Missouri students must build a solid foundation of factual knowledge and basic skills in the traditional content areas. The statements listed here represent such a foundation in reading, writing, mathematics, world and American history, forms of government, geography, science, health/physical education and the fine arts. This foundation of knowledge and skills should also be incorporated into courses in vocational education and practical arts. Students should acquire this knowledge base at various grade levels and through various courses of study. Each grade level and each course sequence should build on the knowledge base that students have previously acquired.

These concepts and areas of study are indeed significant to success in school and in the workplace. However, they are neither inclusive nor are they likely to remain the same over the years. We live in an age in which "knowledge" grows at an everincreasing rate, and our expectations for students must keep up with that expanding knowledge base.

Combining what students must know and what they must be able to do may require teachers and districts to adapt their curriculum. To assist districts in this effort, teachers from across the state are developing curriculum frameworks in each of the content areas. These frameworks show how others might balance concepts and abilities for students at the elementary, middle and secondary levels. These models, however, are only resources. Missouri law assures local control of education. Each district has the authority to determine the content of its curriculum, how it will be organized and how it will be presented.

## **Communication Arts**

In Communication Arts, students in Missouri public schools will acquire a solid foundation which includes knowledge of and proficiency in

- 1. speaking and writing standard English (including grammar, usage, punctuation, spelling, capitalization)
- 2. reading and evaluating fiction, poetry and drama
- 3. reading and evaluating nonfiction works and material (such as biographies, newspapers, technical
- 4. writing formally (such as reports, narratives, essays) and informally (such as outlines, notes)
- 5. comprehending and evaluating the content and artistic aspects of oral and visual presentations (such as story-telling, debates, lectures, multi-media productions)
- 6. participating in formal and informal presentations and discussions of issues and ideas
- 7. identifying and evaluating relationships between language and culture

# **Mathematics**

In Mathematics, students in Missouri public schools will acquire a solid foundation which includes knowledge of

- 1. addition, subtraction, multiplication and division; other number sense, including numeration and estimation; and the application of these operations and concepts in the workplace and other situations
- 2. geometric and spatial sense involving measurement (including length, area, volume), trigonometry, and similarity and transformations of shapes
- 3. data analysis, probability and statistics
- 4. patterns and relationships within and among functions and algebraic, geometric and trigonometric
- 5. mathematical systems (including real numbers, whole numbers, integers, fractions), geometry, and number theory (including primes, factors, multiples)
- 6. discrete mathematics (such as graph theory, counting techniques, matrices)

# Science

In Science, students in Missouri public schools will acquire a solid foundation which includes knowledge of

- 1. properties and principles of matter and energy
- 2. properties and principles of force and motion
- 3. characteristics and interactions of living organisms
- 4. changes in ecosystems and interactions of organisms with their environments
- 5. processes (such as plate movement, water cycle, air flow) and interactions of Earth's biosphere, atmosphere, lithosphere and hydrosphere
- 6. composition and structure of the universe and the motions of the objects within it
- 7. processes of scientific inquiry (such as formulating and testing hypotheses)
- 8. impact of science, technology and human activity on resources and the environment



# **Social Studies**

In Social Studies, students in Missouri public schools will acquire a solid foundation which includes knowledge of

- 1. principles expressed in the documents shaping constitutional democracy in the United States
- 2. continuity and change in the history of Missouri, the United States and the world
- 3. principles and processes of governance systems
- 4. economic concepts (including productivity and the market system) and principles (including the laws of supply and demand)
- 5. the major elements of geographical study and analysis (such as location, place, movement, regions) and their relationships to changes in society and
- 6. relationships of the individual and groups to institutions and cultural traditions
- 7. the use of tools of social science inquiry (such as surveys, statistics, maps, documents)

# **Fine Arts**

In Fine Arts, students in Missouri public schools will acquire a solid foundation which includes knowledge of

- 1. process and techniques for the production, exhibition or performance of one or more of the visual or performed arts
- 2. the principles and elements of different art forms
- 3. the vocabulary to explain perceptions about and evaluations of works in dance, music, theater and visual arts
- 4. interrelationships of visual and performing arts and the relationships of the arts to other disciplines
- 5. visual and performing arts in historical and cultural contexts

# **Health/Physical Education**

*In Health/Physical Education, students in Missouri public* schools will acquire a solid foundation which includes knowledge of

- 1. structures of, functions of, and relationships among human body systems
- 2. principles and practices of physical and mental health (such as personal health habits, nutrition, stress management)
- 3. diseases and methods for prevention, treatment and
- 4. principles of movement and physical fitness
- 5. methods used to assess health, reduce risk factors, and avoid high-risk behaviors (such as violence, tobacco, alcohol and other drug use)
- 6. consumer health issues (such as the effects of mass media and technologies on safety and health)
- 7. responses to emergency situations

# The Show-Me Standards

# KNOWLEDGE + PERFORMANCE = ACADEMIC SUCCESS

**Note to Readers:** What should high school graduates in Missouri know and be able to do? The Missourians who developed these standards wrestled with that question. In the end, they agreed that "knowing" and "doing" are actually two sides of the same coin. To perform well in school or on the job, one must have a good foundation of basic knowledge and skills. Equally important, though, is the ability to use and apply one's knowledge in real-life situations.

