Three-Digit by Two-Digit Division (larger numbers with a calculator)
1.02c	Develop Fluency with multiplication and division: Strategies for multiplying and dividing numbers
1.02d	Develop Fluency with multiplication and division: Estimation of products and quotients in appropriate situations.
1.03	Solve problems using models, diagrams and reasoning about fractions and relationships among fractions involving halves, fourths, eighths, thirds, sixths, twelfths, fifths, tenths, hundreds, and mixed numbers.
1.04a	Develop fluency with addition and subtraction of non-negative rational numbers with like denominators, including decimal fractions through hundredths: Develop and analyze strategies for adding.
1.04b	Develop fluency with addition and subtraction of non-negative rational numbers with like denominators, including decimal fractions through hundredths: Estimate sums and differences
1.04c	Develop fluency with addition and subtraction of non-negative rational numbers with like denominators, including decimal fractions through hundredths: Judge reasonableness of solutions.
1.05	Develop flexibility in solving problems by selecting strategies and using mental computation, estimation, calculators or computers, and paper and pencil.

2.01	Develop strategies to determine the area of rectangles and the perimeter of plane figures.
2.02	Solve problems involving perimeter of plane figures and areas of rectangles.
3.01	Use the coordinate system to describe the location and relative position of points and draw figures in the first quadrant.
3.02	Describe the relative position of lines using concepts of parallelism and perpendicularity.
3.03a	Identify, predict, and describe the results of transformations of plan figures: Reflections
3.03b	Identify, predict, and describe the results of transformations of plan figures: Translations
3.03c	Identify, predict, and describe the results of transformations of plan figures: Rotations
4.01	Collect, organize, analyze, and display data (including line graphs and bar graphs) to solve problems.
4.02	Describe the distribution of data using median, range and mode.
4.03	Solve problems by comparing two sets of related data.
4.04	Design experiments and list all possible outcomes and probabilities for an event.
5.01a	Identify, describe, and generalize relationships in which: Quantities change proportionally
5.01b	Identify, describe, and generalize relationships in which: Change in one quantity relates to change in a second quantity.
5.02	Translate among symbolic, numeric, verbal, and pictorial representations of number relationships.
5.03a	Verify mathematical relationships using: Models, words and numbers
5.03b	Verify mathematical relationships using: Order of Operations and the identity, commutative, associative, and distributive properties.
<b>Reading *Bold items are Essential Learning Objectives*</b>	
1.011	Figure our unfamiliar words by using what you know about base words, breaking words into syllables, and understanding contractions.
1.012	Figure out unfamiliar words by using what you know about dividing words into syllables (i.e. VC/CV) and changing y to I when adding a suffix

1.013	Figure out unfamiliar words by using what you know about dividing words into syllables (i.e. V/CV, VC/V, and three syllable words) and silent consonant (i.e. kn, gn, mb)
<b>1.021</b>	Figure out what words mean by applying the meanings of these suffixes (-er, -est, -ly, -y) and these roots (tele, rupt)
<b>1.022</b>	Figure out what words mean by applying the meanings of these suffixes (-er, -or, -ist, -able) and these roots (sign, spect)
<b>1.023</b>	Figure out what words mean by applying the meanings of these prefixes (re-, mis-, ex-, pre-, con-, com-) and suffix (-ible)
<b>1.024</b>	Figure out what words mean by applying the meanings of these roots (graph and tract)
1.03	Identify key words in nonfiction texts and determine what they mean
1.031	Use context clues to figure out the meanings of unfamiliar words
1.041	Increase vocabulary by reading lots of different kinds of texts, studying how words work, and following the writing process
1.042	Increase vocabulary by reading lots of different kinds of texts, participating in discussions, and learning multiple meanings of words
1.043	Increase vocabulary by participating in book clubs, studying how authors use words, learning about synonyms (words that mean the same thing), antonyms (opposites), and homonyms (i.e. too, to, two)
1.044	Increase vocabulary by reading lots of different kinds of texts, studying how words work, participating in seminars, and writing for learning
1.051	Use the glossary to learn about new words in nonfiction text
1.052	Use a thesaurus to identify synonyms and antonyms of certain words
1.053	Use the glossary, dictionary, and thesaurus to check the meaning of new words
1.061	Read independently at least 20 minutes every day to improve reading fluency (rate, expression, and accuracy)
1.062	Read independently at least 20 minutes every day to learn more about various topics
1.063	Read independently at least 20 minutes every day and learn new vocabulary from that reading
<b>2.01</b>	Use fix-up strategies when what you read doesn't make sense (reread, check other sources, ask for help, put ideas in own words, ask yourself or author questions)
2.021	Preview nonfiction text and set a purpose for reading based on what you already know about the topic and the information you learned from previewing the text features

