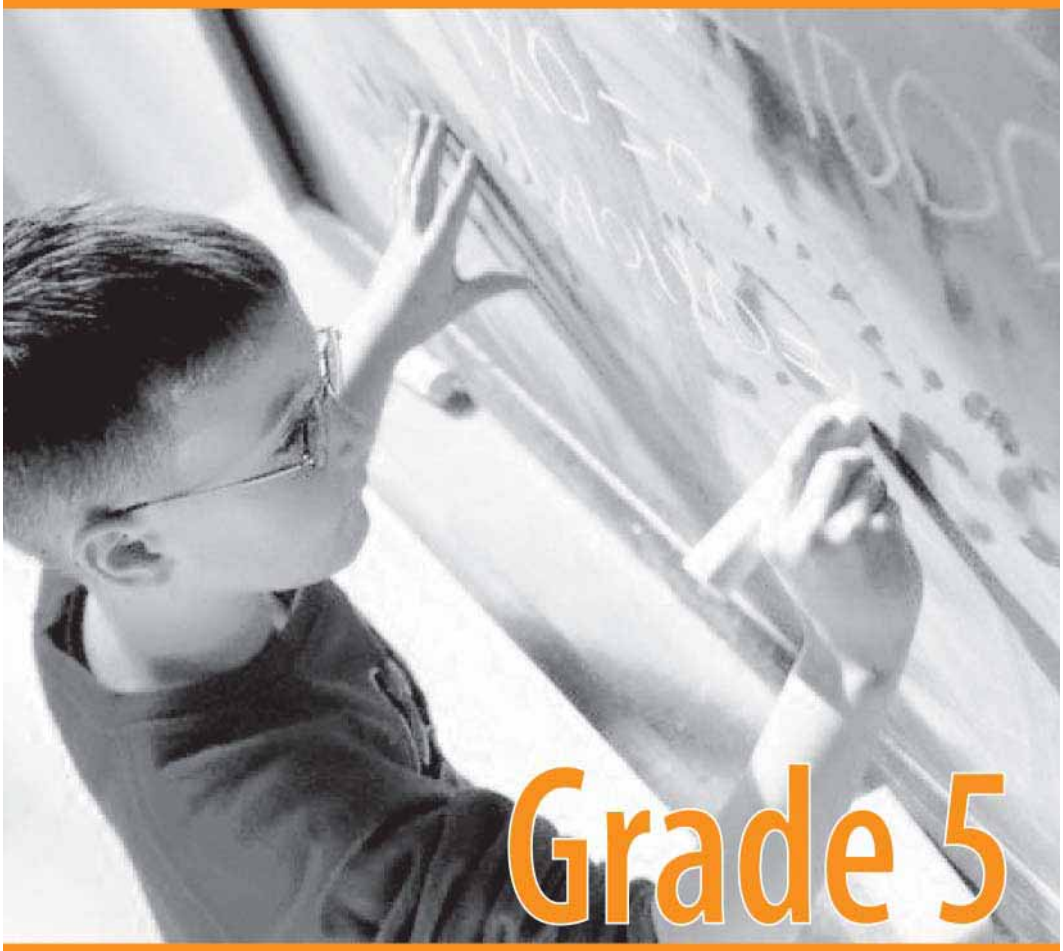
Just for Parents

A Guide to the Kansas Curricular Standards



Grade 5

Provided by the Kansas State Department of Education

Kansas state department of Education

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Introduction

This booklet is intended to help you understand what is required for fifth grade students to meet the educational standards set by the Kansas State Board of Education. The State Board of Education has set high standards for all students in the subject areas of reading, mathematics, science, history and government, economics, geography, and writing. The standards are general statements of what students should know and be able to do at each grade level. Schools use the standards as a guide for what they teach.

To see that students are meeting the education standards set by the State Board, tests were developed from the standards adopted by the Kansas State Board. All accredited schools in the state are required to administer the tests, which are known as state assessments. The questions included on the assessments represent the knowledge students are expected to have in each subject area, but do not include every item in the state standards. This booklet only includes those items covered on the state assessments at the fifth grade level in reading and mathematics.

For the 2007-2008 school year, state assessments will be given in the fifth grade in the subject areas of reading and mathematics. Your school will give the fifth grade assessments during a Kansas State Board established assessment period. Your school will select the specific assessment period based on the school's schedule.

