USD 503 FOURTH GRADE GOALS

By the time your child has completed fourth grade, the things he or she will be expected to know and be able to do are:

READING

Use decoding skills that include knowledge of structural analysis automatically when reading.

Use knowledge of punctuation to read fluently.

Read expressively with appropriate pace, phrasing, intonation, and rhythm of speech.

Use knowledge of sentence structure and word-recognition skills to read fluently.

Adjust reading rate to support comprehension when reading narrative, expository, technical, and persuasive texts.

Determine the meaning of words or phrases by using context clues from sentences and paragraphs.

Identify and use synonyms, antonyms, homophones, and homographs to determine the meaning of words.

Use a dictionary or glossary to determine an appropriate definition of a word or use a thesaurus to expand vocabulary.

Use knowledge of word structure to determine meanings of unknown words:

- -compound nouns
- -contractions
- -root words
- -prefixes and suffixes.

Determine the meaning of figurative language by interpreting similes, metaphors, and idioms.

Identify the connotation and denotation of new words.

Identify characteristics of:

- -narrative text
- -expository text
- -technical text
- -persuasive text.

Understand the purpose of text features (e.g., title, charts and maps, table of contents, pictures, italics, glossary, index, headings, subheadings, topic and summary sentences, captions) and use such features to locate information in and to gain meaning from texts.

Use prior knowledge and content to make, revise, and confirm predictions.

Ask and answer literal, inferential, and critical thinking questions before, during, and after reading text.

Use information from the text to make inferences and draw conclusions.

Identify text structure (sequence, problem-solution, comparison-contrast, description, cause-effect).

Compare and contrast information in one or more texts and identify compare/contrast signal words.

Link causes and effects in narrative and expository texts.

Retell main ideas or events as well as supporting details in narrative, expository, and technical texts.

Identify topics, main ideas, and supporting details.

Distinguish between fact and opinion in various texts.

Identify the author's purpose (e.g., to persuade, to entertain, to inform).

Establish a purpose for reading or listening.

Follow directions explained in technical text.

Identify and describe characters' traits, and explain reasons for characters' actions and the consequences of those actions.

Identify and describe the setting of the story or literary text.

Identify or describe the major conflict in a story and how it is resolved.

Describe aspects of history and culture found in works of literature.

Compare and contrast various languages, traditions, and cultures found in literature.

Make connections between specific aspects of literature from a variety of cultures and personal experiences.

WRITING

Write narrative, expository, technical, and persuasive texts.

Choose and write about an idea and occasionally write about a given prompt (narrative, expository, technical).

Choose a position to write about on a selected topic (persuasive).

Use a variety of prewriting strategies.

USD 503 FOURTH GRADE GOALS

Identify what constitutes plagiarism.

Use transitions to allow ideas to flow smoothly within the piece.

Recognize an incomplete thought.

Use standard writing conventions with accuracy so that meaning is clearly conveyed.

Write with correct grammar and usage that contribute to clarity.

Use correct spelling even with more difficult words.

Use correct paragraph divisions to reinforce the organizational structure.

Write a piece in logical or sequential order.

Write using personal experience, observations, and prior knowledge (narrative).

Write in an expressive and individualized style with an awareness of the reader (narrative).

Maintain focused ideas with supporting details, which give the reader important information that he/she could not personally bring to the text (narrative, expository).

Use specific nouns, powerful verbs, and vivid adjectives in writing (narrative, expository).

Write a piece with a clear introduction, reasonable body, and conclusion (narrative, expository, persuasive).

Choose words and phrases appropriate for purposes and audiences (narrative, expository, persuasive).

Write grammatically correct sentences that vary in length and structure to make the reading pleasant and natural (narrative, expository, persuasive).

Write sentence beginnings that relate to and build upon previous sentences (narrative, expository, persuasive).

Use dialogue appropriately (narrative, persuasive).

Express information in own words using appropriate details with simple and compound sentences (expository).

Identify references for all information used or reproduced from sources (expository).

Construct a simple bibliography with author, title, publisher, year, and/or Web site name (expository).

Begin to write to convey emotion and personality to inform the reader (expository).

Write using personal experience, observations, and begin to incorporate researched information and formally recognize source (expository, persuasive).

Write paragraph(s) with a topic sentence that includes supporting details in a logical order (expository, persuasive).

Use supporting details that are concise, accurate, and helps to clarify the main idea (technical).

Write paragraph(s) or list(s) about one idea (technical).

