

Gwinnett's curriculum for grades K–12 is called the Academic Knowledge and Skills (AKS). The AKS for each grade level spell out the essential things students are expected to know and be able to do in that grade or subject. The AKS offer a solid base on which teachers build rich learning experiences. Teachers use curriculum guides, textbooks, technology, and other materials to teach the AKS and to make sure every student is learning to his or her potential.

The Academic Knowledge and Skills (AKS) were developed by our teachers, with input from our parents and community, in response to Gwinnett County Public Schools' mission statement:

The mission of Gwinnett County Public Schools is to pursue excellence in academic knowledge, skills, and behavior for each student resulting in measured improvement against local, national, and world-class standards.

Read on to learn more about what your child will learn during 4th grade and how you can support your child's learning at home. We encourage you to talk to your child about what he or she is learning.

WELCOME TO 4TH GRADE!



4TH GRADE PARENT AKS BROCHURE



Academic
Knowledge
and Skills
2010–11

Language Arts



Learning to read and write is the basis for *all* learning. In 4th grade, students work on reading and writing skills that will lead to success in subsequent grade levels. Specifically, the focus is on word analysis, as well as reading and writing with accuracy and expression. Students use reading and writing skills throughout the school day as part of Language Arts, Mathematics, Science, and Social Studies classroom activities. Activities include shared reading and writing experiences, choral reading, small-group guided reading, and independent reading and writing times—all within the context of classroom instruction and Writing Workshop.

Learn more about the Language Arts AKS online.

By the end of 4th grade, all students are expected to:

- Use words, patterns in words, and word meanings to read fluently and comprehend effectively;
- Use grade-appropriate grammar and spelling skills in writing;
- Acquire skills to become lifelong readers and writers, such as self-selection of books, self-monitoring to correct errors when reading and writing, and talking with and listening to peers about one's reading and writing; and
- Use reading and writing to communicate through listening, speaking, and viewing.

Balanced Literacy

Teachers follow these principles to determine the best teaching methods, strategies, and materials to meet the needs of our students:

- Learning to read and write is a complex process with many facets.
- Reading and writing are about experiencing language, not merely practicing isolated skills.
- Reading and writing are interconnected forms of communication that emerge from listening and speaking.
- There is no “one way” to teach reading or writing. Teachers will incorporate a wide variety of strategies to teach every student.
- Learning to read and write occurs along a developmental progression of stages.
- All children can learn to read and write along this developmental progression with appropriate accommodations.
- Knowing where each child is developmentally enables teachers to evaluate, plan, and teach appropriately.
- Children should be immersed in a print-rich environment.
- Reading and writing to, with, and by children should occur daily.
- Each day, children should have opportunities to read materials they select themselves and write on self-selected topics.
- Reading and writing are integrated into all subject areas.



Literacy Tips
for Parents

- Your child may enjoy reading and discussing a book with friends. Check your school and public library for opportunities or help your child start his or her own club.
- Read daily as a family. Share your own favorite childhood books with your child.
- Give books as special gifts and help your child build a personal library.

Listening, Speaking, and Viewing

4th graders listen to and write about a variety of literary forms, such as stories and poems, in a variety of fiction and nonfiction genres. These include folk tales, tall tales, biographies, and reports. They learn to listen attentively in order to respond to questions and directions. Students communicate in conversation with descriptive language by relating experiences and retelling stories. They analyze various literary and nonliterary elements, such as character, setting, plot, and theme, cause/effect, and main idea and supporting details.

Reading

Strategies and Comprehension

4th graders read and analyze a variety of both literary and informational texts. These include tall tales, folktales, news items, and reports. Students relate themes in what they read to personal experience and make well-developed connections. 4th graders are expected to read grade-level texts with appropriate accuracy, speed, and expression in order to effectively comprehend what they read.

Word Work, Fluency, and Vocabulary

By the end of the year, 4th graders should be able to read and spell all common sight words and words frequently occurring in writing. Ask your child's teacher for a list of these common sight words. During the 4th grade year, teachers assess students' knowledge of these words and their ability to use them easily in their reading and writing.