<b>2.022</b>	During Reading Strategies: Make predictions
<b>2.023</b>	During Reading Strategies: Ask questions that make you think deeply about what you have read before and after reading fiction texts
<b>2.024</b>	Locate information in nonfiction text that answers the question, "What do you want to learn?"
<b>2.025</b>	During Reading Strategies: Make connections
2.0261	Preview stories and make predictions about the characters, setting, problem, or major events before reading
<b>2.0262</b>	Preview nonfiction text features (title, headings, subheadings, captions) and predict the topics and main ideas of the selection
2.027	Explain why you choose what you will read and tell what you hope to find out
2.031	Read different types of fiction such as legends, novels, folklore, and science fiction
2.032	Read different types of nonfiction such as auto/biographies, informational books, diaries, and journals
2.033	Read different types of texts including poems
2.0331	Read and understand different kinds of poetry like haiku and concrete poems
2.034	Read different kinds of texts including drama (plays and skits)
<b>2.0341</b>	Read and understand plays and skits
<b>2.041</b>	Story Elements: Understands Plot
<b>2.042</b>	Story Elements: Understands Theme
<b>2.043</b>	Main Ideas and Supporting Details: Determine the main ideas and supporting details in nonfiction text and show where they are in the text
<b>2.0432</b>	Story Elements: Understands Main idea and supporting details
2.044	Interpret the author's choice of words
2.045	Identify a characters' point of view or the author's point of view and find examples in the text to support your opinion
<b>2.046</b>	Story Elements: Understands Conflict
<b>2.048</b>	Story Elements: Understands Mood

<b>2.05</b>	Make inferences, draw conclusions, and make generalizations about what you read, pointing out from where in the text you based that decision
<b>2.061</b>	Main Ideas and Supporting Details: Summarize the main ideas of nonfiction text so that you can remember what is important
<b>2.062</b>	Summarize main ideas of stories and find examples in the text to better understand and remember what you read
<b>2.07</b>	Determine if the information or ideas from a text is useful in answering your questions
<b>2.08</b>	Check out what the author means in a text or whether an author's statement was accurate by comparing information to other texts
2.091	Listen carefully to others and ask questions of the speaker
2.092	Listen carefully to others and summarize what was heard by paraphrasing or saying it in your own words
2.093	Listen to others and interpret what was meant by paying attention to both the speaker's words and body language
2.094	Listen carefully to others and try to identify the speaker's purpose
3.011	Analyze the impact of the author's word choice on the story
3.012	Identify a characters' motivation or the reason they act as they do (i.e. greed, fear, curiosity)
3.014	Look at a problem or situation from the points of view of different characters
3.015a	Recognize different types of nonfiction texts such as auto/biographies, informational books, and diary or journal entries
3.015b	Recognize different types of fiction texts like legends, novels, folklore, and science fiction
<b>3.016</b>	Make inferences or draw conclusions about characters, events, or themes
<b>3.02</b>	Analyze the characters, the events, and the plots in the same story and compare these elements between stories, finding examples in the text
3.03	Consider how the author's word choice and the illustrations bring characters to life, enhance the plot, and produce a response from the reader
3.04	Recognize advertising techniques in order to make informed judgments about what you buy

<b>3.05</b>	Find similarities and differences in the information found in nonfiction texts comparing the text features of graphs, charts, and maps and the information in the body of the text
<b>3.06</b>	Research a topic by developing guiding questions and exploring a variety of resources (articles, internet, almanac, encyclopedia, informational books)
<b>Writing</b>	
4.021	Organization: Present information clearly in both speaking and writing
4.022	Writing Variety: Discuss an idea in both speaking and writing
4.023	Writing Variety: Interview others
4.024	Writing Variety: Use discussion and writing to solve problems
4.025	Writing Variety: Use discussion to make decisions
4.026	Writing Variety: Ask open-ended questions
4.027	Writing Variety: Use discussion and writing to explain own learning
4.028	Writing Variety: Retell stories or recount events
4.03	Writing Variety: Use visual aids in presentations in order to keep the audience engaged and to accomplish the purpose
4.041	Writing Variety: Write and share stories and poems
4.043	Writing Variety: Share own stories with others
4.044	Writing Variety: Make presentations
4.051	Organization: Come up with own ideas for writing and organize ideas by brainstorming or discussing with a peer
4.052	Organization: Come up with own ideas for writing and organize ideas by completing a web
4.053	Organization: Come up with own ideas for writing and organize ideas by completing a story map
4.054	Organization: Come up with own ideas for writing and organize ideas by reading and taking notes
4.061	Focus: Write clearly with main ideas
4.062	Focus: Stay focused on the topic when writing
4.063	Focus: Stay focused on the topic when writing and include specific and relevant details
4.064	Focus: Stay focused on the topic when writing and include specific and relevant details, following a prewriting plan
4.071	Writing Variety: Write a variety of different types of texts including rules, instructions, journal entries, stories, and poetry by either selecting the topic or form

