What is Zillij?

Morocco! The very name fascinates the Western world, conjuring up mysterious images. For years, American and European writers, artists, moviemakers, and travelers have promoted its fantasy and unique aspects. It is a country of contrasts in landscape and culture. Its landscape offers both hardship and beauty, and its culture is both the old and the modern, hand in hand. It is a country of unusual sights and experiences, and of great artistry, all of which attract people to Morocco.

Among its unique traditional crafts is the mosaic tile work called zillij. It is used to decorate sidewalk planters, buildings, floors, houses of worship, restaurants, and homes. You can find zillij just about anywhere in Morocco. The craft of making this tile is in such demand worldwide that artisans flock to Fez, one of Morocco's largest cities, to work in shops to learn the craft.

Most of the people in Morocco are Muslims, meaning that they follow the religion of Islam. Islam is a religion with a very rich geometric art. Because the Islamic religion discourages artists from painting people, animals, and other real-world objects; Islamic artists have been creating magnificent tessellating patterns in their tile work for centuries. The famous Dutch tessellation artist, M.C. Escher (1898-1972), was inspired by Islamic tiling designs. He altered geometric tessellating shapes to make birds, reptiles, fish, and people.

Escher

Perhaps you have seen tiled floors and kitchens, but usually they are not as beautiful as the zillij tile work found all over Morocco!
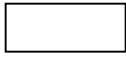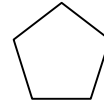
Name_____ **Practice Making Your Own Zillij**

1. On the line below the figures (polygons), write whether the shape is **symmetric** or **asymmetric**.

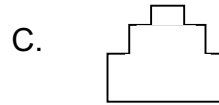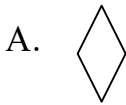_____   _____   _____   _____

2. Tiling means that the artist covers a flat surface with shapes that fit together without any gaps. Symmetric figures cover a space better than others because of transformations that can be performed on them, such as translations, reflections (line of symmetry) or rotations. Which figure below is asymmetric? _____

A.   B.   C.

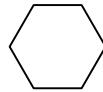3. Moroccan zillij artists usually start their tiling with one basic symmetric polygon shape. They spread their design outward from that shape. On isometric grid paper, repeat a pattern using one or more of these shapes.
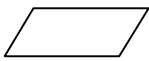
parallelogram   equilateral   equilateral   equilateral
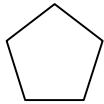
                  pentagon   hexagon   triangle

4. Explain why this shape is asymmetric.

Assessment: Make Your Own Moroccan Mosaics   Name_____

1. From what you have learned about Morocco and zillij, which **statement** is true? (5 pts)
    A. Because of its boring landscape and culture, tourists rarely visit Morocco.
    B. Most of the population in Morocco practice the Jewish religion.
    C. If you could visit Morocco, you'd see zillij tiling in only a few places.
    D. Morocco has both very modern and old characteristics.

2. As it is used in the article, "Western world" means _____.(5 pts)
    A. people who live in Europe and America.
    B. people who practice the Islamic religion.
    C. zillij artists who make the tile work.
    D. people in Southeast Asia.

3. Why do Islamic and Moroccan artists create tessellating patterns in zillij? (5 pts)
    A. The Islamic religion discourages artists from painting people and animals.
    B. Morocco doesn't have many natural resources.
    C. The tiling strengthens their buildings to withstand many earthquakes.
    D. They are easy to do.

4. What way would you design a zillij pattern, or tessellation, in which all the tiles are the same shape? Are your shapes asymmetric or symmetric? Draw your pattern on grid paper. Color your design. (10 points)

5. What way would you design a zillij pattern, or tessellation, that combines two or more different tile shapes? Are your shapes asymmetric or symmetric? Draw your pattern on grid paper. Color your design. Write a statement to explain how you used translation, rotation, reflection, and line of symmetry.   (15 Pts)

Practice Making Your Own Zillij Answer Key

1. A. symmetric   B. symmetric   C. asymmetric   D. symmetric
2. B.
3. Patterns will vary but students' patterns must make use of one or more of the shapes given. Patterns will not have any gaps between the figures.
4. The figure is asymmetric. It does not have line of symmetry nor does it have rotational or reflectional symmetry.

Assessment: Make Your Own Moroccan Mosaics Answer Key
Questions 1-3 are 5 points each

1. D
2. A
3. A
4. Patterns will vary, but the shapes must be symmetric.(10 points)
5. In order to design a tiling pattern with only one shape, that figure must have translational symmetry, reflectional symmetry, or rotational symmetry. Asymmetric shapes will not work for tiling patterns. (15 points)