Writing

At this age, students write fiction and nonfiction stories and reports with well-defined ideas and organizational structures. 4th graders use the elements of writing style— audience awareness, voice, and rich, descriptive language— to make their writing interesting and informative. They use grade-appropriate grammar, spelling, capitalization, and punctuation in their writing. Students revise and edit their own work.

Suggested Reading for Your 4th Grade Student

Porch Lies: Tales of Slicksters, Tricksters, and Other Wily Characters

The Cricket in Times Square

Henry Huggins

Beezus and Ramona

The Magic School Bus Lost in the Solar System

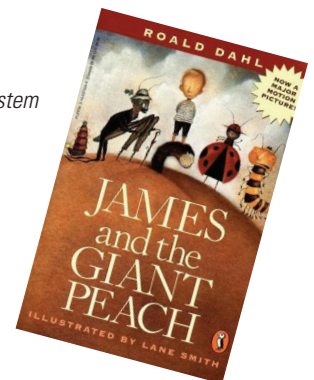
James and the Giant Peach

Math Curse

Jumanji

Shiloh

Bunnicula Meets Edgar Allan Crow



More Great Books for Children

Georgia Book Award Books:

www.coe.uga.edu/gcba

100 Best Books:

www.teachersfirst.com/100books.cfm

American Library Association Notable Books for Children:

www.ala.org/ala/awardsgrants

Mathematics



Through GCPS' K–12 Mathematics program, students will become confident and competent mathematical problem-solvers. They will be able to compute and have a deep conceptual understanding of numbers. Students will think critically. They will communicate their thoughts and mathematical reasoning appropriately as they prepare to compete globally.

Learn more about the Math AKS online.

The 4th grade curriculum focuses on the areas of process skills, numbers and operations, geometry (shapes), measurement and time, and algebra (patterns). By the end of 4th grade, students should be able to do the following:

- Compute operations— addition, subtraction, multiplication, and division— with fluency;
- Add and subtract decimal fractions and mixed numbers with common denominators;
- Use the order of operations, including parentheses, to compute;
- Use mental math and estimation strategies to compute;
- Measure weight and mass;
- Use standard and metric units to measure the weight of objects by grams, kilograms, ounces, pounds, and tons;
- Classify geometric figures, including quadrilaterals (parallelograms, squares, rectangles, trapezoids, and rhombi);
- Graph ordered pairs on a coordinate plane;
- Use a symbol to represent varying quantities; and
- Analyze and compare features of graphs.

4th grade students use a number of strategies and tools as they learn math. They use a variety of representations to demonstrate their knowledge, such as concrete/pictorial, verbal/written, and numeric/data-based. Students use graphs, scales, and fractional models. They use technology, data, and problem-solving strategies.



Math Tips for Parents

- Look for graphs in news stories. Talk about how they are used and what they mean.
- When you fill your gas tank, ask your child to calculate gas mileage.



Social Studies

GCPS' Social Studies program prepares students to participate as constructive citizens in a democratic society. Students understand their role and responsibility as citizens. They discover America's heritage and its role and responsibility in the world. Students relate the past to the present. They learn the similarities and differences between nations, cultures, and peoples of the world. Students interpret maps and globes, process information, and solve problems. Themes of study include: Beliefs and ideas influence decisions and laws, and beliefs determine decision-makers; conflict causes change; culture is the product of society; actions affect society; and the movement of ideas and people affects everyone.



Civics Tips for Parents

- Value talk and talk values. Talk to your children about their day. Our daily lives are rich with opportunities to discuss values such as equity, fairness, and responsibility.
- Use family vacations to learn more about the geography and history of the United States.

Science



4th grade students explore earth, life, and physical science through a hands-on, inquiry approach. Students begin to formulate conclusions to scientific investigations based on experimental results. They begin to organize their observations and data in tables, charts, and graphs. Students recognize the role of inferences and predictions in scientific investigations. They use data to support their conclusions.

Characteristics of Science

Organizing data and distinguishing the relationships between measured variables is an important inquiry skill in 4th grade. Students use scientific tools to make measurements. They learn to write instructions that can be followed in a scientific procedure. Children draw sketches to aid in the explanation of scientific observations.

Types of Science

Earth Science

4th graders study components of our solar system. They compare the Earth to other planets. Students study constellations and star patterns during the seasons. 4th graders explain the day and night cycle and study the position and sequence of moon phases. They collect data to predict weather events and seasonal changes.

