Geometry in Islamic Art - Hexagon, 8-Pointed Star and Symmetry

Age group 5-7 years old (grades 1-2)
Sundays, Mondays and Wednesdays from 8:00am to 10:30am for 1 hour and half
For more information please contact: nqussini@qm.org.qa

This course will allow students to learn about different art categories which are usually found in most of the museum’s artifacts; and from various regions around the world! Students will use basic geometric instruments like the compass and ruler to make some of the geometric constructs found in Islamic Art.

Students will first be given a brief interactive talk which will introduce the idea of what Islamic Art is, where they have seen stand the importance of geometry. After an explanation of the rules of conduct, they will then be taken on a tour of relevant objects at the Museum proper. The tour will also be an interactive experience. Upon returning to the classroom each student will be given a compass, ruler, pencil and paper. They will then be shown how to best use a compass, and allowed a few supervised minutes to practice. On a clean sheet of paper students will then be walked through how to geometrically form a hexagon and an 8-pointed star.
**Objectives**
To develop observing, planning, recording and designing skills
To learn, develop and control tools, techniques and materials
To develop spatial skills and awareness with additional fine motor skills
To connect geometry to real life and art objects
To learn the 4 aspects of Islamic art; which are vegetal/floral/ arabesque, calligraphy, geometry and figurative art forms. Then state that we will be concentrating on the geometric aspect of Islamic art.
To create different types of geometries and to understand why they are used in a lot of Islamic art works.

**Educational Curriculum Links**

**GEOMETRY**
Describe simple properties of shapes using everyday language
Identify right angles in the environment and contained in 2-D shapes.
Identify parallel and perpendicular lines; draw parallel and perpendicular lines
Symmetry
Pattern
Recognition of geometric figures e.g. *Circle, triangle, square etc.*

**ART**
Recognize the intersection of math, art, design and functionality
SCIENCE
Color Theory: Primary and secondary colors
Use both experience and information to answer questions
Classify objects into groups according to common characteristics
Sort objects into groups and make simple comparisons

LANGUAGE
Use of key vocabulary: symmetry, pattern, point, line, circle, square, primary colors, etc
Identify familiar words in a stream of speech which carry key information
Follow and respond to simple descriptions
Follow and respond to (by doing) instructions, suggestions, and requests in a sequence of one or more steps, supported by teacher demonstration

ANALYTICAL THINKING
Working out problems logically
Seeing behind the obvious
Judging the value of different choices
Detecting bias

CREATIVE THINKING
Seeing a new pattern of connection that was not previously apparent
Thinking new ideas and of ways to implement them

MOTORIAL SKILLS
Manipulation and control of tools
If you are interested in further develop the knowledge about Islamic Geometry:

Islamic Art: Recognizing Geometric Ideas in Art, Levy, Janey (available at MIA Library)
Islamic Design: a Genius for Geometry, Sutton, Daud (available at MIA Library)
Geometry and the Liberal Arts, Pedoe, Daniel (available at MIA Library)
Pattern in Islamic Art, Wade, David (available at MIA Library)
The Language of Pattern, Albarn, Keith. Etc. (available at MIA Library)

Website: http://artofislamicpattern.com/about/#/O
Website: http://patterninislamicart.com/

MIA objects related to this course:
WW.15.1999: Carved and Inlaid Wooden Door, Mamluk, Egypt, 14th century
WW.56.2003: Pair of Carved Wooden Doors or Shutters, Saljuq, Turkey (Konya), 13th century
WW.76.2004: Carved and Inlaid Ivory and Wood Cabinet, Mughal, India or Pakistan, 16th - 17th century
TI.59: Black and Turquoise-Glazed Tile (Cintamani Motif), Ottoman, Turkey or Syria, 16th century
TI.193: Glazed Polychrome Hexagonal Tile, Mamluk, Egypt or Syria, 15th century
TI.194: Glazed Polychrome Hexagonal Tile, Mamluk, Egypt or Syria, 15th century