



Lesson #12

The Intricate Art of Persian Tiles

The creation of Persian tiles began about 1200 A.D. After conquering Timur, the people of Persia learned from Chinese pottery that many colors could be added to one tile. By 1500 A.D., the colors of Chinese pottery became an integral part of Persian tilemaking and unique to the region. Persian tile decorating reached its zenith in the 18th and 19th centuries. Tiles are used in two different ways for art. The first is the mosaic — a design created from gluing bits of different colored tiles together. The second, in Persian, is called Ghlami — a technique where several colors are painted onto one tile with a brush. In this exciting, cultural lesson, students learn to create Persian Ghlami tiles using underglazes and/or a majolica technique.



The photos above show the basic steps for decorating tiles. Use these photos as a guide for decorating 6-inch by 6-inch tiles by enlarging them 260 percent.

Lesson Goals and Objectives:

1. Students learn to make tiles using underglaze and majolica techniques.
2. The lesson incorporates art history, multi-culture, aesthetics, and criticism with a hands on activity.
3. The lesson focuses on important design elements and a variety of technical skills essential to tile making.

Background and Preparation:

1. This lesson is designed for middle and high school students, but can be used with modification for elementary students, as well.
2. An overview of various types of tiles should be presented with an emphasis on Persian tiles. Explain the various artistic and architectural uses of tiles and the history of Persian tiles. Show students examples of tiles.
3. Explain that Persian tile designs were not usually created by

the tilemaker, but rather by design specialists. The tilemaker expanded the designs to fit the working space — a wall, a floor, a roof. The designs were repeated over and over; each tile had just a small part of the overall pattern. Tile design like carpet design is both a craft and an industry that evolved in Persia over centuries. Small specialty firms all over Iran employ very talented artisans to design and make carpets, tiles, pottery, brass work, woodwork, and fabric. These are very complicated, very beautiful art forms, and the craft is studied and learned by one generation after another. The designs and techniques aren't taught at universities, but passed on by masters to their apprentices. Designs can be original creations or copied from photographs or books. The designs must then be altered, revised, and changed in size to accommodate the size of the tile composition one plans to make.

4. Explain the two techniques presented in this lesson plan — tile painting using underglazes and tile painting using the majolica process.

Glossary:

Bisque — unglazed pottery after first firing

Composition — the organization of a work of art

Glaze — a special clear or colored liquid mixture that is applied to pottery and becomes a hard glass surface when fired to the right temperature in a kiln

Fire — a term used in ceramics; to heat the clay in a kiln at a very high temperature until it is dry and hard and becomes pottery.

Majolica — a type of elaborately decorated pottery developed in the Middle Ages and refined in the Renaissance. White tin glazed earthenware was painted and decorated with stains and oxides. This traditional majolica process is still being explored by artists today, however it can be reproduced using safe contemporary materials.

Pattern — an original design used as a guide or model for copying

Persia — the former name for a country in the Middle East (Southwestern Asia) now called Iran

Tile — a thin, rectangular or square piece of fired clay

Trace — to copy a drawing onto another surface by following the lines of the original drawing

Underglaze — a special type of color that is put on a ceramic piece before the glaze. It has no flux (glass former) in it so it stays where it is put when fired and is good for detail work. It is used for painting and decorating.

Supplies:

Six inch unglazed bisque tiles:

AMACO® No.11333L

Underglaze Tiles:

AMACO® Underglazes

AMACO® Velvets

AMACO® Clear Glaze

Majolica Tiles:

AMACO® Opaque White Glaze — LG-11

AMACO® Majolica Gloss Decorating Colors (GDC Series)

Additional Supplies:

Sufficient copies of pattern

Transfer paper

Pencils

Kiln



Instructions:

1. Younger students should use the patterns found in this lesson plan. More advanced students may wish to make their own patterns. A class may wish to create a group project.

Underglaze Tiles

2. Using six inch unglazed bisque tiles, students transfer or trace the design onto the tiles with carbon paper.



3. Use black Velvet underglaze and other colors to paint the outline of the carbon tracing.
4. Students should select colors to reflect the design or effect they wish to achieve.
5. Fill in each area of the design, each color, using two or three coats of underglaze or Velvets for complete coverage.
6. Go over the outline again to make sure that all the lines are precise thickness
7. Check all the colors for complete, solid coverage.
8. When the tile is complete and the underglazes completely



dry, apply at least two coats of clear glaze. Wait for each coat to dry before applying the next coat.