4.072	Writing Variety: Write a variety of different types of texts including nonfiction, diaries, and learning logs by either selecting the topic or form
4.073	Writing Variety: Write a variety of types of texts including personal and imaginative narratives by either selecting the topic or form
4.074	Writing Variety: Write a variety of different types of texts including skits and research reports by either selecting the topic or form
4.081	Style: Review own writing and make it better by improving the words used
4.0811	Organization: Retell nonfiction in a logical order
4.0812	Organization: Write using a logical sequence
4.082	Organization: Review writing and make it better by adding or changing transition words, or the order of events or ideas
4.084	Style: Review own writing and make it better by starting sentences in different ways (sentence fluency)
4.085	Support and Elaboration: Review and improve own writing by making what is written clearer or easier to understand
4.086	Support and Elaboration: Review and improve own writing by deciding if it has enough details and if the details are important to the topic
4.091	Writing Variety: Write learning log entries, letters of complaint, and letters of request
4.092	Writing Variety: Write personal and imaginative narratives
4.093	Writing Variety: Write research reports
4.101	Organization: Use the computer to gather information (internet or database) and to organize information into a table or spreadsheet
4.102	Conventions: Use technology tools to present information (i.e. PowerPoint, spreadsheet)
5.011	Conventions: Capitalize the names of languages and musical compositions
5.012	Conventions: Correctly use comas in a series (i.e. the ball, the bat, and the glove)
5.013	Conventions: Capitalize the names of nations (i.e. England, Canada, France)
5.014	Conventions: Use a comma in direct address (Frankie, where have you been?)
5.015	Conventions: Use commas and quotation marks correctly in dialogue ("Get out of here," the boy screamed.)

5.016	Conventions: Use apostrophes correctly in possessives (the cat's string- one cat, the cats' string -more than one cat)
5.021	Conventions: Correctly use pronouns in place of nouns (he, him, her, his, them, etc.)
5.022	Conventions: Use the correct form of the verb to match the subject (he runs NOT he run)
5.023	Conventions: When writing, stay in either the present or past tense (I <b>walked</b> down the street. There I <b>saw</b> (not see) a bird.)
5.024	Conventions: Keep the subject(s) in sentences consistent (i.e. nouns and pronouns. The <b>boys...They</b> )
5.031	Support and Elaboration: Use simple and compound sentences to add elaboration to a topic
5.032	Conventions: Correctly use verbs that don't follow the rules (I saw, NOT I seen)
5.033	Style: Review own writing and make it better by using adverbs appropriately
5.034	Conventions: Correctly use prepositions (i.e. he, she, her, his)
5.035	Conventions: Correctly use coordinating conjunctions (and, but, or, for, so, yet)
5.041	Focus: Write multiple paragraphs with: Topic Sentences
5.042	Focus: Write multiple paragraphs with: Concluding sentence that relates to the topic
5.043	Organization: Write multiple paragraphs with ideas that make sense and flow from one to the next
5.045	Support and Elaboration: Write multiple paragraphs with elaboration (an idea is well developed with details or examples)
5.051	Conventions: Check spelling by asking, "Does that look right?"
5.052	Conventions: Check spelling by using what you know about related words or word parts and their meaning(s)
5.061	Conventions: Reread own writing and check for misspelled words or word parts and their meaning(s)
5.062	Conventions: Read own writing and use a dictionary or thesaurus to correct some misspelled words
5.063	Conventions: Read over own writing and use resources in the classroom (such as spell check) to correct most misspelled words
5.07	Conventions: Use a rubric or checklist to proofread and check own writing for errors
5.0811	Organization: Retell nonfiction in a logical order
5.0812	Organization: Write using a logical sequence

5.082	Organization: Pay attention to the time order of events in own writing
5.083	Focus: Stay on topic in a conversation
5.091	Conventions: Use handwriting (cursive) that others can easily read
5.092	Conventions: Use word processing to create writing others can read

