



Technology-Connected Lesson Plan

Title:	Geometry and Quilting
Grade Levels:	4-5
Curriculum Areas: **	☞ Math, Language Arts, Social Studies
Lesson Objectives:	<ul style="list-style-type: none"> ☞ The learner will create a quilt square for a class quilt using at least three, two-dimensional geometric figures. ☞ The learner will research and write a brief description of at least two different quilt patterns that they find.
La. Content Standards:	<p>G-2-E identifying, describing, comparing, constructing, and classifying two-dimensional and three-dimensional geometric shapes using a variety of materials; (1, 2, 3, 4)</p> <p>G-6-E demonstrating the connection of geometry to the other strands and to real-life situations. (1, 2, 3, 4, 5)</p> <p>G-4-M constructing two- and three-dimensional models; (3)</p> <p>H-1A-E3 identifying and using primary and secondary historical sources to learn about the past; (1, 3, 4)</p> <p>H-1B-E1 describing and comparing family life in the present and the past; (1, 2, 3, 4)</p> <p>H-1A-M6 conducting research in efforts to answer historical questions; (1, 2, 3, 4)</p> <p>ELA-1-M5: Adjusting reading rate according to texts and purposes for reading (e.g., problem solving, evaluating, researching)* (1, 2, 4, 5)</p> <p>ELA-2-M2: Using language, concepts, and ideas that show an awareness of intended audience and/or purpose (e.g., classroom, real-life, workplace) in developing complex compositions (1, 2, 4)</p> <p>ELA-3-M1: Writing fluidly and legibly in cursive or printed form (1, 4)</p> <p>ELA-3-M4: Demonstrating understanding of the parts of speech to make choices for writing (1, 4)</p>
Technology Guidelines:	<p>1. Technology Communication Tools (<i>Communication Foundation Skill</i>)</p> <ul style="list-style-type: none"> ◆ Students use telecommunications to collaborate, publish, and interact with peers, experts and other audiences. <p>3. Technology Productivity Tools (<i>Resource Access and Utilization Foundation Skill</i>)</p> <ul style="list-style-type: none"> ◆ Students use technology tools to enhance learning, increase productivity, and promote creativity.

	<p>6. Basic Operations and Concepts</p> <ul style="list-style-type: none"> ◆ Students demonstrate a sound understanding of the nature and operation of technology systems. ◆ Students are proficient in the use of technology.
Technology Connection:	<ul style="list-style-type: none"> 🖥️ The Math Forum-Ask Dr. Math www.mathforum.org/dr.math/ 🖥️ Red Dawn (A Timeline of quilting in America) www.reddawn.net/quilt/timeline.htm 🖥️ The Library of Congress (Quilts and quilt making in America) View the photo gallery www.memory.loc.gov/ammem/qlthtml/qlthome.html
Procedures:	<ul style="list-style-type: none"> 🖥️ Display a variety of quilts, quilt blocks, quilt books, etc. 🖥️ Discuss with students that quilts are not only a part of America's heritage, but also relate to math/geometry. 🖥️ Students will have been introduced to a variety of geometric figures during a unit of geometry. 🖥️ Students will have practiced/learned the names as well as the attributes of triangles, circles and quadrilaterals. 🖥️ Students will have had time to practice drawing and measuring each of the polygons that they have studied in math class. 🖥️ Students will visit sites on the Internet to look at a variety of quilt designs and the background of quilt making. 🖥️ Students will learn about various patterns and their meaning. 🖥️ Students will choose two patterns and write a brief description of them. 🖥️ Using paint or a similar program, students will create and print individual quilt blocks. 🖥️ Using their printed block as a guide, students will cut and glue felt pieces on a cotton backing to create a class quilt. (The teacher will have the backing prepared and marked off into six inch squares.)
Assessment:	🖥️ Teacher observation/completed work
Materials:	<ul style="list-style-type: none"> 🖥️ Felt pieces 🖥️ Scissors 🖥️ Glue 🖥️ Cotton backing
Teacher's Name:	🖥️ Margie Penton
School:	🖥️ Hammond Westside Primary/Upper

****** This lesson could be used as part of a geometry unit as well as a social studies unit about the settlers of our country. It is also easily incorporated into Reading/Language Arts. While creating this lesson I was amazed at the number of fictional quilt books available.