



## Shape Up!

### *Exploring Shapes through Historic Quilt Patterns*

#### Overview

Shapes can be found all around us, and the ability to recognize and understand shapes is a foundational mathematic skill. Using quilt squares, students will identify a variety of shapes and how they can be combined to create new and different shapes and designs. Students will be able to work with shapes while putting together quilt design puzzles.

#### Age Group

Early Childhood - Kindergarten

#### Duration

30 – 45 minutes

#### Subject

Mathematics

Fine Arts

#### Standards of Learning Met

Mathematics

- K.MD.3: Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.
- K.G.1: Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to
- K.G.2: Correctly name shapes regardless of their orientations or overall size
- K.G.4: Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/“corners”) and other attributes (e.g., having sides of equal length)
- K.G.5: Model shapes in the world by building shapes
- K.G.6: Compose simple shapes to form larger shapes

Fine Arts

- FPA 4.1.A.3: Students apply the elements and principles of design to their artwork
- FPA 4.1.A.5: Students use art materials and tools in a safe and responsible manner
- FPA 4.1.A.6: Students complete and exhibit their artwork



### Objectives

Students will...

- Identify specific shapes
- Recognize shapes in a quilt square
- Create their own quilt squares using puzzle shapes

### Materials

Included

- Lesson Packet
- 2 Quilt Squares
- *Quilting A Memory* information sheet
- *Quilt Pattern Puzzles* for each student

Needed

- Glue sticks or tape

### Key Terms

**Binding** - a strip of fabric used to cover the raw edges of the quilt sandwich

**Piecing** – the process of sewing two or more pieces of fabric together to form a larger whole

**Quilt** – a coverlet or blanket made of two layers of fabric with a layer of batting in between, all stitched firmly together, usually in a decorative manner

**Quilt Pattern** – the pieces of fabric arranged to create a specific quilt design

**Quilt Square** – a quilted square of fabric. Several squares can be sewn together to form a large quilt.

**Tied Quilt** – a type of quilt in which yarn or thread ties are used to secure the layers rather than quilting stitches

### Sample Lesson Plan

1. Have students brainstorm as many different shapes as they can. Draw these shapes on the board as they are listed.
2. Have students identify where these shapes can be found.  
*Optional:* Play a form of *I Spy* using shapes in and around the classroom.
3. Introduce the concept that shapes can be put together to form new shapes or new, useful items or images. Use the *Log Cabin* and *Eight Pointed Star* quilt squares to illustrate.
4. Discuss how quilts are made as well as the many uses of quilts (Use the *Quilting a Memory* information sheet to inform the discussion). Have students examine the quilt squares and name as many different shapes as they can.
5. Provide each student with a *Quilt Pattern Puzzle*. Either have students complete the quilt pattern puzzle or allow them to play with the shapes provided to create their own quilt square (extra puzzle pieces have been provided for this). Once students have completed their design, glue or tape their new quilt square either to the quilt pattern sheet provided or to a blank piece of paper if a new pattern has been created. Allow glue to dry before taking home.