

Process

## 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 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 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 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

## Tips for Working with Schools

### Working with Schools

Before school:

Plan on arriving at schools about 30-40 minutes AFTER the school day begins.

After school:

Many students do not ride the bus anymore—there is a string of cars around the block for about half an hour before school lets out each day to pick up students. You may want to arrive early to find a parking space for after school events.

Field trips require advance planning for teachers. In some cases, they may have to reserve a bus a month ahead of time. Additionally, if a teacher confirms the bus, they don't usually get to talk to the bus driver. The bus driver may not be on the same page as the teacher and transportation folks.

Attendance at school is best Tuesday through Thursday. According to research, student behavior may be the worst on a Thursday.

Holidays at an elementary school are best to avoid. 😊 Fridays at a high school on home game days are best to avoid. It is difficult to predict which days to avoid at middle schools...

Flexibility is important—schools are ever-changing, with ever-changing populations and situations.

### Working with Teachers

- Offer on-going training sessions for teachers, if possible and realistic
- Offer research-based strategies (Marzano's work is research-based) for their students
- If you can help provide materials or your TIME, teachers would REALLY appreciate it
- Match your offerings to the GLEs and CLEs—everything you do or offer can at least match to the Process Standards. Provide that information to teachers.
- Any tests you provide or use should have at least some Selected Response (multiple choice or fill in the blank) and Constructed Response (essay or questions that may have multiple answers) questions.
- Be as prompt as possible when working with schools. If you say that you will provide a service or materials, please try to do it in a timely manner.

### Working with Students

- Any information you present to a student may have to be repeated more than one time in order to be learned. Using multiple methods of presentation (saying it, showing a picture, having them work with the materials such as soil samples, etc.) is the best way to make sure students understand.
- Younger students are concrete—student gain the ability to think more abstractly as they get older. For some students that happens in middle school, but for others it doesn't happen until later in high school... Elementary students understand what it means to have 1 piece of pie. Secondary students understand what the phrase means "everyone wants their piece of the pie".

- So, based upon this idea of abstract thinking, models used to represent something else begin to be effective by middle school
- Be prepared to explain connections between information to students. Educators cannot expect students to automatically make the connections between related information, unless they discuss it. Ask the student to identify the connection and that can tell you if they understand it or not. If you don't discuss connections, be prepared for them to have made their own (usually incorrect) connection. 😊
- So, discussions are necessary after playing a game or doing an activity with students to make sure they made the connections you expected.
- Use similarities and differences when working with students to help understanding

A word of caution:

Teachers are educated to present two sides to an issue and schools try to stay neutral on topics that can be "emotionally charged". If you are perceived to be too biased in a certain direction on an issue, you may not be asked to work with the school again. Your enthusiasm for your topic and for your organization is wanted and needed—(kids need to see adults excited about things), but just be aware that schools attempt to be fair and unbiased in their approach.

DESE website: [www.dese.mo.gov](http://www.dese.mo.gov)

## Educational Jargon 101

### Federal Terms:

**NCLB**—No Child Left Behind. This legislation includes a plan for teachers to become “highly qualified” and for students to be tested yearly between (and including) grades 3-8 in both Communication Arts (English) and Math. For Science, it mandates that students be tested one time in elementary, middle and high school.

**NCLI**—No Child Left Inside. Passed in the House of Representatives... This legislation would appropriate funding for Environmental Education for teachers and students.

### State of Missouri Terms:

**DESE**—Department of Elementary and Secondary Education. This is the governing body for Missouri Schools that provide people and resources to help schools in our state. They are located in Jefferson City.

**MAP**—Missouri Assessment Program. This is the group that is in charge of testing and assessment for students in Missouri. They are responsible for getting together teams of teachers to write test items for students and the test itself.

**Show-Me Standards**—This document was produced as a result of the original work in 1993 and represents what all Missouri students should know (the Content Standards for each subject area) and should be able to do (the Process Standards for all subject areas) by the time they graduate from any Missouri high school.

**Grade Level Expectations (GLEs)**—These are the specific objectives that all elementary and middle school students are expected to know for each grade level in each core subject (math, science, social studies and communication arts).

The GLEs are based upon the Show-Me Standards and also the Frameworks.

**Course Level Expectations (CLEs)**—These are the specific objectives that all high school students are expected to know for each class they take in each core subject (biology, algebra, etc.). The CLEs are also based upon the Show-Me Standards and the Frameworks.

**End of Course Exam (EOC)**—This is the new assessments (spring 2009 is first required year) for core subject classes at the high school level only. There will be an EOC test for Biology, one for Algebra, etc. Eventual plans are for there to be two EOC exams per core subject area during the high school years.