The knowledge and skills assessed by the fifth grade assessment may not have been learned entirely in the fifth grade, but are expected to have been a part of your child's studies in the grades prior to and including Grade 5.

All students are expected to take part in the state assessments. To include students with special needs who cannot benefit from taking the general assessments the state has developed modified and alternate assessments. Both

the modified and alternate assessments are based on the general education standards. The modified and alternate assessments are for students with disabilities so significant that they cannot participate in the general assessments. About 3 percent of the student population will qualify for the modified and alternate assessments.

Extended curricular standards have been developed for students who participate in the alternate assessment. Alternate assessments are intended for students with the most severe disabilities and are designed to assess the student's achievement of the standards at the appropriate level of complexity. It is expected that less than 1 percent of the student population will be eligible to participate in the alternate assessments.

The Kansas State Board of Education's mission of helping all students learn is shared by Kansas schools. Kansas educators are eager partners with parents and caregivers in the education and development of the children of our state. If you have questions about your child's learning, development, or progress in school, please talk with your child's teacher, school principal, or school counselor.

Mathematics

Kansas students are expected to know selected skills in math and to display those skills at different levels of complexity depending upon their grade level. In the fifth grade, students are expected to know and be able to do the following in math:

- Understand how to express whole numbers, fractions and decimals in different representations. For example ¼ is the same as .25, which is the same as 4÷16.
- Estimate using whole numbers, fractions, decimals, and money.
- Given two or more whole numbers, find the greatest common factor (the largest number that will divide evenly into each of the numbers given) and the least common multiple (the lowest number that will divide evenly by each of the numbers given).
- Understand and use variables and symbols to represent unknown whole number values. For example, if a dog eats ¼ pound of food in a day, you would express the amount of food eaten by the dog in n number of days as ¼ x n.
- Using addition, subtraction and multiplication, solve one-step equations involving one unknown quantity and one whole number (e.g., X - 6 = 14).
- Understand how to use a function table to identify, plot and label whole number ordered pairs on a coordinate grid (or graph).
- Recognize and describe three-dimensional figures (cubes, spheres, cylinders, etc.) using the following terms: faces (the sides of the figure), edges (where two faces join) and vertices (where the edges meet, a corner point).
- Make conversions using inches, feet and yards; cups, pints, quarts and gallons; and ounces and pounds.
- Recognize three-dimensional figures from different perspectives (ex: top, bottom, side, corner).

- Find minimum (smallest value), maximum (largest value), mean (the sum of the values divided by the total number of values), median (the middle number), mode (most common) and range (difference between the greatest and the least) for a whole number data set of up to 20 whole numbers.
- Given a variety of real-world situations, determine if an estimate or an exact answer is needed, and do the necessary computations using mental math, paper and pencil, concrete materials and appropriate technology.
- Solve real-world problems by using addition, subtraction, multiplication and division with monetary and non-monetary values.
- Solve problems using plane figures (circles, squares, rectangles, triangles, ellipses, rhombi, parallelograms, hexagons, pentagons) using the line(s) of symmetry (a line that divides a figure into two equal parts that are mirror images of each other).
- Solve problems by applying appropriate measurements and measurement formulas. For instance, length to the nearest eighth of an inch or to the nearest centimeter; weight to the nearest pound or gram; perimeter of squares, rectangles, and triangles; and area of squares and rectangles.
- Use data from various charts, graphs, tables, and diagrams to make reasonable inferences, predictions and decisions.

Reading

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

- Use clues from the surrounding words to determine the meaning of an unknown word or phrase.
- Understand how adding beginnings or endings to words change the meaning of the words.
- Understand how information located in titles, graphs and charts, tables of contents, and pictures/illustrations can assist in understanding the meaning of the text.
- Make a prediction or draw a conclusion based on the material read.
- Identify how the author has organized information in the material read.
- Explain how topics, themes, problems, characters, or relationships are alike or different.
- Understand how one or more things can have an effect on the outcome of another.
- Explain main ideas or events in a story and provide supporting details from the material read.
- Understand and explain what a story is about.
- Understand and identify the author's purpose in writing a given text.
- Understand the difference between fact and opinion and recognize propaganda (the spreading of information or ideas for the purpose of helping or hurting a cause, institution, or person).
- Identify characters from the story, tell about them, and explain their actions.
- Describe the location and time of a story.
- Identify or describe the major conflict in a story and explain how it is resolved.

