



Pattern My World

Intermediate Grades Learning Plan—(1.5 hours)

SHEET #1 (Front)

Overview:

1. Review the meaning of **pattern** and **repeat**
 - a. Pattern = something that repeats
 - b. Repeat = when something happens over and over again
2. Discover the meaning of **tessellation**
 - a. Tessellation = tiling where shapes fit together without gaps or overlaying shapes and create patterns
3. Explore real world examples of patterns
4. Look at how Artist Gustav Klimt used patterns in his work
5. Look at how Artist Joan Miró used repeating elements in his work
6. Compare the works of Artist Gustav Klimt and Artist Joan Miró
7. Create an art project displaying a pattern

Supplies From Kit: (organized by learning plan section)

Engage	Explore	Explain	Elaborate	Extend
N/A	<u>One Grain of Rice</u> book	Post-It Notes	Pattern Blocks	Wallpaper & Fabric Samples
		Pattern Blocks	Pattern Cards (dk brown)	<i>Portrait of Adele Bloch-Bauer I</i> by Gustav Klimt
		Pattern Cards (dk brown)	Tessellation Cards (tan)	<i>Portrait of Margarethe Stonborough-Wittgenstein</i> by Gustav Klimt
		Tessellation Cards (tan)		<i>Personage et Oiseaux</i> , by Joan Miró
				<i>Bleu II</i> , by Joan Miró
				Art Project Samples
				Black Construction Paper (1 per participant)
				Glitter Crayons



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SHEET #1 (Back)

Supplies Provided by Consumer: (organized by learning plan section)

Engage	Explore	Explain	Elaborate	Extend
Chalk Board or White Board (optional)	N/A	Chalk Board or White Board or Wall	N/A	Discarded Magazines
Chalk or Wb Markers (optional)		Scrap Paper in 3 x 3 squares (10 per pair of students)		Glue or Paste
		Writing Utensils (1 per pair)		Additional Crayons or Paint (optional)

Preparation:

- 1) Create a shape pattern (using circles, squares, triangles, rectangles, etc.) on a board or wall, with each shape no bigger than the size of a Post-It Note. Cover each shape with a Post-It Note. See supplemental pattern sheet for pattern ideas. (Used during the Explain learning plan step.)
- 2) Cut the 3 x 3 squares of scrap paper. (Used during the Explain learning plan step.)



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SHEET #2 (Front)

Engage: What Do You Know? (5 minutes)

Gather the participants together. Use these questions to have a discussion about pattern and repeat. (Optional, write the words 'pattern' and 'repeat' on a board.)

Have you seen a pattern before? What was it like?

How did you know it was a pattern?

Do you see any patterns now?

Have you seen something repeating?

Have you repeated something before? (e.g. the seasons are a cyclical repetition)

What do you think of when you hear the word 'tessellation'?

Explore: Story Time (10 minutes)

Read book A Grain of Rice. Encourage participants to look for patterns.

Explain: Patterns (20 minutes)

- 1) Discuss the patterns and repeating words in the book. Explain the definitions of pattern and repeat.
- 2) Focus the participant's attention on the Post-It Notes on the wall or board of the pattern you prepared. (See Preparation.)
- 3) Remove the first sheet. Have the participants note the shape. Encourage participants to decode the pattern.
- 4) Continue removing the sheets one at a time, and ask for predictions for the next shape, until the entire pattern is visible.
- 5) Divide the participants into pairs and distribute scrap paper. Have them create hidden patterns for each other.
- 6) Gather the participants together. Hold up a pattern card. If needed, model how to use the card.
- 7) Hold up a tessellation pattern card. Explain that a tessellation is a tiling, as seen on floors and in bathroom, where shapes fit together without gaps or overlaying shapes, and create patterns.



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SHEET #2 (Back)

Elaborate: Pattern Cards (15 minutes)

Allow the participants time manipulating the pattern blocks and cards, or creating their own patterns/tessellations.

Extend: Art (40 minutes)

- 1) Gather the participants together. Distribute wallpaper and fabric samples. Have the participants point to and compare patterns and other repeating shapes.
- 2) Show pictures of Gustav Klimt's work. Share brief life history and art genre. Have the participants point out:
 - a. Patterns
 - b. Repeating Shapes
- 3) Distribute pictures of Joan Miró's work. Share brief life history and art genre. Have the participants point out:
 - a. Patterns
 - b. Repeating Shapes
 - c. Representational elements (shapes that look like objects)
- 4) Discuss similarities and differences between the paintings. Encourage discussion about how Klimt would have portrayed Miró's work, and how Miró would have portrayed Klimt's work.
- 5) Introduce the art project samples, and point out the patterns.
- 6) Have the participants cut out a person, animal, or other item, from a magazine. The cut-out picture should fit on the black construction paper.
- 7) Have the participants create a patterned background on the black paper. Then glue the cut-out picture on the background.

Sources:

[Build It Festival: Teacher's GEMS Guide](http://artsedge.kennedy-center.org) by Philip Gonsalves & Janie Kopp

<http://artsedge.kennedy-center.org>

<http://math.dartmouth.edu/~matc/math5.pattern/lesson4math.html>

<http://www.digitalpalette.org.uk/worcbboxes/klimt/index.html>