Grade Level Expectations and Glossary

Third Grade

Grade Level Expectations and Glossary
This document contains grade level expectations and glossary terms specific to third grade. It is simply a reorganized version of Missouri Department of Elementary and Secondary Education’s documents, which were developed by the Department’s curriculum consultants, in collaboration with educators from across the state. These GLEs were meant to help clarify the Show-Me Standards and comply with the No Child Left Behind Act of 2001.

For GLEs in all grades and a comprehensive glossary, see http://www.dese.state.mo.us/divimprove/curriculum/GLEDocuments.html.

For more information on curriculum matters in the state of Missouri, including the Grade Level Expectations, see http://www.dese.state.mo.us/divimprove/curriculum/index.html.

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grade level expectations
Missouri
GLE
at a glance

Third Grade
Communication Arts
Grade Level Expectations and Glossary
C. **Phonics**: apply decoding strategies to independently “problem solve” unknown words when reading

D. **Fluency**: read grade-level instructional text
   - With fluency, accuracy, and expression
   - Adjusting reading rate to difficulty and type of text

E. **Vocabulary**: develop vocabulary through text, using
   - Base words
   - Synonyms and antonyms
   - Context clues
   - Glossary
   - Dictionary, with assistance

F. **Pre-Reading**: apply pre-reading strategies to aid comprehension
   - Access prior knowledge
   - Preview
   - Predict
   - Set a purpose for reading

G. **During Reading**: utilize strategies to
   - Self-question and correct
   - Infer
   - Visualize
   - Predict and check using cueing systems (meaning, structure, visual)

H. **Post-Reading**: apply post reading skills to identify and explain the relationship between the main idea and supporting details
   - Question to clarify
   - Reflect
   - Analyze
   - Draw conclusions
   - Summarize
   - Paraphrase

I. **Making Connections**: identify connections between
   - Text ideas—information and relationships in various **fiction** and **non-fiction** works (**compare** and **contrast**)
   - Text ideas and own experiences
   - Text ideas and the world
### Develop and apply skills and strategies to comprehend, analyze, and evaluate fiction, poetry, and drama from a variety of cultures and times

**A. Text Features:** locate and
- Apply information in title, table of contents, and glossary
- Recognize the **text features** of fiction, poetry, and drama in grade-level text

**B. Literary Devices:** explain examples of **sensory details** and **figurative language** within the **context** of poetry and prose

**C. Text Elements:** use details from text to
- Make inferences about **setting**, **character traits**, and problem and solution
- Make predictions
- Draw conclusions
- **Compare** and **contrast** characters and changes in problems and settings
- Identify the narrator
- Identify **cause and effect**
- Identify events from the beginning, middle, and end
- Identify **author’s purpose**

### Develop and apply skills and strategies to comprehend, analyze, and evaluate nonfiction (such as biographies, newspapers, technical manuals) from a variety of cultures and times

**A. Text Features:** locate and interpret key information in illustrations, title, chapter headings, table of contents, charts, diagrams, graphs, glossary, captions, and maps to answer questions

**B. Literary Devices:** explain examples of sensory details and figurative language within the context of nonfiction text

**C. Text Elements:** Use details from text to
- Answer questions
- Retell main idea and important details
- Organize a sequence of events
- Identify simple cause and effect
- Draw conclusions
- **Compare** and **contrast** texts
- Identify **author’s purpose** for writing text
- Make inferences about problems and solutions

**D. Understanding Directions:** Read and follow a two and three step directions to complete a simple task
1. **Apply writing process in composing text**

   **A. Writing Process:** follow a writing process to
   - Independently use a simple **graphic organizer** in pre-writing
   - Generate a **draft**
   - Routinely reread and revise work
   - Routinely edit and proofread for capitalization and ending punctuation
   - Independently publish writing