Helping Your Child Succeed

Keeping on top of the work your child is completing at school is a good start in helping your child have a successful fifth grade year. Building some simple activities into your at-home time can ensure your child leaves the fifth grade fully prepared for the next level of instruction.

Helping with Math

As you go about your daily activities, try to find opportunities to have your child practice new math concepts. For instance, when you're having pizza for dinner, have your child practice fractions. This can be done by asking your child to count the number of slices in the pizza. Then ask how many people can be served if each person gets 1/8 of a pizza? If you make two pizza's cut one into eighths and the other into twelfths. Ask your child to determine how many slices of each pizza you would need to have the same amount of pizza.

Similar methods can be used to help your child understand lines of symmetry. A line of symmetry divides a figure into two equal parts that are mirror images of each other. Using an uncut pizza,

cake, or pie, have your child determine the different ways the item can be cut to create two equal pieces, using only one cut.

Estimation is another skill your child can practice at home. If your child is reading a novel, have him or her record the number of pages read for the first two days. Ask your child to estimate how many pages could be read in a week. You can also have your child select five to six items in a catalog and then estimate their total costs. Be sure to have your child explain how he or she arrived at the estimate.

In the fifth grade, your child will spend time learning about variables in mathematics. Using variables in common, every-day situations can help your child to more easily grasp this concept. For instance, if you go to McDonald's and order chicken McNuggets and you get six nuggets, ask your child to determine how many nuggets he or she would eat in a year if you went to McDonald's *n* times. *N* is the variable in this equation, but your child should be able to tell you that the number of nuggets eaten in a year would be 6 x n. Another example might use cookies. When you open a package of cookies, make note of the number you and/or your child eat from the package. When you're done eating your portion of cookies have your child count the number of cookies still in the package. Knowing that you've eaten, for example, six cookies and there are, for example, 14 cookies left in the package, ask your child what the equation would be to determine the number of the cookies originally in the package, and ask your child to identify the variable in the equation (x – 6 = 14).

Another skill that will be important to learn in the fifth grade is the use of function tables and a coordinate grid. The coordinate grid is what most people think of as a graph. A function table lists the values, or points, to be graphed. For instance, if your child is selling candy bars for a fund raiser, he or she could create a function table for the values represented by the

money earned from selling 1, 2, 3, 4, and 5 candy bars. If the cost of a candy bar is $2.00, the function table would look like this:

Given this function table, the ordered pairs on the graph would be (1,5), (2,4), (3,6), (4,8), (5,10). Your child can then graph those points on the grid. You could also ask your child to use graph paper to make a coordinate grid on which to map your back yard. Different points on the grid can represent landmarks such as a tree, a swing set, a flower bed, or other attributes. This may be more fun for your child if you combine it with a "treasure hunt." You can hide something in the back yard and use your child's map to provide clues to finding it by taking your child to different points on the map. You could also have your child hide something in the yard and create a map of clues for you to follow.

Conversions are another area your child will be studying in fifth grade math, and it's an area that can easily be practiced at home. The kitchen is an especially good place to practice this skill. If you're making a gallon of lemonade, ask your child to determine how many quarts would be needed to fill the gallon pitcher. If you're making hamburgers for dinner, have your child determine how many ounces of meat are needed for a quarter pound burger. Sewing and wood work projects also offer a good opportunity to have your child make conversions from inches to feet and from feet to yards.

As always, look for ways to incorporate simple math into everyday activities. For instance, while folding laundry, have your child count the items folded. How many more pairs of slacks were folded than shirts? How many pairs of socks were folded, and if x pair of socks were folded, how many individual socks does that make?

Helping with Reading

When it comes to encouraging your child to read, nothing says more than the example you set. Let your child see you reading for work and for pleasure. You may want

to set up a reading area in your home, where books and magazines of interest to your child are available. If your child has a special hobby, consider a magazine subscription related to that hobby.

If your child is reading a particular novel, consider reading it yourself, as well. That will allow you to discuss the book with your child and participate in some simple exercises that will help your child develop comprehension skills. For instance, ask your child what he or she thinks will happen next in the book. Have your child point out specific key words or phrases in the book that helped in reaching that conclusion. Ask your child to highlight the words that provide clues as to the environment, time of day, year, or historical period being portrayed in the book.