Use transitions to connect points within the piece (technical).

Write with an awareness of purpose and audience (e.g. letters, simple reports, directions) (technical).

Attempt to write with authority so the voice is not distracting (technical).

Write compact sentences or phrases that make the point clear (technical).

Use graphic devices (technical).

Select words that convey the writer's message clearly and precisely (technical).

Use details to support the author's position (persuasive).

Begin to explore two sides of an issue and build an argument (persuasive).

Write to convey opinion and to convince the reader to agree with the author (persuasive).

MATH

Know, explain, use equivalent representations for, compare, and order:

- -whole numbers 0 through 100,000
- -fractions greater than or equal to zero (halves, fourths, thirds, eighths, tenths, sixteenths, hundreths) including mixed numbers
- -decimals greater than or equal to zero through hundredths place and when used as monetary amounts.

Identify, read, and write numbers using numerals, words, and expanded form from hundredths place through one hundred thousands place.

Identify any whole number as even or odd.

Identify the place value of digits from hundredths place through one hundred thousands place.

Classify subsets of numbers as whole numbers, fractions (including mixed numbers), or decimals.

Use these properties with whole numbers:

- -order properties of addition and multiplication
- -zero property of addition: 4+0=4
- -property of one for multiplication: 1 x 3 = 3
- -associative properties of addition and multiplication: (3+2) +4 = 3 + (2+4)
- -symmetric properties of addition and multiplication:

USD 503 FOURTH GRADE GOALS

10=2 + 8 is the same as 2 + 8= 10
-zero property of multiplication: 9 x 0 = 0
-distributive property: 6(7 + 3) = (6 x 7) + (6 x 3).

Estimate whole number quantities 0 through 10,000, fractions (halves, fourths, thirds), and money through $1,000.

Recognize and explain the difference between an exact and an approximate answer.

Select from an appropriate range of estimation strategies and determine if an estimate is an overestimate or underestimate.

State and use basic multiplication facts through 12 x 12 and the corresponding division facts.

Skip count (multiples) by 2's, 3's, 4's, 5's, and 10's

Add and subtract whole numbers 0 through 100,000 and when used as monetary amounts.

Multiply through a three-digit whole number by a two-digit whole number.

Multiply whole dollar monetary amounts (through three-digits) by a one- or two-digit whole number.

Multiply monetary amounts less than $100 by whole numbers less than ten.

Divide through a two-digit whole number by a one-digit whole number with a one-digit whole number quotient with or without a remainder.

Add and subtract fractions greater than or equal to zero with like denominators.

Figure correct change through $20.00.

Identify multiplication and division fact families.

Read and write the same addition, subtraction, multiplication, or division expression horizontally, vertically, and with different operational symbols (4 x 3 is the same as 4 · 3).

Show the relationship between these operations with the basic fact families, including the use of mathematical models:
-addition and subtraction
-addition and multiplication
-multiplication and division
-subtraction and division.

Find factors and multiples of whole numbers from 1 through 100.

Use concrete objects and drawings to work with types of patterns:
-AB (1-2, 1-2…)
-ABC (1-2-3, 1-2-3…)
-AAB (1-1-2, 1-1-2…)
-growing pattern (7, 9, 11…).

Generate patterns with attributes:
-counting numbers (multiples and factors)
-increasing or decreasing numbers (11, 22, 33…)
-geometric shapes with one or two attribute changes
-measurements
-money, and time
-things related to daily life (water, life, food cycles)
-things related to size, shape, color, texture, movement.

Identify, state and continue a pattern presented in various formats:
-numeric list or table
-visual (picture, table, or graph)
-verbal
-written
-movement.

Generate repeating, growing, and input/output table patterns.
-

Explain and use variables and symbols to represent unknown numbers from 0 through 1,000.

Solve one-step equations using whole numbers with one variable and a whole number solution that:
-find the unknown in a multiplication or division equation based on the basic facts (60 = 10 x n)
-find the unknown in a money equation using multiplication and division basic facts and addition and subtraction with values through $10 (8 quarters + 10 dimes = y dollars)
-find the unknown in a time equation involving whole minutes, hours, days, and weeks with values through 200 (180 minutes = y hours).

Compare two whole numbers 0 through 10,000 using =, <, >.

Read and write whole number equations and inequalities using mathematical vocabulary and notation (15 = 3 x 5 is the same as fifteen equals three times five).

State mathematical relationships between whole numbers 0 through 1,000.