Life Science

4th graders study ecosystems in life science. They construct food chains to identify producers, consumers, and decomposers in a system. Students explore factors that affect the survival or extinction of organisms.

Learn more about the Science AKS online.

Physical Science

Students investigate the behavior of light using mirrors, lenses, and prisms. 4th graders explore how sound is produced and the ways sound travels through solids, liquids, and gases. Students demonstrate the relationship between force and motion. They will identify the role of simple machines in making work easier.



Science Tips for Parents

- Have your child use a flashlight to explore behaviors of light. Shine a light at different objects, then record the results— *reflection, refraction, or absorption*.
- Watch the weather report with your child. Ask your child to explain the symbols used on the weather maps and to make predictions about the weather for the coming days.

Interpretive Skills/Where We Live/Personal Finance

4th graders extend their understanding of maps and the impact of geography on historical and current events. Students formulate appropriate research questions. They interpret political cartoons. Students identify elements of a personal budget and explain the importance of personal spending and savings decisions.

Learn more about the Social Studies AKS online.

Our Nation

In the K–5 Social Studies program, students focus on Our Heritage, studying the history and geography of the U.S. in 4th grade. Students learn about Native American cultures and European explorers in North America. They study Colonial America and the American Revolution as well as our new nation and Westward expansion. Stories about the reform movements illustrate positive character traits. (*See the section on Character Education to learn more about this area of emphasis.*)

Art and Music



Visual Arts

In grades 3–5, visual arts students sharpen observational skills and increase technical skills. Through repetition in the elementary grades, students master art concepts. They distinguish differences between artworks from around the world and across the centuries. Children study the movements of Realism, Expressionism, and Structuralism in art history.

Learn more about the Fine Arts AKS online.

4th graders use a broader range of subject matter and media. As students learn about art, they create works of their own. They make drawings, paintings, sculptures, prints, pottery, fiber art, mixed media, and digital images. Students explore color, form, value changes, contrast, design, composition, and texture in their work. They use technology to create art.



Fine Arts Tips for Parents

- At gift-giving times, encourage your child to make gifts for family and friends using skills learned in art class.
- Watch for orchestra and symphony events especially for children. They often feature the conductor talking about the instruments used in the compositions.
- Play “name that artist” while looking through a coffee table art book from a particular art movement or era.

General Music

The music program for grades 3–5 creates a foundation for further music study in middle school. Students experience a variety of music styles through listening, moving, creating, singing, and playing instruments. Discussion and reflection support their musical understanding.

Students learn to perform harmonies through rounds, echo songs, and partner songs. They perform alone and in groups. Children create simple compositions and accompaniments. They create movements for musical dramatizations and interpretations.

4th graders are exposed to music of diverse cultures and time periods. They identify master composers and compositions. Children explore the difference between music in major and minor keys and differences in vocal register. Students learn how musical elements, such as melody and rhythm, contribute to the character of a composition. They identify families of musical instruments by sound and sight. 4th graders learn how to read music, including notation, scales, and musical symbols.

Health and Physical Education



Health

In Health, students learn how to live a healthy lifestyle and reduce the risks linked with illness and injury. They also learn the consequences of unhealthy behaviors. Students learn to be responsible for their decisions and actions, and to understand the influence they have on others. Each year, students learn grade-appropriate lessons about emotional health, relationships, nutrition, the benefits of physical activity, substance abuse prevention, basic human anatomy, personal health, and safety.

4th grade students understand first aid procedures for emergencies involving bleeding. Lessons focus on the impact of rest, food choices, sleep, and recreation on overall health. Students learn how to develop personal goals to stay healthy. They learn about the role of digestion. Students recognize how to prevent a variety of diseases and illnesses. 4th graders can explain the effects of drugs and tobacco. They understand the appropriate use of over-the-counter drugs. Students identify ways to resolve conflict without fighting. They understand the importance of care, consideration, and respect for oneself and others. 4th graders develop a general understanding of physical and emotional changes during puberty.

Learn more about the Health and PE AKS online.