Have your child describe characters in the book to you. Do the characters remind your child of anyone he or she knows? What characteristics do they share? Which character does your child feel is most like him or herself?

You can pass time during long car drives, or just sitting around your home, by playing

Free Tutoring

HomeworkKansas provides expert tutoring in core subjects to every Kansas student, Grades 4 -12. HomeworkKansas, a service of the State Library of Kansas, allows students to connect to an expert tutor for one-to-one homework help. Tutoring is provided by a live tutor via the Internet. Students simply go to the HomeworkKansas website at www.homeworkkansas.org and enter their Kansas library card number. Students can register and receive a Kansas library card number instantaneously at the same site. To better match students and their homework needs with the best available tutor, students are asked for their grade level and their homework topic. The student then enters the online classroom and, using chat technology and an online whiteboard, the tutoring session begins. All tutors are certified and have completed a third party background check. Tutors are available seven days a week from 4:00 p.m. – 11:00 p.m. and from 4:00 p.m. – 9:00 p.m., Sunday – Thursday in Spanish.

a simple game that will help your child understand topic and themes. Ask your child to name five movies. Then, have him or her complete this sentence: "(movie title) is a story about _____." Try to have your child use just one word to describe the main idea of the movie – courage, revenge, desire, dreams, etc.

While you're watching television, or even reading the newspaper or a magazine, have your child find examples of fact, fiction, opinion, and propaganda. Fact can be found in the news portions of the paper or magazine and the news programs on television. Fiction is displayed in many television programs, as well as the comics section of the newspaper. Editorials, both written and broadcast, are a good example of opinion, and advertisements generally use propaganda as a sales technique.

As testing time draws near, make sure your child is physically prepared, as well as mentally prepared. Students need to be well rested to fully concentrate during test time, so make sure your child gets plenty of sleep in the week leading up to a test. Also be sure your child is awake on test day in plenty of time to eat a good breakfast and not have to rush in the morning. Most importantly, let your child know you have faith in his or her ability to do well.

For More Information

More detailed information on the Kansas Curricular Standards and the state assessments is available on the Kansas State Department of Education web site at www.ksde.org.

If you have questions regarding standards and assessments, you may contact the Kansas State Department of Education at 785-296-3201.

Kansas State Board of Education
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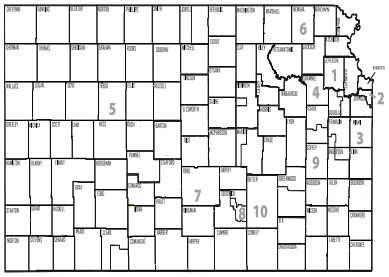
Education Priorities for a New Century

Ensure that all students meet or exceed high academic standards and are prepared for their next steps (e.g., the world of work and/or post-secondary education)

- Redesign the delivery system to meet our students' changing needs
  - Develop and implement policy on academic/vocational integration
  - Identify, replicate, and promote best practices that can be targeted to specific populations (e.g., high schools; middle school reading; early childhood)
  - Study and clarify regulations and identify challenges
  - Examine the definition of a classroom in a redesigned system
- Provide an effective educator in every classroom
  - Develop a policy on alternative compensation
  - Identify obstacles
  - Assess the effectiveness of current professional development practices
  - Identify, replicate, and promote best practice in teacher preparation and professional development
  - Improve the support system for teachers
  - Develop recruitment strategies for future teachers
  - Assess and improve the alternate licensure program
  - Promote loving, safe, supportive and nurturing environments
- Ensure a visionary and effective leader in every school
  - Identify, replicate, and promote best practices in preparation and performance
  - Identify and grow visionary leaders focused on learning
  - Study the impact of current leadership programs
- Improve communication with all constituent groups and policy partners
  - Align pre-Kdg through 16 systems of support in collaboration with identified partners (e.g., Kansas Board of Regents, Social and Rehabilitative Services, etc.)
  - Develop a structure for regularly communicating about education with the legislative leadership of both parties with a focus on areas of common interest
  - Keep the public informed on key policy areas
  - Resume focus group meetings in each board member district and periodic meetings with the media
  - Improve communication of relevant information with school faculty

Kansas State Board of Education
Adopted 9/2007

Board Members



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