Find the values, and determine and state the rule, using symbolic notation with one operation of whole numbers from 0 through 200 using an input/output table.

State the rule for numerical patterns using whole numbers 0 through 200 with one operation (if the pattern is 46, 68, 90…then the rule is add twenty-two to the number before).

Use an input/output table to identify, plot, and label ordered pairs in the first quadrant of a coordinate plane.

Know, explain and use models to represent mathematical concepts:
-concrete objects
-pictures
-number lines
-hundred charts
-coordinate planes
-measurement tools
-multiplication arrays
-division sets

USD 503 FOURTH GRADE GOALS

-money models
-place value models
-fraction and mixed number models
-input/output tables
-geometric models
-graphs
-frequency tables
-line plots
-Venn diagrams.

Create a mathematical model to show the relationship between two or more things.

Recognize, draw, describe, and investigate the properties of circles, squares, rectangles, triangles, ovals, rhombi, octagons, hexagons, and pentagons.

Recognize and describe the square, triangle, rhombus, hexagon, parallelogram, and trapezoid from pattern blocks.

Recognize cubes, rectangular and triangular prisms, cylinders, cones, and spheres using the terms faces, edges, and vertices.

Recognize:
-squares, rectangles, rhombi, parallelograms, trapezoids as special quadrilaterals
-similar and congruent figures
-points and lines (intersecting, parallel, perpendicular) line segments, and rays.

Determine and draw lines of symmetry in geometric shapes and real-world objects.

Use whole number estimates for length, width, weight, volume, temperature, time, perimeter, and area using standard and nonstandard units.

Select, explain the selection of, and use measurement tools to measure:
-length, width, and height to the nearest fourth of an inch or to the nearest centimeter
-volume to the nearest cup, pint, quart, or gallon; to the nearest liter; or to the nearest whole unit of a nonstandard unit
-weight to the nearest ounce or pound or to the nearest whole unit of a nonstandard unit of measure
-temperature to the nearest degree
-time including elapsed time.

State:
-the number of weeks in a year
-the number of ounces in a pound
-the number of milliliters in a liter, grams in a kilogram, and meters in a kilometer
-the number of items in a dozen.

Convert:
-within the customary system: inches and feet, feet and yards, inches and yards, cups and pints, pints and quarts, quarts and gallons
-within the metric system: centimeters and meters.

Find:
-the perimeter of two-dimensional figures given the measures of all the sides
-the area of squares and rectangles using concrete objects.

Describe a transformation using cardinal points or positional directions (e.g., go north three blocks and then west four blocks or move the triangle three units to the right and two units up).

Recognize, perform, and describe one transformation (flip, turn, slide).

Recognize three-dimensional figures (rectangular prisms, cylinders) and concrete objects from various perspectives.

Use a number line to model basic multiplication and division facts.

Use points in the first quadrant of a coordinate plane to identify locations.

Identify and plot points as ordered pairs on a coordinate plane.

Organize whole number data using an input/output table and plot the ordered pairs on a coordinate plane.

Recognize that the probability of an impossible event is zero and that the probability of a certain event is one.

List all possible outcomes of a simple event.

Recognize and state the probability of a simple event in an experiment or simulation.

Organize, display, and read data in a variety of types of displays:
-graphs using concrete objects
-pictographs
-frequency tables
-horizontal and vertical bar graphs
-line and circle graphs
-Venn diagrams
-charts and tables
-line plots.

Collect data and explain the results.

Using numbers 0 through 1,000 find:
-minimum and maximum values
-range
-mode
-median, with an odd number of data points
-whole number mean.

Solve real-world problems.

SOCIAL STUDIES

Evaluate rules and law: the law or rule serves the common good, the law or rule must be possible to follow.

Define shared ideals across regions in the United States (e.g., the right to vote, freedom of religion and speech).

USD 503 FOURTH GRADE GOALS

Recognize the United States Constitution as the document that defines the rights and responsibilities of citizens in the United States.

Determine how people can participate in government and why it is important.

Recognize how individuals have a civic responsibility for meeting the needs of communities.

Describe the function of state governments.

Define *capital* as the location of state and national government.

Define *capitol* as the building in which government is located.

Know that every spending and saving decision has an opportunity cost.

Identify examples of how natural, capital, and human resources are used in production of goods and services.

Trace the production, distribution, and consumption of a particular good in the state or region.

Give an example of economic specialization that leads to trade between regions of the United States (e.g., Kansas produces wheat and beef and trades with other regions).