## Social Studies

Objective	Description
1.01	Locate, in absolute and relative terms, major landforms, bodies of water and natural resources in North Carolina.
1.02	Describe and compare physical and cultural characteristics of the regions.
1.03	Suggest some influences that location has had on life in North Carolina such as major cities, recreation areas, industry, and farms.
1.04	Evaluate ways the people of North Carolina used, modified, and adapted to the physical environment, past and present.
1.05	Assess human movement as it related to the physical environment.
2.01	Locate and describe American Indians in North Carolina, past and present.
2.02	Trace the growth and development of immigration to North Carolina, over time from Europe, Asia, and Latin America.
2.03	Describe the similarities and differences among people in North Carolina, past and present.
2.04	Describe how different ethnic groups have influenced culture, customs and history of North Carolina.
3.01	Assess changes in the ways of living over time and determine whether the changes are primarily political, economic or social.
3.02	Identify people, symbols, events, and documents associated with North Carolina's history.
3.03	Examine the Lost Colony and explain its importance in the settlement of North Carolina
3.04	Compare and contrast ways in which people, goods, and ideas moved in the past with their movement today.
3.05	Describe the political and social history of colonial North Carolina and analyze its influence on the state today.
4.01	Assess and evaluate the importance of regional diversity on the development of economic, social and political institutions in North Carolina

4.02	Identify religious groups that have influenced life in North Carolina and assess the impact of their beliefs.
4.03	Explain the importance of responsible citizenship and identify ways North Carolinians can participate in civic affairs.
4.04	Examine ways North Carolinians govern themselves and identify major government authorities at the local and state level.
4.05	Identify and assess the role of prominent persons in North Carolina, past and present.
5.01	Explain different celebrated holidays, special days, and cultural traditions in North Carolina.
5.02	Describe traditional art music and craft forms in North Carolina.
5.03	Describe and compare the cultural characteristics of regions with North Carolina and evaluate their significance.
6.01	Explain the relationship between unlimited wants and limited resources.
6.02	Analyze the choices and opportunity cost involved with economic decisions.
6.03	Categorize the state's resources as natural, human, or capital.
6.04	Assess how the state's natural resources are being used.
6.05	Recognize that money can be used for spending, saving and paying taxes.
6.06	Analyze the relationship between government services and taxes.
6.07	Describe the ways North Carolina specializes in economic activity and the relationship between specialization and interdependence.
6.08	Cite examples of interdependence in North Carolina's economy and evaluate the significance of economic relationships with other states and nations.
7.01	Cite examples from North Carolina's history of the impact of technology.
7.02	Analyze the effect of technology on North Carolina's citizens, past and present.
7.03	Explain how technology changed and influenced the movement of people, goods, and ideas over time.
7.04	Analyze the effect of technology on North Carolina citizens today.
7.05	Identify the advantages and disadvantages of technology in the lives of North Carolinians.

# Science

Objective	Description
1.01	<p>Observe and describe how all living and nonliving things affect the life of a particular animal including:</p> <ul style="list-style-type: none"> <li>• Other animals</li> <li>• Plants</li> <li>• Weather</li> <li>• Climate</li> </ul>
1.02	Observe and record how animals of the same kind differ in some of their characteristics and discuss possible advantages and disadvantages of this variation.
1.03	Observe and discuss how behaviors and body structures help animals survive in a particular habitat.
1.04	Explain and discuss how humans and other animals can adapt their behavior to live in changing habitats.
1.05	Recognize that humans can understand themselves better by learning about other animals.
2.01	Describe and evaluate the properties of several minerals
2.02	<p>Recognize that minerals have a definite chemical composition and structure, resulting in specific physical properties including:</p> <ul style="list-style-type: none"> <li>• Hardness</li> <li>• Streak color</li> <li>• Luster</li> <li>• Magnetism</li> </ul>
2.03	Explain how rocks are composed of minerals.
2.04	Show that different rocks have different properties.
2.05	Discuss and communicate the uses of rocks and minerals.
2.06	Classify rocks and rock-forming minerals using student-made rules
2.07	Identify and discuss different rocks and minerals in North Carolina including their role in geologic formations and distinguishing geologic regions.
3.01	Observe and investigate the pull of magnets on all materials made of iron and the pushes or pulls on other magnets.
3.02	Describe and demonstrate how magnetism can be used to generate electricity.

3.03	Design and test an electric circuit as a closed pathway including an energy source, energy conductor, and an energy receiver.
3.04	Explain how magnetism is related to electricity.
3.05	Describe and explain the parts of a light bulb.
3.06	Describe and identify materials that are conductors and nonconductors of electricity.
3.07	Observe and investigate that parallel and series circuits have different characteristics.
3.08	Observe and investigate the ability of electric circuits to produce light, heat, sound, and magnetic effects.
3.09	Recognize lightning as an electrical discharge and show proper safety behavior when lightning occurs.
4.01	Explain why organisms require energy to live and grow.
4.02	Show how calories can be used to compare the chemical energy of different foods.
4.03	Discuss how foods provide both energy and nutrients for living organisms.
4.04	Identify starches and sugars as carbohydrates.
4.05	<p>Determine that foods are made up of a variety of components:</p> <ul style="list-style-type: none"> <li>▪ Starches</li> <li>▪ Glucose</li> <li>▪ Protein</li> <li>▪ Fats</li> <li>▪ Carbohydrates</li> </ul>