These standards (73 in all) are intended to define what students should learn by the time they graduate from high school. On this side are 33 "performance" standards, listed under four broad goals. On the reverse side are 40 "knowledge" standards, listed in six subject areas. Taken together, they are intended to establish higher expectations for students throughout the Show-Me State. These standards do not represent everything a student will or should learn. However, graduates who meet these standards should be well-prepared for further education, work and civic responsibilities.

Il Missourians are eager to ensure that graduates of Missouri's public schools have the knowledge, skills and competencies essential to leading productive, fulfilling and successful lives as they continue their education, enter the workforce and assume their civic responsibilities. Schools need to establish high expectations that will challenge all students. To that end, the Outstanding Schools Act of 1993 called together master teachers, parents and policy-makers from around the state to create Missouri academic standards. These standards are the work of that group.

The standards are built around the belief that the success of Missouri's students depends on both a solid foundation of knowledge and skills *and* the ability of students to apply their knowledge and skills to the kinds of problems and decisions they will likely encounter after they graduate.

The academic standards incorporate and strongly promote the understanding that active, hands-on learning will benefit students of all ages. By integrating and applying basic knowledge and skills in practical and challenging ways across all disciplines, students experience learning that is more engaging and motivating. Such learning stays in the mind long after the tests are over and acts as a springboard to success beyond the classroom.

These standards for students are not a curriculum. Rather, the standards serve as a blueprint from which local school districts may write challenging curriculum to help all students achieve. Missouri law assures local control of education. Each school district will determine how its curriculum will be structured and the best methods to implement that curriculum in the classroom.

## GOAL 1

Students in Missouri public schools will acquire the knowledge and skills to gather, analyze and apply information and ideas.

Students will demonstrate within and integrate across all content areas the ability to

- 1. develop questions and ideas to initiate and refine research
- 2. conduct research to answer questions and evaluate information and ideas
- 3. design and conduct field and laboratory investigations to study nature and society
- 4. use technological tools and other resources to locate, select and organize information
- 5. comprehend and evaluate written, visual and oral presentations and works
- 6. discover and evaluate patterns and relationships in information, ideas and structures
- 7. evaluate the accuracy of information and the reliability of its sources
- 8. organize data, information and ideas into useful forms (including charts, graphs, outlines) for analysis or presentation
- 9. identify, analyze and compare the institutions, traditions and art forms of past and present societies
- 10. apply acquired information, ideas and skills to different contexts as students, workers, citizens and consumers

#### GOAL 3

Students in Missouri public schools will acquire the knowledge and skills to recognize and solve problems.

Students will demonstrate within and integrate across all content areas the ability to

- 1. identify problems and define their scope and elements
- 2. develop and apply strategies based on ways others have prevented or solved problems
- 3. develop and apply strategies based on one's own experience in preventing or solving problems
- 4. evaluate the processes used in recognizing and solving problems
- 5. reason inductively from a set of specific facts and deductively from general premises
- 6. examine problems and proposed solutions from multiple perspectives
- 7. evaluate the extent to which a strategy addresses the problem
- 8. assess costs, benefits and other consequences of proposed solutions

## GOAL 2

Students in Missouri public schools will acquire the knowledge and skills to communicate effectively within and beyond the classroom.

Students will demonstrate within and integrate across all content areas the ability to

- 1. plan and make written, oral and visual presentations for a variety of purposes and audiences
- 2. review and revise communications to improve accuracy and clarity
- 3. exchange information, questions and ideas while recognizing the perspectives of others
- 4. present perceptions and ideas regarding works of the arts, humanities and sciences
- 5. perform or produce works in the fine and practical arts
- 6. apply communication techniques to the job search and to the workplace
- 7. use technological tools to exchange information and ideas

# GOAL 4

Students in Missouri public schools will acquire the knowledge and skills to make decisions and act as responsible members of society.

Students will demonstrate within and integrate across all content areas the ability to

- 1. explain reasoning and identify information used to support decisions
- 2. understand and apply the rights and responsibilities of citizenship in Missouri and the United States
- 3. analyze the duties and responsibilities of individuals in societies
- 4. recognize and practice honesty and integrity in academic work and in the workplace
- 5. develop, monitor and revise plans of action to meet deadlines and accomplish goals
- 6. identify tasks that require a coordinated effort and work with others to complete those tasks
- 7. identify and apply practices that preserve and enhance the safety and health of self and others
- 8. explore, prepare for and seek educational and job opportunities

TURN OVER