**Strand**—For the science GLEs, there are 8 strands that represent each of the areas of science. Strand 1 is Matter and Energy; strand 2 is Force and Motion; strand 3 is Living Organisms; strand 4 is Ecology; strand 5 is Earth Systems; strand 6 is the Universe; strand 7 is Inquiry-Scientific Method; and strand 8 is Science, technology and society.

**DOK**—Depth of Knowledge. This designation will be on the GLEs, beginning in 2010 and indicates the level of difficulty of the GLEs. An objective with a DOK=1 means that the objective requires basic recall of facts by a student. At the upper end, an objective with a DOK=4 would require students to analyze, critique or design an experiment and demands more critical thinking on the part of the student.

**MSIP**—Missouri School Improvement Plan. The accreditation program in which teams of administrators and MSIP committee members conduct school visits. Accreditation is based upon points and schools gain points for programs well done. MAP scores by students contribute to a school's MSIP score.

**AYP**—Adequate Yearly Progress. This term is actually related to NCLB, but in Missouri is determined by student MAP scores. Math and Communication Arts MAP scores are figured in at all grades 3-8 and then again one time at high school (math is grade 10 and communication arts is grade 11). Science counts as "bonus points" currently, but will be mandated (and scores reported for AYP), beginning in 2010. Social studies is not currently part of AYP.



# 2008 Poster Contest Rules

## THEME: Water is Life

### Eligibility

The National Conservation Poster Contest is open to kindergarten through twelfth grade students. Artwork entered into the national competition must have been evaluated in a local or area conservation district sponsored poster contest and a state conservation association or state auxiliary sponsored contest.

One poster from each state may be entered in each of the following grade categories: K-1, 2-3, 4-6, 7-9 and 10-12. The state conservation association or auxiliary selects a poster for entering in each of the grade divisions and submits it to NACD. The state does not have to enter a poster for every grade level. The contest is open to public, private or home school students.

### 2008 Contest Theme

The National Poster Contest theme "Water is Life," based on the 2008 NACD Stewardship theme. Topics you may want to research are: Water in your ever day life, water cycle, groundwater, sources of drinking water, amount of water on Earth, watersheds, stormwater runoff, drought, flooding, water used to grow food you use each day, while remembering the theme of "Water is Life". Additional information can be found at [www.nacdnet.org](http://www.nacdnet.org) Stewardship & Education.

### Contest Rules

The contest rules were created so as not to limit or revise the current rules of local and state conservation poster contests:

- Any media may be used to create a flat or two-dimensional effect (paint, crayon, colored pencil, charcoal, paper or other materials).
- Poster size must be between 8.5" x 11" and 22" x 28".
- A completed entry form must be attached to the back of the poster.
- Posters should be packaged so they remain flat when sent for judging.
- Each entry must have been evaluated at each conservation district's most recent competition prior to the state evaluation.
- All posters must be created by an individual student rather than a team of students.
- Use 2008 Stewardship Theme "Water Is Life" on your poster
- Although younger students will most likely receive help in planning from parents or teachers, NACD encourages each student to do as much of the work as possible by him/herself.

## Regional Oral Presentation Problem

Certain ecosystems around the world harbor especially large numbers of species. Many scientists use the term “hotspots” when referring to those areas of the world that are not only rich in biodiversity, but also unique and threatened. The most familiar are tropical rainforests.

However, Missouri is home to many thousands of native animals and more than 2000 native plants. Our state’s amazing species diversity arises from its equally diverse types of habitat – prairies, woodlands, glades, savannas, streams, caves, wetlands and forests.

One of the greatest challenges we face in protecting biodiversity is how to balance the needs of the present without jeopardizing those of the future. Ensuring the survival of species, genes and ecosystems will require a combination of many approaches, as well as collective thinking of people from all disciplines and backgrounds.

Conserving biodiversity and finding solutions to the intricately connected problems of environmental degradation, social decline, and economic instability will mean feeling, thinking about, and doing things different from the ways we have before. It will mean fostering more compassion for other species and a kind of reverence for living systems that are too complex for us ever to understand fully. It will mean educating ourselves about the connections among all elements of biodiversity and between a healthy natural environment and a healthy human society.

**Your task:** Your team is made up of experts in different natural resources disciplines and you are tasked with developing a brief (7 minutes) radio informational program to educate the general public about biodiversity and persuade them of its importance.

**Be sure and include the following information as a minimum:**

1. How biodiversity affects soils, forestry, wildlife and aquatics.
2. Causes of biodiversity loss in Missouri and possible solutions to solving these losses.
3. Benefits of biodiversity.
4. How natural changes in our world affect biodiversity.