



**Title of Lesson:** Textile Designs and Math

**Artist:** Cassandra Stancil Gunkel, PhD

**Art Form:** Fiber Art Design, Batik

**Academic Standard:**

**Arts Standard:**

**9.1 Art Production Themes (use patterns to create pleasing art design),  
9.4.Aesthetic choices, artistic design**

**Students Will**

- Identify patterns in textile designs
- Use a grid to create a pleasing textile design
- Explore and decode a variety of grid designs in fashion
- Explore how math ideas can build pleasing designs

**Assessment:** students identify patterns in a variety of batik or printed textile designs

<b>Academic Content Objective</b>	<b>The student will</b>	<b>Assessment:</b>
<b>Arts Content Objective</b>	<b>The student will</b>	<b>Assessment:</b>

**Summary of the Lesson:**

**Fiber artists use patterns to create pleasing designs.**

**ARTS Lesson Structure:**

**Introduce pattern from wearable designs.**



**Attention: How will you prepare the students for the lesson? How will you elicit their attention?**

Introduce batik shirts and wearables by Nigerian artists Gesali Adeyamo and the Roy Urban company (Philadelphia). Introduce carved stamps used to create their designs.

Discuss: how is the carved design repeated on the shirt front? What math idea or multiplier did the designer follow to create his design (5 rows, 6 columns of repeating patterns)

**Review: What content will you review in both academics and the arts to prepare the students for the lesson? How will you connect stored information?**

Show examples of artworks with patterns: quilts, clothing, architecture

**Teach: Summarize the steps you will take to teach the lesson?**

Introduce pattern concept with objects, game boards and the math idea they illustrate (grid game board = 12 by 12)

Introduce "surface design," pattern in surface design, batik as a type of surface design

Discuss and illustrate ways to create and follow a pattern to create a design or cover a surface.

Have students create several 8 inch grids of 1 inch squares on paper using pencils, rulers.

Use a stamp/pad or pencil mark, lead students to fill the grid in a variety of ways:

Fill each square, fill alternate squares, fill every 2 squares, etc,

Try stamp variations: vary orientation of the stamps, following the above grid ideas. Explore how the resulting patterns.

**Support: How will you close your lesson to connect previous information to new learning? What will you assign?**



Show examples of wearables, artworks for discussion, student interpretation of pattern. For later: students can look for patterns in their clothing, in artworks