2. **Compose well-developed text using standard English conventions**

   **A. Handwriting:** create legible compositions with correct spacing between words in a sentence and in margins
   **B. Capitalization:** use conventions of capitalization in written text
   - Months of the year
   - Titles of individuals
   - Greeting and closing of letter
   **C. Punctuation:** in composing text, use
   - Correct ending punctuation in imperative and exclamatory sentences
   - Comma in greeting and closing of letter
   **D. Parts of Speech:** use parts of speech correctly in written text
   - Verbs that agree with the subject
   - Words that answer when, where, why, and how questions (adverbs)
   - Words to compare (adverbs)
   **E. Spelling:** in writing, use
   - Correct spelling of simple compounds, homophones, contractions and words with affixes
   - Standard spelling
   - Classroom resources and dictionary to verify correct spelling
   **F. Sentence Construction:** in composing text, identify and write sentences
   - Declarative
   - Interrogative
   - Imperative
   - Exclamatory

3. **Write effectively in various forms and types of writing**

   **A. Narrative and Descriptive Writing:** write narrative text that
   - A beginning, middle, and end
   - Relevant details to develop the main idea
   - A clear controlling idea
   - Precise and descriptive language
   **B. Note-Taking:** Identify information in written text to complete a graphic organizer
   **C. Expository and Persuasive Writing:** write expository text with
   - A main idea
   - Three or more supporting details
   **D. Audience and Purpose:** write informational reports, diary/journal entries and friendly letters that address an intended audience and purpose
### 1. Develop and apply effective listening skills, strategies

**A. Purpose for listening:**
- For enjoyment
- For information
- To distinguish fact from opinion
- For directions to complete a two or three step task

**B. Listening Behavior:** demonstrate listening behaviors (e.g., prepares to listen, listens without interruptions, maintains eye contact)

### 2. Develop and apply effective speaking skills and strategies for various audiences and purposes

**A. Discussion and Presentation:** speak clearly, stay on topic and use appropriate volume and pace when sharing ideas

**B. Giving Directions:** give clear two and three step oral directions to complete a simple task
### Develop and apply effective research process skills to gather, analyze, evaluate information

<table>
<thead>
<tr>
<th>A. <strong>Research Plan:</strong> formulate key words and questions to investigate topics</th>
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<tbody>
<tr>
<td>B. <strong>Acquire Information:</strong> locate information on keywords and questions in provided resources</td>
</tr>
<tr>
<td>D. <strong>Sources Consulted:</strong> informally give credit for others’ ideas, images and information found in various resources</td>
</tr>
</tbody>
</table>

