



Comparing the Quilts of Indigenous Plains People with the Tessellations of M.C. Escher, Part 1

Diamonds, Not Just a Girl's Best Friend



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| Grade Level | 9th – 12th Grade | Time Frame | 120-150 Minutes |
| Subject | Visual Arts | Duration | 2-3 Periods |
| Course | Visual Arts | | |

Essential Question

How can an artist use the principles of design to create effective art? How can the principles of design help an artist convey mood and meaning?

Summary

Students will watch an ICAP video of Plains tribe member Crystal Pewo Lightfoot who makes star quilts and start quilt based designs. They will learn the history of the quilts and the Plains tribes, examine quilts using modern principles of design, and make a design of their own. Students will share their work with one another. Students will then use their skills to analyze professional works by tribe members. This is the first lesson of the "Comparing the Quilts of Indigenous Plains People with the Tessellations of M.C. Escher" lesson duo.

Snapshot

Engage - Students watch an ICAP video featuring Crystal Pewo Lightfoot, a member of the Apache Tribe of Oklahoma and a descendant of the Kiowa Tribe.

Explore - Students read about Plains tribes history and the significance behind the patterns in their quilts. After reading, they will create their own example using premade patterns.

Explain - Students explain how the principles of design apply to their quilts.

Extend - Students conduct a Gallery Walk to view their classmates artwork, providing at least one positive critique and identifying one principle of design.

Evaluate - Using the instructional strategy It's OPTIC-al, students analyze three professional pieces of artwork.

Standards

Oklahoma Academic Standards (*Fine Arts: Visual Art (High School: Advanced (II))*)

CP: Creative Process (CP)

VA.CP.1 : Learn and use vocabulary and concepts related to visual arts.

II.VA.CP.1.1 : Use the elements of art and principles of design to create artwork for the development of a portfolio.

II.VA.CP.1.2 : Choose from a range of materials and methods of traditional and contemporary artistic practices to plan personal works of art and design.

II.VA.CP.1.3 : Reflect on artistic choices through written response.

Attachments

- [Diamond Template—Diamonds, Not Just a Girl's Best Friend.svg](#)
- [Four Corners Posters—Diamonds, Not Just a Girl's Best Friend - Spanish.docx](#)
- [Four Corners Posters—Diamonds, Not Just a Girl's Best Friend - Spanish.pdf](#)
- [Four Corners Posters—Diamonds, Not Just a Girl's Best Friend.docx](#)
- [Four Corners Posters—Diamonds, Not Just a Girl's Best Friend.pdf](#)
- [It's OPTIC-al Graphic Organizer—Diamonds, Not Just a Girls Best Friend - Spanish.docx](#)
- [It's OPTIC-al Graphic Organizer—Diamonds, Not Just a Girls Best Friend - Spanish.pdf](#)
- [It's OPTIC-al Graphic Organizer—Diamonds, Not Just a Girls Best Friend.docx](#)
- [It's OPTIC-al Graphic Organizer—Diamonds, Not Just a Girls Best Friend.pdf](#)
- [Lesson Slides—Diamonds, Not Just a Girl's Best Friend.pptx](#)
- [Plain Tribes Quilt History—Diamonds, Not Just a Girl's Best Friend - Spanish.docx](#)
- [Plain Tribes Quilt History—Diamonds, Not Just a Girl's Best Friend - Spanish.pdf](#)
- [Plain Tribes Quilt History—Diamonds, Not Just a Girl's Best Friend.docx](#)
- [Plain Tribes Quilt History—Diamonds, Not Just a Girl's Best Friend.pdf](#)
- [Principles of Design Half-Sheet—Diamonds, Not Just a Girl's Best Friend - Spanish.docx](#)
- [Principles of Design Half-Sheet—Diamonds, Not Just a Girl's Best Friend - Spanish.pdf](#)
- [Principles of Design Half-Sheet—Diamonds, Not Just a Girl's Best Friend.docx](#)
- [Principles of Design Half-Sheet—Diamonds, Not Just a Girl's Best Friend.pdf](#)
- [Quilt Design Project Handout—Diamonds, Not Just a Girl's Best Friend - Spanish.docx](#)
- [Quilt Design Project Handout—Diamonds, Not Just a Girl's Best Friend - Spanish.pdf](#)
- [Quilt Design Project Handout—Diamonds, Not Just a Girl's Best Friend.docx](#)
- [Quilt Design Project Handout—Diamonds, Not Just a Girl's Best Friend.pdf](#)
- [T-Chart—Diamonds, Not Just a Girl's Best Friend - Spanish.docx](#)
- [T-Chart—Diamonds, Not Just a Girl's Best Friend - Spanish.pdf](#)
- [T-Chart—Diamonds, Not Just a Girl's Best Friend.docx](#)
- [T-Chart—Diamonds, Not Just a Girl's Best Friend.pdf](#)