Physical Education (PE)

Physical Education emphasizes lifetime fitness, physical activity, and skill development. Through carefully planned classes, students learn the importance of physical activity— for their health and for their success in school. The curriculum promotes increased fitness as students acquire skills and develop physically.

In PE, students learn about physical activities that enhance their health. Students develop skills such as throwing, catching, kicking, and hitting a variety of objects. 4th graders use acceptable behaviors in groups. Movement and motor skills— including jumping, rolling, balancing, stopping and starting, and changing direction— are important parts of the 4th grade PE program.



Health & PE Tips for Parents

- Talk to your child about the food pyramid and making good dietary decisions.
- Encourage your child to be physically active, whether in organized sports, with friends, or on family outings.
- Start the conversation at home with an age-appropriate book about how boys and girls change during puberty.

Please sign and return to your child’s teacher. If you have any questions, please contact the teacher and/or administrator at the school.

I understand that my child who is enrolled in 4th grade must earn a passing score on each of the following Criterion-Referenced Competency Tests (CRCT) subtests to earn promotion: Reading, English/Language Arts, Mathematics, Science, and Social Studies.* Should my child not pass all required CRCT subtests to earn promotion to 5th grade, he or she will have the opportunity to attend summer school and to take needed retests. A student who does not meet all promotion requirements after summer school and retests will not be promoted to 5th grade. Instead, the student will receive extra help the next year through a transition program.

* Note: A special education student’s promotion is determined by his or her Individualized Education Program (IEP). Promotion for a student with Limited English Proficiency (LEP) is determined by his or her AKS Modification and Intervention Plan, or by recommendation of the English Language Learner (ELL)/Test Participation Committee.

Student name (please print)

Parent signature

Date

Specialized Programs and Services

The school system provides a variety of specialized programs and services, including Title I, English to Speakers of Other Languages (ESOL), Special Education, Gifted Education, and alternative education programs. Guidance, social work, and psychological services provide for students' emotional and physical needs, along with limited clinic services for all students and specialized nursing support for medically fragile children. The School Nutrition Program operates cafeterias in every GCPS school. Some programs and services have eligibility requirements and require testing for admission. On this page, learn more about some of these programs and services.

Gifted Education



The GCPS Gifted Education program, called FOCUS at the elementary level, provides academic challenges for children who are intellectually advanced. The program offers valuable learning opportunities that are advanced in content and accelerated in pace. All gifted education classes offer experiences that extend GCPS' AKS curriculum. These experiences help students develop thinking strategies and processes. Classes are taught by teachers with gifted certification. Students served through the Gifted Education program meet eligibility requirements set by the state. Both student performance and results on national assessments are used to determine a child's participation in the program.

Special Education and Psychological Services



GCPS' Department of Special Education and Psychological Services focuses on meeting the educational needs of students with disabilities, beginning at age 3. Students served in the program have physical, mental, or emotional impairments. They must meet the eligibility requirements set by the Georgia Department of Education. GCPS provides comprehensive special education programs and services, including assessment and interventions.

English to Speakers of Other Languages



English instruction is available for students whose primary or home language is other than English and whose lack of proficiency in English limits their successful participation in the regular classroom. ESOL instruction addresses English listening, speaking, reading, and writing.

Character Education



The school system supports a mandate from the Georgia General Assembly requiring all schools to teach character education. Society and culture are tied together through common threads that guide the way we live, work, and learn. These common beliefs are taught at home and reinforced by the community, schools, religious institutions, and youth service groups. These basic tenets guide the way Gwinnett County teachers teach and the way the school system conducts the business of teaching and learning. Character education is thoroughly embedded in the AKS curriculum.

Counseling and Advisement



Counselors partner with families and teachers to remove barriers to student achievement. They deliver a comprehensive and developmentally appropriate program which includes lessons in the areas of academic, career, and life skills. Counselors build strong relationships with their students through classroom guidance, small-group counseling, and individual counseling.

Technology/Information & Media Literacy



The school media program contributes to your child's academic achievement and prepares him or her to live and work in our information-rich society. Available resources include books and magazines for pleasure reading and research, an online catalog for locating materials, and computers that provide access to online instructional resources that are age-appropriate. In a GCPS Media Center, your child will find a state-certified, full-time media specialist who supports teaching and learning and encourages lifelong reading. The media specialist collaborates with teachers to help your child learn to locate, analyze, evaluate, interpret, and communicate information and ideas.