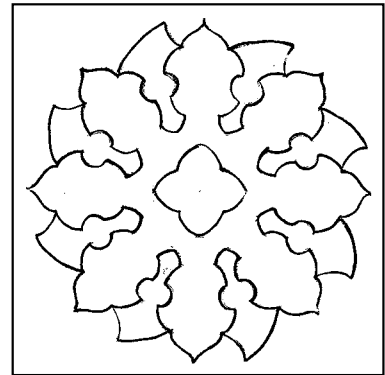
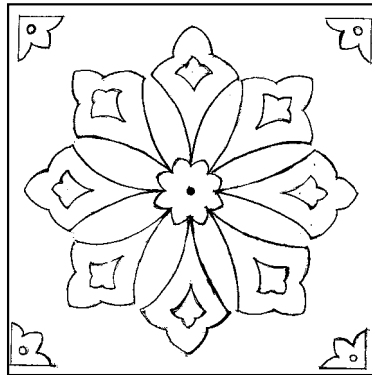
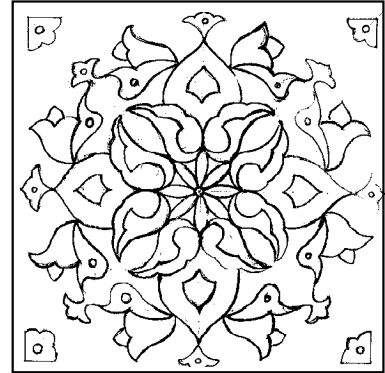
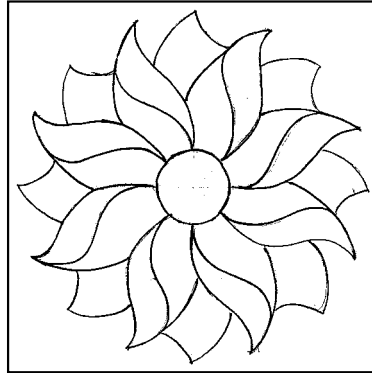
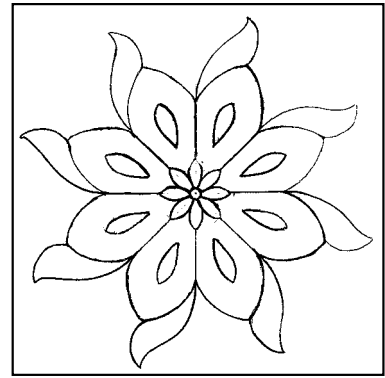
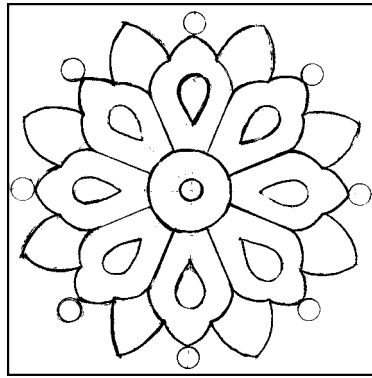
9. The tiles are fired to cone 04 (1400°F, 760°C).

Majolica Tiles

2. Apply three to four coats of opaque white glaze to the tile. Be sure each coat is dry before the next coat is applied.
3. When the glaze is completely dry, carefully trace design onto tile using carbon paper and pencil
4. Use AMACO® Black from the Majolica Gloss Decorating Colors Series (GDC) to outline the design. This is applied over the unfired white glaze.
5. Basic background colors using Majolica Gloss Decorating Colors are applied with two to three coats. With three coats the glaze is more opaque.
6. Final designs are painted over background colors using two to three coats.
7. Tile is fired to cone 04 for four hours creating rich colors with a glossy surface texture.

Additional Suggestions:

1. Patterns included with this lesson (see drawings at right) will give your students ideas for creating a design. Students may follow this technique to create their own patterns. Floral, animal, bird, and geometric patterns are typical of Persian tiles.
2. Majolica Gloss Decorating Colors can be applied to most glazed commercial tile. Be sure to clean the tile(s) before using. It is recommended that test firings be done before purchasing or decorating a large amount of commercially glazed tiles. With commercially glazed tiles, you may need to fire GDC glazes a little higher (cone 03 or 02) to get the desired results.
3. If students are going to make multiple tile compositions, designs must be created with the exact number of tiles in mind. If the piece will be four tiles, the original design should be 12 inches by 12 inches. The design should accommodate the four-tile composition.
4. For multiple tile compositions, arrange cool, fired tiles according to the pattern on a piece of board. Use construction adhesive to secure the tiles to the board. The tiles can then be grouted and framed.
5. This technique can be used to create school wall murals and permanent tile installations.



The sketches above show possible design ideas for decorating tiles. Enlarge the desired pattern 260 percent to work with 6-inch by 6-inch tiles.

This lesson was created by and based on the work of artist Jafar Mogadam, Riverside, Iowa. Examples of tiles were created by Jafar Mogadam.

This is Lesson #12 in a series of art plans for elementary and secondary programs using American Art Clay Co., Inc. products.



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