Materials

- Lesson Slides (attached)
- T-Chart handout (optional; attached; one per student)
- Plains tribes Quilt History handout(attached; one per student)
- Diamond Template handout(attached; one per student)
- Principles of Design handout(attached; one per student)
- It's OPTIC-al handout(optional; attached; one per student)
- Copy paper (in various colors if not using coloring medium)
- Coloring medium such as pastels, paint, markers
- Blank canvas or heavy paper for artwork
- Scissors
- Sticky Notes

- Projector
- Touchscreen device like phone/tablet or Chromebook/laptop for each student

20 minutes

Engage

Introduce the lesson by displaying the title **slide 2** from the attached **Lesson Slides**.

Distribute a blank piece of copy paper and display **slide 3** to introduce the [Sketchnotes](#) instructional strategy. Instruct students to create sketches that represent the main ideas of the video they are going to watch. Move to **slide 4** and play the video [K20 ICAP - Diamonds, Not Just A Girl's Best Friend](#). After watching the video, allow students a few minutes to share their sketches with the class.

Embedded video

<https://youtube.com/watch?v=a38fjNw6-Oc>

Move to **slides 5-6** and share the essential question and learning objectives for the lesson to the extent you feel necessary.

50 minutes

Explore

Move to **slide 7** and distribute copies of the attached **Plains Tribes Quilt History** handout to each student. Instruct your students to draw the [T-Chart](#) on a blank piece of paper, or pass out the attached **T-Chart** handout. Have your students label the top of their T-Chart with “What I Know About This” and “What I Learned From My Partner.” Once they have completed the reading, instruct your students to complete the “What I Know About This” column with the information they can remember from the reading.

Preface the next step for your students by letting them know they will only have 30-seconds to share what they learned. Display **slide 8** and explain the [30-Second Expert](#) strategy. Use this slide, which has a 30-second timer, to keep track of time. After the first student shares what they have written down, their partner should summarize that information in the second column of their t-chart labeled, “What I Learned from my Partner.” Repeat the exercise (and the timer) so students can switch roles.

Display **slide 9** and pass out copies of the attached **Diamond Template** handout and blank paper to your students. Play the [Star Quilt Project for “Diamonds, Not Just a Girls Best Friend](#) video on **slide 10**. Inform students that they will complete the activity using the attached **Quilt Design Project** handout after they are reminded of the principles of design (if necessary).

Embedded video

<https://youtube.com/watch?v=HBE10iBWgQ0>

Before students begin working on their designs, show students **slides 11-19**, reviewing the following rules with them as needed:

- Balance
- Emphasis/Focal Point
- Contrast
- Movement
- Pattern
- Rhythm
- Unity
- Variety

If you like, you can distribute the attached **Principles of Design Half-Sheet** handout to provide students with a paper reminder that they can keep.

Allow students the remainder of the day, as well as the first half of class tomorrow to finish their designs.

Teacher's Note: Time for Projects

Based on the level of the art class or the grade level of the students, it is possible that students will need more time to complete these projects. The listed time is provided to indicate that these steps will take more than one day, though one may certainly increase or decrease allotted time based upon the needs of the class.

20 minutes

Explain

Display **slide 20** and share the instructional strategy [8-Up](#) with your students. Ask students to think back to the quilt design activity. Inform that by the end of three minutes, they should identify three words that best describe the design they created.