Tips for Parents on 10 Things You Can Do to "Be There" for Your Child

BE...

- **An Involved Parent...** *Be attentive, aware, together*
- **A Role Model...** *Be caring, engaged, influential*
- **A Cheerleader...** *Be supportive, positive, fun*
- **A Partner...** *Be encouraging, working together*
- **Their Favorite Teacher...** *Be there for teachable moments*

- **A Friendly Critic...** *Be patient, accepting, flexible*
- **An Advisor...** *Be ready to help, share your experiences*
- **A Good Communicator...** *Be a talker, a listener, stay connected*
- **A Lifelong Learner...** *Be inquisitive, share, read together*
- **An Advocate...** *For your child, school, community, public education*

Research shows that when parents are involved in their children's education at home, their children do better in school. When parents are involved at school, their children's achievement excels and the schools they attend become even stronger.



Be There is a national movement that inspires parents to become more involved in their child's education and their public schools. Teachable moments are everywhere. You can be your child's favorite teacher by connecting in meaningful ways as you go through the ordinary routines of the day... driving in the car, preparing a meal, shopping, or doing chores. Below and throughout this brochure, you will find tips for helping your child have a successful 4th grade experience. Look for more helpful tipsheets and other resources on the school system web site and your local school web site.



Tips for Parents on Helping Your Child Have a Successful 4th Grade Experience

- **Read, talk, and listen to your child** often and about a variety of subjects.
- **Encourage your kindergartner's natural love for learning** with praise. Recognize her curiosity and hard work. Let your child know that his or her academic success is important to you.
- **Stay in touch with your child's teacher.** Participate in parent-teacher conferences—in fall and in spring—to discuss your child's progress.
- **Talk to your child about what he is learning at school.** Use this brochure as a reference. You can find a complete listing of the 4th grade AKS on the school system's web site (www.gwinnett.k12.ga.us).
- **Promote the importance of regular school attendance** and being on time. Stress that school is a family priority and being in class each day is important.
- **Stay informed** on school and class happenings. Read newsletters and reports that come home.
- **Ask to see your child's work.** Keep samples so you can see and celebrate the growth your child makes this year.
- **Become involved** in the PTA and attend school events. Be a school volunteer if you are able.
- **Give your child daily responsibilities**, such as taking out the trash, feeding or walking pets, folding laundry, setting the dinner table, or making the bed.
- **Encourage healthy habits**, such as eating nutritious foods, getting ample rest, having a regular bedtime, and being physically active. Talk to your child about personal hygiene.

About Promotion to 5th Grade

To earn promotion to the 5th grade, a child enrolled in 4th grade must earn a passing score on each of the following Criterion-Referenced Competency Tests (CRCT) subtests: Reading, English/Language Arts, Mathematics, Science, and Social Studies.*

Should a child not pass all required CRCT subtests to earn promotion to 5th grade, he or she will have the opportunity to attend summer school and to take needed retests. A student who does not meet all promotion requirements after summer school and retests will not be promoted to 5th grade. Instead, the student will receive extra help the next year through a transition program.

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Gwinnett County Public Schools
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 Suwanee, GA 30045
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For more information about the AKS, please visit www.gwinnett.k12.ga.us and click on the AKS/Curriculum link under Quick Links.

About Testing

Gwinnett County Public Schools measures student achievement in a number of ways to ensure students are learning the curriculum. Our assessment program helps teachers monitor students' academic progress. Assessment data and information pinpoints students' strengths and weaknesses. This focus allows teachers to plan targeted instruction that promotes each student's success.

Required Testing for 4th Grade

All 4th grade students participate in the state's Criterion-Referenced Competency Tests (CRCT) in the spring.

CRCT

The multiple-choice CRCT measures what students should know and be able to do at the end of 4th grade, based on the state's curriculum, the Georgia Performance Standards (GPS). (Gwinnett's AKS curriculum includes and goes beyond the state's GPS curriculum.) Georgia students in 4th grade take the CRCT in Reading, English/Language Arts, Mathematics, Science, and Social Studies. Students are expected to meet or exceed grade-level expectations on each CRCT to be on track for success in school.