

# “Gee’s Geometry” Grades K-8

*correlation with Missouri State Standards*

## Missouri History Museum



Mary Lee Bendolph,  
Gee’s Bend Quilts, and Beyond



## Show Me Standards (Social Studies)

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

2. continuity and change in the history of Missouri, the United States and the world
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 environment
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)

# Grade Level Expectations

GLE	Component	Content
<b>Social Studies</b>		
<b>SS 3a.G.</b> "Knowledge of contributions of non-Missourians"	Gallery Visit: stations A, B, C	Gee's Bend is located in Alabama.
<b>SS 3b.F.</b> "Cultural features of the historic African Empires"	Gallery Visit: station B	Traditional African weaving patterns influence the quilt designs.
<b>SS 4. A, B, D, H, K.</b> "Knowledge of basic economic concepts, being able to explain and use them to interpret historical and current events" and "Understanding the consequences of personal and public economic decisions" and "Interdependence of households, businesses and governments" and "Understanding the roles of people, business, and government in economic systems of the United States" and "Understanding the roles of government in a market economy"	Gallery Visit: stations A, B	Slavery, sharecropping, the Great Depression, and the New Deal are all important landmarks in our discussion of the history of Gee's Bend. As each of these time periods is introduced, students will be asked to think along with the people of Gee's Bend: how did the decisions of the Pettitway plantation owners, the Van De Graaf family, or the Roosevelt Administration affect them? What choices could they make as their circumstances changed? Were government actions effective in addressing their needs?
<b>SS 5. A, B, C, D, E, H.</b> "Reading and constructing maps" and "Understanding the concept of location to make predictions and solve problems" and "Understanding the concept of place" and "Relationships within places ( <i>Human-Environment Interactions</i> ) (Movement)" and "Understanding relationships between and among places" and "Human Systems (Describe major patterns of population distribution, demographics and migrations in the world and the impact of these patterns on cultures and community life)"	Gallery Visit: station A	Students will be shown a map of Gee's Bend and asked to situate the town both geographically and culturally. Particularly salient points include its location in the South (i.e., slavery, race relations) and the fact that it is surrounded by water on 3 sides (thus meaning that the people there are able to be isolated from the rest of the state, sometimes by force and with tragic consequences).
<b>SS 6. A, B, C, D, F, G, H, I, J, M, O.</b> "Cultures meeting the needs of people" and "Groups meeting the needs of individuals" and "Methods of resolving conflicts" and "Knowledge of how needs of individuals are met" and "Effects of actions, cultural, traditions and institutions" and "Effect of laws and	Gallery Visit: stations A, B, C	The gallery visit is focused on the history of Gee's Bend as a civil rights story. What rights should have been guaranteed to the people of Gee's Bend, and how did the ability or failure of their society to ensure these rights have an impact on their lives? How did they advocate for civil rights, as

events on relationships" and "Effect of personal and group experiences on perceptions" and "Changing ideas, concepts and traditions" and "Methods of resolving conflicts" and "Major social institutions" and "Causes, effects and resolutions of cultural conflict"		individuals and as a town? Stories from the eras of slavery, sharecropping, the Great Depression, the New Deal, and the Civil Rights movement will be discussed.
<b>SS 7.A.</b> "Identify, select, use, analyze and create appropriate resources, primary and secondary, for social science inquiry"	Gallery Visit: stations A, B, C	The quilts of Gee's Bend are themselves primary sources. Students will engage in close looking and elaboration based on these artifacts.
<b>Mathematics</b>		
<i>Grades K-2:</i> <b>GSR 1A, MA 2 1.6, 1.10.</b> "Sort recognize, and describe attributes and parts of 2- and 3-dimensional shapes."	Geometry Workshop	A tangram activity is designed for students to discuss the basic attributes of 2-dimensional shapes. They will also be able to sort similar shapes into groups and explain why shapes are similar and different. Students will construct their own quilt blocks that will eventually be turned into a massive class quilt.
<i>Grades 3-5:</i> <b>GSR 1A, MA 2 1.5, 1.6, 1.10, 4.1; GSR 1C, MA 2 1.6, 4.1; GSR 3A, MA 2 3.6, 4.1.</b> "Compare, identify, describe, and analyze the attributes of 2- and 3-dimensional shapes" and "Predict, describe, and justify the results of putting together or taking apart 2- and 3-dimensional shapes and subdividing, combining, and transforming shapes" and "Determine if two objects are congruent through a slide, flip or turn, and predict, draw, and describe the results of sliding/translating, flipping/reflecting, and turning/rotating around a center point."	Geometry Workshop	A tangram activity is designed to give students experience with transformations, symmetry, asymmetry, and congruency. Key terms include Transformation, Rotation, Reflection, Symmetry, Congruence, Coordinate Plane, and Center Point.
<i>Grades 6-8:</i> <b>GSR 1A, MA 2 1.6, 1.10, 3.3, 3.6; GSR 3A, MA 2 3.6, 3.7.</b> "Identify, describe, classify, and generalize 1-, 2-, and 3-dimensional shapes and their relationships using defining properties" and "Describe the transformation from a given pre-image and reposition shapes under formal and informal transformations (reflection/flip, rotation/turn, translation/slide)."	Geometry Workshop	A tangram activity involves discussion of the properties of shapes with a focus on tangram pieces to appeal to visual learners. Students will also demonstrate informal and formal transformations, ultimately making a quilt block using transformations.