Divide your class into eight groups as you move to **slide 21**. Instruct students to share their words with their group. Together, they should come to a consensus on three words they feel are the best fit description.

Once time is up, move to **slide 22** and have groups partner up with another group and share their responses. You should now have four larger groups. Together, they should take their six responses and whittle them down to just two.

Next, move to **slide 23** and have groups partner up with another group. You should now have two large groups. Have students share their two responses with one another and whittle these four words down to two. Have the large groups share their two words with one another and as a whole group, narrow these two words down to a single word that best describes the quilt activity.

Move to **slide 24** and remind students of the principles of design. Ask your students to consider the words they just used to describe their work, as well as the single word the class settled on, do any of the principles match what they were describing? Ask students the following:

"Do any of the principles match what you were describing?"

"Thinking back to the first activity, did you see those same principles there?"

Teacher's Note: Possible Student Response

Students answers may include balance, pattern, repetition, and/or rhythm during the first discussion.

After hearing their responses, instruct your students to select the principle that best matches their quilt design and write it down on a sticky note.

Display **slide 25** and explain the [Sticky Bars](#) strategy to your students. Have them place their sticky note answers on the wall, grouping identical or similar answers together to create a bar graph. Have students group together according to their responses, Ask students to summarize why they think their principle of design is most applicable to their designs.

Teacher's Note: Activity Timing

If you would like your students to spend more or less time on discussion, you can find additional timers on the [K20 YouTube Channel](#).

When the timer ends, have each group share a response. After the students have shared their responses, ask if any students have changed their minds. If they have, allow them to join the group that persuaded them. Explain to students that while arguments can be made for many of the design principles, with an especially strong case for repetition, the lesson today is focused on pattern.

Teacher's Note: Alternate Activity

The activity in the previous paragraph is very similar to K20's [Four Corners](#) instructional strategy. To use this strategy, print the attached **Four Corners Posters** and hang them around the room. This can help facilitate a smoother transition to groups. This is useful for younger students, but for older students it might be an unnecessary extra step.

15 minutes

Extend

Display **slide 26**, distribute a sticky note to each student, and share the instructional strategy [Gallery Walk](#). Instruct each student to display their design on the wall using a temporary adhesive like painter's tape. Have your students walk around the room and review each other's designs. Have students select at least one design and attach at least one positive critique and identify one principle of design, attaching it to the wall below the artwork. When everyone has a sticky note, have the students return to their original design to read the critique.

25 minutes

Evaluate

Use **slide 27** to introduce the [It's OPTIC-al](#) instructional strategy. Pass out the attached **It's OPTIC-al** handout to your students, and show the sample professional pieces of artwork on **slides 28-30** so each student can assess them. When they have finished, have them turn in their handout along with their piece of artwork from earlier in the lesson for a complete project grade, at which point, the class is ready to continue on to the second lesson in the series, [Escher's Terrific Tessellations: The Art Of Tile Transformations](#).

Resources

- K20 Center. (n.d.). 30 second expert. Strategies. <https://learn.k20center.ou.edu/strategy/1048>
- K20 Center. (n.d.). Four corners. Strategies. <https://learn.k20center.ou.edu/strategy/138>
- K20 Center. (n.d.). Gallery walk / carousel. Strategies. <https://learn.k20center.ou.edu/strategy/118>
- K20 Center. (n.d.). It's OPTIC-al. Strategies. <https://learn.k20center.ou.edu/strategy/99>
- K20 Center. (n.d.). Sketchnotes. Strategies. <https://learn.k20center.ou.edu/strategy/2870>
- K20 Center. (n.d.). Sticky bars. Strategies. <https://learn.k20center.ou.edu/strategy/129>
- K20 Center. (n.d.). T-chart. Strategies. <https://learn.k20center.ou.edu/strategy/86>
- K20 Center. (2023a, July 10). *K20 ICAP - Diamonds, Not Just A Girl's Best Friend* [Video file]. <https://www.youtube.com/watch?v=a38fjNw6-Oc>
- K20 Center. (2023b, July 10). *Plains Star Quilts and Rotations* [Video file]. <https://www.youtube.com/watch?v=YJxmt0dt3mw>