

**Advances in geometry**  
CREATED A WHOLE NEW KIND OF ART IN MUSLIM CIVILIZATION.

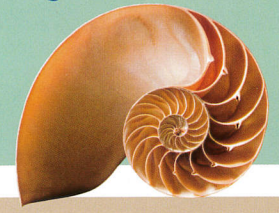
**2 Geometric art**  
BROUGHT TOGETHER MATH, SPACE, SHAPE, AND PATTERN.



**3 Interlacing, flowing lines create complex**  
PATTERNS THAT SEEM TO CHANGE SHAPE RIGHT BEFORE YOUR EYES.

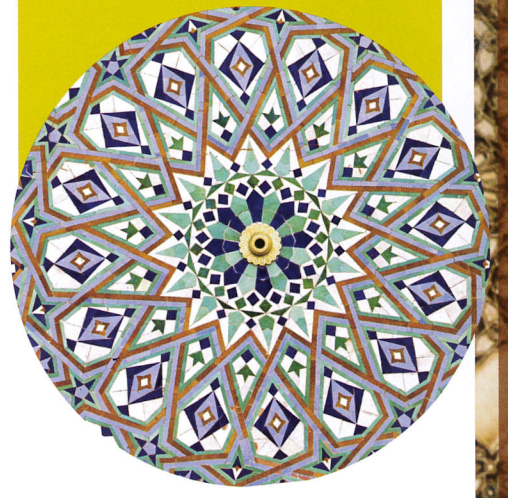
**5 EACH UNIT OF AN ARABESQUE PATTERN CAN STAND ALONE BUT ALSO HELPS TO COMPLETE THE OVERALL DESIGN.**

**14 The nautilus shell** is an example of a natural occurrence of a simple and beautiful golden ratio.



**15 THE IKHWAN AL-SAFA (BROTHERS OF PURITY), A GROUP OF 10TH-CENTURY SCHOLARS, DISCOVERED THAT IF YOU LIE DOWN AND SPREAD YOUR HANDS OUT, YOUR TOES AND THE TIPS OF YOUR FINGERS WILL TOUCH THE EDGE OF AN imaginary circle.**

**16 Divine proportion and the geometric patterns** OF MUSLIM CIVILIZATION HAD AN ENORMOUS IMPACT ON WESTERN ART.



This type of geometric art is called **'arabesque.'**

**17** The ideal **human body** is eight heads long, the **foot and the face** are each an eighth of the body's length, **the forehead** is a third of the face, and **the face** is four noses or four ears. **Check yours out!**

**18** LEONARDO DA VINCI'S "VITRUVIAN MAN" SHOWS THE PROPORTIONS OF THE HUMAN BODY DESCRIBED BY THE **Brothers of Purity.**

# 25

## CREATIVE FACTS ABOUT

## ART AND DESIGN

THE COMPLEXITY OF ARABESQUE encouraged **deep thought**, which made it **ideal for decorating** MOSQUES, TOMBS, AND SHRINES.

**7** Arabesque is most often used to **decorate walls, ceilings, carpets, furniture, tiles, and textiles.**



**8** MUSLIMS FELT THAT ARABESQUE'S INFINITE DESIGN MOVED BEYOND THE MATERIAL WORLD AND EXTENDED INTO ANOTHER **spiritual level.**

THE TOPKAPI SCROLL IS A COLLECTION OF **114 geometric patterns** drawn by master builders from Persia in the 15th or 16th century.

**10** UNLIKE RELIGIOUS ART IN THE WEST, ART IN MUSLIM CIVILIZATION DOES NOT FEATURE HUMANS OR ANIMALS. THE PROPHET MUHAMMAD SPOKE OUT AGAINST PORTRAYING HUMAN OR ANIMAL FORMS IN ART BECAUSE IT IS TOO MUCH LIKE THE WORSHIP OF IDOLS, RATHER THAN OF ALLAH (GOD).



**19** ARABESQUE DESIGNS were often paired with the use of **ARABIC CALLIGRAPHY** to write verses from the Quran.



**21** The Alhambra, a 14th-century palace and fortress in Granada, Spain, CONTAINS SOME OF THE FINEST EXAMPLES OF ARABESQUE ART.



**22** ARTISTS IN MUSLIM CIVILIZATION USED **linseed oil** TO IMPROVE THEIR PAINTS, GLAZES, AND INKS.



**Calligraphy** IS ONE OF THE MOST RECOGNIZABLE FORMS OF ISLAMIC ART.

ARABESQUE OFTEN USED DESIGNS INSPIRED BY NATURE, ALONG WITH geometric shapes.

**12** THIS INSPIRATION INCLUDED THE GOLDEN RATIO, a measurement that appears in nature and is pleasing to the eye.

**13** The golden ratio OCCURS WHEN THE WIDTH OF SOMETHING IS ROUGHLY TWO-THIRDS OF ITS HEIGHT.

**23** BEGINNING IN THE 14TH CENTURY, EUROPEAN ARTISTS STARTED USING **imported linseed-oil paint** INSTEAD OF TEMPERA PAINTS TO ACHIEVE RICHER COLORS.

**24** TEMPERA PAINT IS MADE FROM **egg, water, honey, and dye.**