### Develop and apply effective skills and strategies to analyze and evaluate oral and visual media

| A. **Media Messages:** identify intended messages conveyed through oral and visual media |
- **Active listening behaviors**: actions that let the speaker know the audience is listening (Examples: non-verbal body language cues such as making eye contact and nodding in agreement, verbal cues such as questioning and summarizing main points, etc.)
- **Affixes**: one or more sounds or letters attached to the beginning or end of a word or base—prefixes or suffixes
- **Analyze**: to examine by parsing or breaking down into smaller parts or elements
- **Audience**: the author’s awareness of audience: writing for a specific purpose with a specific reader or group of readers in mind
- **Author’s purpose**: the author’s intent or reason for writing— to explain or inform, to entertain, to persuade
- **Base word**: a word to which affixes may be added to create related words; root word; the basic part of a word that usually carries the main component of meaning and cannot be further analyzed without the loss of identity (e.g., “teach” in “re-teach” or “teaching”)
- **Cause and effect**: the connection or relationship between a precipitating event or reason, and its effects or results (A cause makes something occur; an effect is the outcome of the cause.)
- **Character traits**: authors develop characterization by describing various aspects of the character—physical appearance; personality; speech, behavior/actions; thoughts and/or feelings; interactions with other characters
- **Compare**: to tell how things are alike; to examine both points of similarity and difference, but generally with the greater emphasis on similarities
- **Context clues**: information from the surrounding words, illustrations, or sentences that helps give meaning to a specific word or phrase
- **Contrast**: to explain how things are different
- **Conventions**: capitalization, punctuation, spelling, grammar (http://leo.stcloudstate.edu)
- **Cueing system**: any of the various sources of information aiding in the identification of an unrecognized word and helping readers construct meaning from print (e.g., phonics, grammar, context, word parts, and text structure)
- **Declarative sentence**: informs the reader, punctuated with a period
- **Decode**: to analyze spoken or graphic symbols of a familiar language to ascertain their intended meaning (To learn to read, one must learn the conventional code in which text is written in order to decode the written message. In reading practice, the term is used primarily to refer to word identification.)
- **Decoding strategies**: methods of translating symbols into words
- **Descriptive writing**: portrays a character, object, or scene through sensory details/imagery (precise nouns, verbs, adverbs, and adjectives that relate how things look, sound, feel, taste, smell)
- **Draft**: writing ideas in a rough, unpolished form; the preliminary version of a piece of writing
- **Draw conclusions**: use of facts and inferences to make a judgment or decision
- **Exclamatory sentence**: expresses strong feelings; punctuated with an exclamation point
- **Expository text**: presents facts, opinions, definitions of terms and examples to inform the reader about a specific topic
- **Fiction**: imaginative narrative in any form of presentation that is designed to entertain, as distinguished from that which is primarily designed to explain, argue, or merely describe (as a genre, fiction may include short stories, novella, novels, drama, and narrative poetry)
- **Figurative language**: language which makes use of certain literary devices or literary techniques often called “figures of speech” in which something other than the literal meaning is implied (hyperbole, imagery, irony, metaphor, personification, simile, symbolism)
• **Fluency**: the ability to read a text accurately, quickly, and with proper expression and comprehension (Fluent readers do not have to concentrate on decoding words and can focus their attention on the meaning of the text.)

• **Friendly letter**: informal or personal letter; has five parts—heading, greeting, body, closing, and signature (http://englishplus.com/grammar/00000143.htm)

• **Grade-level instructional text**:
  * Instructional reading level: the text level at which a student reads 90%-95% of the words accurately with 75%-89% comprehension; the level at which a student needs support from the teacher
  * Independent reading level: the text level at which a student reads 96%-100% of the words accurately and comprehends 90%-100% of the content without help

• **Graphic organizer**: a visual device for organizing information around a concept, theme, or topic; includes, but not limited to the following
  * Advance organizer: previews instruction and provides familiar concepts that connect and anchor the new learning
  * Chart: gives information, shows processes, or makes comparisons, often with pictures and symbols rather than with words
  * Cluster, concept map, or web: presents written ideas around a theme, characteristic, category, or word
  * Diagram: shows how something works, how it is constructed, or how its part relate to one another
  * Graph: presents information with lines, pictures, and symbols rather than words
  * Mind map: uses pictures and symbolic drawings rather than written words
  * Outline: organizes information into topics and subtopics with related details; topic outlines use words and phrases to describe key information; sentence outlines use complete sentences to list major points and supporting details
  * Venn diagram: uses two overlapping circles to express similarities and differences in two things

• **Imperative sentence**: commands, gives orders, makes requests; usually punctuated with a period, sometimes with an exclamation point

• **Infer**: to draw meaning from a combination of clues in the text without explicit reference to the text

• **Information literacy**: the ability to evaluate sources, and information in those sources, for accuracy and validity

• **Interrogative sentence**: asks a question; punctuated with a question mark

• **Key words**: words and phrases used in the research process to locate appropriate information

• **Literary devices**: literary elements; figures of speech (http://www.uvsc.edu/owl/handouts/literacy%20terms.pdf)

• **Main idea**: the implicit or explicit message; what a text is “mostly about”; the theme of the text

• **Media**: means of communication, including print and visual works, live and television/film/video performances, audio, Internet; plural of *medium*

• **Narrative**: relates a story or personal essay (e.g., anecdote, autobiography, memoir)