<b>Communication Arts</b>		
<b>Writing 3.A, E.</b> "Write effectively in various forms and types of writing" and "Narrative and Descriptive Writing" and "Audience and Purpose"	Gallery Visit station A	In a creative writing activity, students write a postcard to a person of their choice, describing their day at school in Gee's Bend.
<b>Writing 1.A and 2.A, F.</b> "Writing Process" and "Apply a writing process in composing text" and "Compose well-developed text using standard English conventions" and "Handwriting" and "Sentence Construction"	Gallery Visit station B	Using <i>Workclothes Quilt (2002)</i> , students will write a poem as a group by writing sentences on strips of paper and then arranging them into a poem.
<b>Listening and Speaking 1.A, B, C.</b> "Develop and apply effective listening skills and strategies" and "Purpose for Listening" and "Listening Behavior" and "Discussion and Presentation"	Gallery Visit, Geometry Workshop (throughout visit)	Students listen to directions given by museum staff and respond appropriately. Guides will discuss the exhibit and related history with students, asking for their perspectives. Students may be asked to share their work with the group.
<b>Fine Art</b>		
<b>AP 1. A and 2.A.</b> "Investigate the nature of art and discuss responses to artworks" and "Aesthetics" and "Analyze and evaluate art using art vocabulary" and "Art Criticism"	Gallery Visit stations A, B, C	Students engage in close looking and elaboration using the quilts. They are introduced to vocabulary (e.g., asymmetry, multiple patterning) and are encouraged to use these terms.
<b>IC 2.A.</b> "Explain the connections between Visual Art and Communication Arts, Math, Science or Social Studies" and "Connecting Art and Non-Art Subjects"	Gallery Visit and Geometry Workshop	In the Gallery, connections with Social Studies are made. In the workshop, connections with Mathematics are made.
<b>HC 1.A.</b> "Compare and contrast artworks from different historical time periods and/or cultures" and "Historical Period or Culture"	Gallery Visit stations A, B, C	The nature of the Gee's Bend Quilts as a specific example of regional and/or African American textile traditions is emphasized.
<b>HC 1.B.</b> "Compare and contrast artworks from different historical time periods and/or cultures" and "Characteristics of Artworks"	Gallery Visit station B	Students engage in a compare and contrast exercise using two <i>Housetop Variation</i> quilts.

## MAP Testing Tie-Ins

- ✓ Docents are requested to use the twelve questions words that appear in MAP testing: *Analyze, Infer, Predict, Support, Identify, Explain, Trace (as in a timeline), Paraphrase, Evaluate, Formulate, Justify, Define, Describe, Compare, Contrast*. The scenario demonstrates ways to integrate these "power words" into the interpretation of this gallery.
- ✓ Students complete a compare-and-contrast exercise in the gallery using two of the quilts. Docents are instructed to look for at least 3 well-phrased sentences in students' responses.