

Taj Mahal Teaches Symmetry



Teacher-created example

Target Group: Grades K-4

Goal (Terminal Objective): Students will learn about symmetry while drawing the Taj Mahal.

Objective: Students will learn the history of the Taj Mahal while using symmetry to draw it.

National Standards:

Visual Arts Grades K-4 Content Standard 1: Understanding and applying media, techniques, and processes

Visual Arts Grades K-4 Content Standard 2: Using knowledge of structures and functions

Visual Arts Grades K-4 Content Standard 3: Choosing and evaluating a range of subject matter, symbols, and ideas

Visual Arts Grades K-4 Content Standard 4: Understanding the visual arts in relation to history and cultures

Visual Arts Grades K-4 Content Standard 5: Reflecting upon and assessing the characteristics and merits of their work and the work of others

Visual Arts Grades K-4 Content Standard 6: Making connections between visual arts and other disciplines

Purpose: The students will learn about symmetry while drawing and learning about the Taj Mahal.

New Vocabulary: Taj Mahal, symmetry, reflection, warm colors

Materials:



#55-0924 Peggable Box Crayons Standard Sz Economy Crayons



#22-1560 Washable Fine Tip Peggable Markers



#22-6050 Washable Watercolor Magic



#56-6012 Natural Hair Rainbow Brush Assortment



#22-1696 Individual White No-Spill Paint Cup



#22-7244 144 ct. Graphite Pencils



#22-0914 12 ct. Pointed Tip Student Scissors Best-Pack

white paper, ruler

Time: Two or three art periods

Introduction and Motivation (Set):

Show the students a picture of the Taj Mahal and ask them if they know what the picture is and where it is located. Many wonderful pictures can be found by doing a *Google Images* search.

Give them a brief history of the Taj Mahal: it is considered one of the most beautiful buildings in the world, it is actually a tomb located in Agra, India, started in 1632 and completed in 1654, Emperor Shah Jahan had it built for his wife when she died and wanted to express the love that he felt for his wife, and it eventually became the tomb of the emperor as well.

Show pictures of the Taj Mahal at different times of the day and show how the creamy color seems to change colors at dawn and sunset.

Instruction:

Have the students fold a 12" X 18" paper in half. On the top half, draw along with the students one shape at a time. The entire complex of buildings consists of rectangles and half circles. Begin with a long rectangle along the folded edge of the paper. Sitting on top of that, add a large rectangle in the middle with a smaller rectangle sitting on top of that. Add a large half circle or onion shaped dome on the top of that.

Continue adding the rectangles and half circle domes along each side of the center building working out from the center out keeping symmetry.

Once all of the building shapes are drawn, go back and add details like the half oval arched windows seen. Continue to work along with the children one detail at a time. You will draw and then they will follow along.



Transferring the drawing



Completed drawing

After the buildings are completed in pencil, the students will refold the paper in half and rub a pair of scissor handles on the back of the pencil drawing to help lightly transfer the drawing onto the lower half of the paper for the reflection. Redraw the reflection with a blue watercolor marker.

Color the top half of the drawing using only the warm colors (Reds, oranges, yellows) of crayons.

Paint over the reflection using the blue liquid watercolor and water. The water will make the marker blur so that it will look like a reflection in water.

Activities:

(1) Guided Practice:

1. Students will fold their paper in half and leave it folded in half with the fold of the paper facing their belly.
2. Use a ruler and draw the rectangles and half circles along with the teacher.
3. Transfer the drawing by rubbing on the back of the pencil drawing with the handle of scissors. Trace this with a blue watercolor marker.
4. Color the buildings using only warm colors of crayons. Color the sky also to look like a sunset.
5. Paint the blue liquid watercolor thinned with water over the reflection causing the marker to blur.

(2) Independent Practice and Check for Understanding: Teacher will circulate around the students making sure that the objectives are being demonstrated; asking direct questions when understanding is not visible. Teacher will help with the work when necessary and reinforce students as they work.

(3) Closure: Students display their work. The teacher will guide a critique to point out the strong qualities of successful compositions.

Evaluation: Teacher will evaluate the works individually based on the following criteria:

Level One -- The finished picture shows the symmetry of the Taj Mahal. The buildings were drawn using a ruler. The buildings and sky are colored in completely with only the warm colors of crayon. The drawing has been transferred successfully to the bottom half of the picture and retraced with a blue watercolor marker. The blue liquid watercolor paint has been thinned enough so that the water looks blue and the blue marker still shows darker. The craftsmanship is excellent.

Level Two -- The finished picture shows the symmetry of the Taj Mahal. Most of the buildings were drawn using a ruler. The buildings and sky could have been colored in more carefully with only the warm colors of crayon. The drawing has been transferred successfully to the bottom half of the picture and retraced with a blue watercolor marker. The blue liquid watercolor paint could have been thinned more so that the water looks blue and the blue marker still shows darker. The craftsmanship is good.

Level Three -- The finished picture shows the symmetry of the Taj Mahal. The buildings were drawn freehand and the use of a ruler is minimal. The buildings and sky have not been colored in completely with only the warm colors of crayon. Other colors of crayon have been used. The drawing has not been transferred successfully to the bottom half of the picture and retraced with a blue watercolor marker. The blue liquid watercolor paint could have been thinned more so that the water looks blue and the blue marker still shows darker. The craftsmanship is variable.

Level Four -- The finished picture does not show the symmetry of the Taj Mahal. None of the buildings were drawn using a ruler. The buildings and sky have not been colored in completely with only the warm colors of crayon. Other colors of crayon have been used. The drawing has not been transferred successfully to the bottom half of the picture and retraced with a blue watercolor marker. The blue liquid watercolor paint was thinned too much or not enough so that the water looks blue and the blue marker still shows darker. The craftsmanship is poor.

Extension: The students could make a 3-D version of the Taj Mahal using construction paper, small empty boxes, and empty paper towel tubes

Resources:

http://www.envocare.co.uk/taj_mahal_history.htm

http://www.maniza.com/Asia/taj_mahal.htm

<http://www.mapsofworld.com/travel-destinations/taj-mahal.html>

<http://goasia.about.com/od/indiaphotography/ig/India-s-Taj-Mahal/The-Taj-Mahal--36.htm>

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