• **Nonfiction**: writing that concerns real events and is intended to explain, inform, persuade, or give directions (e.g., autobiography, biography, memoir, essay, workplace communications)

• **Note taking**: use of a system (e.g., graphic organizer) to summarize concepts and ideas presented in print, verbal, and nonverbal communication

• **Pace**: rate or speed
• **Paraphrase**: using one’s own words to express the main ideas in what has been read, seen, or heard

• **Persuasive writing**: seeks to influence readers or listeners to agree with a perspective or perform an action (e.g., editorials, advertisements, persuasive essays and letters, public service announcements, position papers)

• **Phonics**: phonic cues; instruction based on the alphabetic principle that there is a predictable relationship between phonemes (sounds in a spoken language) and graphemes (letters that represent the sounds) that can be used to decode and read words

• **Post-reading skills**: strategies used to reflect on reading and integrate new information and concepts with previously learned understandings

• **Predict**: to use context and content clues to anticipate what might happen next

• **Pre-reading strategies**: activities that take place before reading to access prior knowledge, preview text, assist the reader in predicting the text’s topic or main idea and set a purpose for reading

• **Reading rate**: the speed at which a selection is read and the manner in which it is read, depending on the purpose for reading—skimming, scanning, studying, or reading for pleasure

• **Reflect**: to think about and write or speak one’s views in response to a text or presentation

• **Research plan**: a multi-step sequential plan for research which includes surveying the available source material, recording bibliographic information, taking notes, and synthesizing the research material into a paper or presentation

• **Sensory details**: details that appeal to the five senses and evoke images of how something looks, sounds, feels, tastes, or smells; sensory details may be literal (descriptive language) or figurative (imagery)

• **Sentence (simple)**: one subject and one predicate, as in “The dog ate my homework.”

• **Setting**: the geographic location and time period of a story

• **Summarize**: to make a brief statement about the essential ideas in a text

• **Supporting details**: examples provided to describe, explain, or reinforce the main idea

• **Text elements**: basic parts of a story: setting, characters, plot, conflict, point of view, and theme

• **Text features**: parts, other than the body of the text, that designate special features (e.g., title, author, copyright, dedication); text organizers that provide structure and help readers locate information (e.g., page numbers, table of contents, captions, glossary, index, illustrations, graphs, charts, etc.)

• **Visualize**: to picture the people, places, and/or actions that an author describes in text; a reading strategy to increase comprehension of text

• **Vocabulary**: the words one can understand and use correctly
Third Grade
Math
Grade Level Expectations
A. **Read, write, and compare numbers**: read, write, and compare whole numbers up to 3 digits

B. **Represent and use rational numbers**: recognize commonly used fractions
   - Halves
   - Thirds
   - Fourths

C. **Compose and decompose numbers**: recognize equivalent representations for the same number and generate them by decomposing and composing numbers

D. **Classify and describe numeric relationships**: classify numbers by their characteristics, including odd and even

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**Understand meanings of operations and how they relate to one another**

A. **Represent operations**: represent a given situation involving multiplication

B. **Describe effects of operations**: describe the effects of adding and subtracting whole numbers as well as the relationship between the two operations

C. **Apply properties of operations**: apply commutative and identity properties of addition to whole numbers

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**Compute fluently and make reasonable estimates**

B. **Develop and demonstrate fluency**: develop fluency with basic number relationships (12 x 12) of multiplication and division

C. **Compute problems**: apply and describe the strategy used to compute up to a 3-digit addition or subtraction problem

D. **Estimate and justify solutions**: estimate and justify the results of addition and subtraction of whole numbers
1. **Understand patterns, relations, and functions**
   A. **Recognize and extend patterns**: extend geometric (shapes) and numeric patterns to find the next term
   B. **Create and analyze patterns**: represent patterns using words, tables or graphs