Define the characteristics of an entrepreneur and give an example of someone who shows those characteristics.

Define market economy as an economic system in which buyers and sellers make major decisions about production and distribution, based on supply and demand.

Discuss ways workers can improve their ability to earn income by gaining new knowledge, skills, and experience.

Analyze the costs and benefits of making a choice.

Apply geographic tools (grid systems, symbols, legends, scales, compass rose) to construct and interpret maps.

Use a data source as a tool.

Identify and give examples of the difference between political and physical features within a region.

Identify major landforms and bodies of water in regions of the United States.

Locate major physical and political features of regions from memory (e.g., Appalachian Mountains, 50 States, Kansas River, Grand Canyon, Prime Meridian, Arctic Circle, San Francisco, Yellowstone National Park, Mississippi River).

Identify and compare the physical characteristics of eastern to western Kansas and regions of the United States (e.g., location, land and water features, climate, vegetation, natural resources).

Identify the human characteristics of Kansas and regions of the United States (e.g., people, religions, languages, customs, economic activities, housing, foods).

Identify and describe the physical components of Earth's atmosphere, land, water, biomes (e.g., temperature, precipitation, wind, mountains, plains, oceans, plants, habitats).

Explain features and patterns of Earth's surface in terms of physical processes (weathering, mountain building).

Explain the functions and relationships of ecosystems in Kansas and across the United States (e.g., food chains, water, link between flora and fauna and the environment).

Describe the types and characteristics of political units (e.g., city, county, state, country).

Identify conditions that determine the location of human activities (e.g., resources, population, transportation).

Examine natural resource challenges and ways people have developed solutions as they use renewable and nonrenewable resources (e.g., lack of water, limitations of fossil fuels).

Research the contributions made by notable Kansans in history.

Use traditional stories from regions of the United States to help define the region.

Describe the observations of the explorers who came to what was to become Kansas.

Describe how communication and transportation systems connect Kansas to other regions, past and present (e.g., trails, Pony Express, telegraph, steamboats, railroad lines, highway systems, air transportation, Internet).

Compare and contrast the purposes of the Santa Fe and Oregon-California Trails.

Describe life on the Santa Fe and Oregon-California Trails.

Compare the various reasons several immigrant groups settled in Kansas (e.g., English, German, German-Russian, French, Swedish, Mexican, African American, Vietnamese).

Explain the economic and cultural contributions made by immigrant groups in Kansas.

Explain the origin of the name "Kansas".

Describe the history of the Kansas state song, "Home on the Range".

Create and use historical timelines.

Develop a thesis statement around a historical question.

Understand the difference between inferred information and observed information.

USD 503 FOURTH GRADE GOALS

Identify and compare information from primary and secondary sources.

Use research skills to interpret an historical person or event in history and note the source.

SCIENCE

Ask questions that he/she can answer by investigating.

Plan and conduct a simple investigation.

Use appropriate equipment, tools, and safety procedures to gather data.

Communicate, critique, analyze his/her own investigations, and interpret the work of other students.

Observe and measure properties of objects.

Describe and classify objects by more than one property.

Observe and record how one object interacts with another.

Recognize and describe the differences between solids, liquids, and gases.

Move objects by pushing, pulling, throwing, spinning, dropping, and rolling and describe the motion.

Observe that a force (a push or a pull) is applied to make objects move or stop moving.

Construct a simple, parallel, or series circuit.

Observe organisms and compare and contrast different structural characteristics and the functions of these structures.

Compare basic needs of different organisms in their environment.

Discuss ways organisms use their senses to survive in their environments.

Investigate the properties of a variety of soils.

Describe properties of different kinds of rocks.

Discuss that the sun provides light and heat to maintain the temperature of the earth.

Describe changes in the surface of the earth as a result of erosion.

Observe, describe, and record daily and seasonal weather changes.

Identify a simple design problem.

Discuss that science is a way of investigating questions.

Invent a product to solve problems.

Work with others to solve problems.

Develop an awareness that women and men of all ages, backgrounds, and ethnic groups engage in a variety of scientific and technological work.

Investigate how scientists use tools to observe.

Discuss that safety involves freedom from danger, risk, or injury.

Assume some responsibility for his/her own health.

Define types of pollution and develop personal actions to solve pollution problems in and around the neighborhood.

Practice reducing, reusing, and recycling.

Observe historical samples of people in science who have made contributions.