2. **Represent and analyze mathematical situations and structures using algebraic symbols**
   A. **Represent mathematical situations**: represent a mathematical situation as an expression or number sentence
   B. **Describe and use mathematical manipulation**: apply the commutative property to the addition of whole numbers

3. **Use mathematical models to represent and understand quantitative relationships**
   A. **Use mathematical models**: model problem situations, including multiplication with objects or drawings

4. **Analyze change in various contexts**
   A. **Analyze change**: describe qualitative change, such as students growing two inches in a year
### 1. Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships

A. **Describe and use geometric relationships**: compare 2- and 3-dimensional shapes using physical models
   - Circle
   - Rectangle
   - Rhombus
   - Trapezoid
   - Triangle
   - Rectangular prism
   - Cylinder
   - Pyramid
   - Sphere

C. **Compose and decompose shapes**: predict the results of putting together or taking apart 2- and 3-dimensional shapes

### 2. Specify locations and describe spatial relationships using coordinate geometry and other representational systems

A. **Use coordinate systems**: describe location using common language and geometric vocabulary (forward, back, left, right, north, south, east, west)

### 3. Apply transformations and use symmetry to analyze mathematical situations

A. **Use transformations on objects**: determine if two objects are congruent through a slide, flip, or turn

C. **Use symmetry**: identify lines of symmetry in a polygon

### 4. Use visualization, spatial reasoning, and geometric modeling to solve problems
<table>
<thead>
<tr>
<th>1</th>
<th><strong>Understand measurable attributes of objects and the units, systems, and processes of measurement</strong></th>
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<tbody>
<tr>
<td>A.</td>
<td><strong>Determine unit of measurement</strong>: identify, justify, and use the appropriate unit of measure (linear, time, weight)</td>
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<tr>
<td>C.</td>
<td><strong>Tell and use units of time</strong>: tell time to the nearest five minutes</td>
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<tr>
<td>D.</td>
<td><strong>Count and compute money</strong>: determine change from $5.00 and add and subtract money values to $5.00</td>
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<tr>
<th>2</th>
<th><strong>Apply appropriate techniques, tools, and formulas to determine measurements</strong></th>
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<tbody>
<tr>
<td>A.</td>
<td><strong>Use standard or non-standard measurement</strong>: use a referent for measures to make comparisons and estimates</td>
</tr>
<tr>
<td>C.</td>
<td><strong>Apply geometric measurements</strong>: determine the perimeter of polygons</td>
</tr>
</tbody>
</table>
1. **Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them**
   - A. **Formulate questions**: design investigations to address a given question
   - C. **Represent and interpret data**: read and interpret information from line plots and graphs (bar, line, pictorial)

2. **Select and use appropriate statistical methods to analyze data**
   - A. **Describe and analyze data**: describe the shape of data and analyze it for patterns

3. **Develop and evaluate inferences and predictions that are based on data**
   - A. **Develop and evaluate inferences**: discuss events related to students’ experiences as likely or unlikely

4. **Understand and apply basic concepts of probability**
**Possible Topic/Focus for the School Year:**
Community—Our Community, its History, How it is Governed, How People Earn a Living in it, How it Relates to the Nation
**Principles of Constitutional Democracy**

1. Knowledge of the principles expressed in documents shaping constitutional democracy in the United States

   A. **Knowledge of the Constitution as the fundamental law of our nation**: identify and explain cities make laws and ordinances
      
      *Teaching strategy*: Invite city officials to explain city laws and why they exist.

   B. **Citizens have both rights and responsibilities**: discuss and apply responsibilities of citizens including respect for the rights of others and treating others fairly (justice)
      
      *Teaching strategy*: Create posters, ads, or diagrams that depict the ideals of justice and respect.

   C. **Understanding of the main purposes of United States documents**: state the main purposes of the Declaration of Independence, and identify the purpose of the Constitution
      
      *Teaching strategy*: Create a simple diagram that lists the main purposes of the Declaration of Independence and the Constitution.

   D. **Knowledge of the symbols of our nation**: explain how the National Anthem symbolizes our nation
      
      *Teaching strategy*: Read and interpret the first and last verses of the Star Spangled Banner. Explain the meaning in your own words.

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**Missouri, United States, and World History**

2a. Knowledge of continuity and change in the history of Missouri, the United States, and the world

   B. **Knowledge of the contributions of non-Missourians**: describe the contributions of Martin Luther King, Jr.
      
      *Teaching strategy*: Collect a series of pictures from magazines, the Internet, etc., to create a montage showing how Martin Luther King, Jr. helped people achieve equality and freedom. Write a short explanation for the montage.

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2b. Knowledge of continuity and change in the history of the world
### Principles and Process of Governance Systems

<table>
<thead>
<tr>
<th>3</th>
<th>Knowledge of principles and processes of governance systems</th>
</tr>
</thead>
</table>
| A. **Knowledge of democratic principles of governance, especially as applied to school, community and state**: analyze peaceful resolution of disputes by courts or other legitimate authorities, such as parents, teachers, principals, etc.  
  Teaching strategy: Role-play and then discuss conflict resolution scenarios related to parents, teachers, and principals. |
| B. **A general knowledge of how and by whom authoritative decisions are made, enforced and interpreted within these governance systems**: describe how authoritative decisions are made, enforced, and interpreted within the federal government  
  Teaching strategies: Create a chart with explanations that shows how the federal government makes, enforces, and interprets decisions. |
| C. **Knowledge of the functions of the three branches of government**: identify and explain the functions of the three branches of government in the federal government  
  Teaching strategies: Construct concept/word maps that illustrate the functions of the three branches of federal government. |
## Economic Concepts and Principles

### Knowledge of economic concepts (including productivity and the market system) and principles (including the laws of supply and demand)

<table>
<thead>
<tr>
<th>A. Knowledge of basic economic concepts, being able to explain and use them to interpret historical and current events:</th>
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<tbody>
<tr>
<td>• Identify and explain <strong>public goods</strong> and services</td>
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<tr>
<td>Teaching strategy: construct a map, and label certain buildings as public-service places (city hall, schools, streets, police department, fire department, highway department, etc). Students explain the purposes of those places and how they are different from the community’s <strong>private goods</strong> and services</td>
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<tr>
<td>• Distinguish among natural, capital, and human resources</td>
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<tr>
<td>Teaching strategy: Define and give real-world examples of natural, capital and human resources. Divide the class into three groups of students: human resources, capital resources, and natural resources. Each group will identify their resource in the school building. Share findings with the other groups on large paper or board.</td>
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</table>

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<thead>
<tr>
<th>B. Economic decision-making: create a cost-benefit analysis</th>
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<tbody>
<tr>
<td>Teaching strategy: Have students design a cost-benefit T-chart of choices for a tough decision they had to make during the past week. Select three or four students to share their charts and to explain how the cost-benefit T-chart helped them to make their decision.</td>
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<tr>
<th>C. The existence and purposes of taxes:</th>
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<tbody>
<tr>
<td>• Identify taxes students experience, such as sales tax</td>
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<tr>
<td>Teaching strategy: Bring in pictures of items that students buy. Students should explain why the advertised price is not the total price. Explain how and why taxes are added.</td>
</tr>
<tr>
<td>• List how tax moneys are used, who benefits from tax-supported services and who pays for these services</td>
</tr>
<tr>
<td>Teaching strategy: Have cooperative learning groups design cost-benefit T-charts that illustrate the benefits and costs related to consumers paying taxes and the benefits they get from them. Then, provide time for each team of students to share their cost-benefit T-chart with the class.</td>
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</tbody>
</table>
### Elements of Geographical Study and Analysis

**5 Knowledge of major elements of geographical study and analysis** (such as location, place, movement, and regions) and their relationship to changes in society and the environment

| A. **Reading and constructing maps**: read and construct maps |
| B. **Geography of Missouri and the United States—Location**: |
|   • identify and locate the Mississippi and Missouri Rivers |
|   • Identify the states bordering Missouri |
|   • Describe and use **absolute location** using a grid system |
| D. **Relationships within places (human-environment interactions) (movement)**: |
|   describe various ecosystems in Missouri and the world and what physical factors cause them to be as they are |
| E. **Relationships between and among places**: |
|   • Describe how changes in communication and transportation technologies affect people's lives |
|   • Explain why people living in different **places** (cities, suburbs, towns, villages) and specializing in different ways of making a living have a need to interact with each other |
| F. **Regions**: identify examples of different **regions** (e.g., urban, rural, recreational area, wheat-producing region, business district) |

### Relationships of Individual and Groups to Institutions and Traditions

**6 Knowledge of the individual and groups to institutions and cultural traditions**

| A. **Cultures meeting the needs of people**: compare how people’s needs have been met in different ways in different cultures at various times |
| C. **Methods of resolving conflicts**: take part in a constructive process or method for resolving conflicts (such processes or methods include identifying the problem, listing alternatives, selecting criteria for judging the alternatives, evaluating the alternatives, and making a decision) |
## Tools of Social Science Inquiry

**Knowledge of the use of tools of social science inquiry (such as surveys, statistics, maps, and documents)**

A. **Identify, select, use and create appropriate resources for social science inquiry**
   - Identify, select, and use visual, graphic, and auditory aids (timelines and diagrams)
   - Identify, use, and create primary and secondary sources (diaries, letters, people, interviews, journals, and photos)
   - Identify and use library and media resources (electronic resources, dictionaries, encyclopedias, videos, periodicals, atlases, almanacs, telephone directories, and books)
   - Identify and use artifacts (building structures and materials, works of art representative of cultures, fossils, pottery, tools, clothing, musical instruments)
• **Human-environment interactions:** the theme of geographic education called “Relationships within Places: Humans and Environments”, one of the five themes of geographic education coined by the Joint Committee on Geographic Education of the National Council for Geographic Education and the Association of American Geographers in their book *Guidelines for Geographic Education*. This theme explores the fact that people and the environments in which those people live and work often have a profound impact on each other.

• **Location:** the descriptions of the positions of people and places on the Earth’s surface. One way of describing the location of a place is by “absolute location”, in which we can precisely locate any place on the Earth’s surface by using the arbitrary grid system of latitude and longitude. Another way of describing the location of a place is by “relative location”, in which we locate the place by explaining where the place is in relation to one or more other familiar places. This term is one of the five themes of geographic education coined by the Joint Committee on Geographic Education of the National Council for Geographic Education and the Association of American Geographers in their book *Guidelines for Geographic Education*.

• **Place:** as the term is used by geographers, pertains to those physical characteristics and human characteristics used to describe an area. Two individuals may have different conceptions of the same place, because they perceive things based on their points of view and experiences. This term is one of the five themes of geographic education coined by the Joint Committee on Geographic Education of the National Council for Geographic Education and the Association of American Geographers in their book *Guidelines for Geographic Education*.

• **Private goods:** those goods that producers can withhold from customers who refuse to pay for them, where the consumption of the product or service by one person reduces its usefulness to others. One example is a hamburger.

• **Public goods:** goods or services that cannot be withheld from customers who refuse to pay for them (nonexclusion), where the consumption of products or services by one person does not reduce its usefulness to others (shared consumption). Examples include national defense, street lighting, flood control, public safety, and fire protection in a crowded neighborhood.

• **Region:** an area that displays unity in terms of one or more selected criteria. The criteria used in defining regions may vary considerably. Regions, for example, may be defined by political boundaries, types of terrain, how land is used, rainfall, soil type, dominant religion of the people, and so on. This term is one of the five themes of geographic education coined by the Joint Committee on Geographic Education of the National Council for Geographic Education and the Association of American Geographers in their book *Guidelines for Geographic Education*.