

** I first asked the students to discuss their knowledge of architecture in general, and the photos of the Cologne Cathedral. Wikipedia has great photos of the interior. After discussing the Cathedral and the key characteristics of Gothic Architecture I showed them a virtual tour of the Cathedral at koeln.arounder.com. For the project, we created "stained glass windows" with black construction paper and colored tissue paper.*

Cathedral of Sts. Peter and Mary (Cologne Cathedral) :

- A Roman Catholic Cathedral in Cologne Germany
- The largest Gothic church in Northern Europe
- Germany's most visited landmark
- Like most Gothic churches, it was in the center of town and was the tallest structure at the time it was being built.
- The building of this cathedral was started in 1248, and then was left unfinished in 1473. In 1842, building began again to the original plans and it was finished in 1880 (632 years later!).
- 474 ft. long x 248 ft. wide x 515 ft. tall (top of the spires)

Gothic Architecture :

- Gothic Architecture is a unique combination of existing technologies used to create more height and more light. The goal was to build high and to create the illusion of height to be closer to God.
- Most Gothic churches were built in the form of the Latin Cross. One very long aisle called the nave, flanked by two shorter aisles called transepts, and a small aisle at the top called the choir, or chancel, or presbytery.
- The structural parts of the building ceased to be solid walls, and became a stone skeleton comprised of clustered columns from floor to ceiling, pointed ribbed vaults and flying buttresses.

Height - The proportion of height to width was generally 2:1. The greatest proportional difference is 3.6:1 (Cologne Cathedral). Internally, vertical piers running from floor to ceiling supported high ribbed vaulted ceilings. Pointed arches also added to the illusion of height. Externally, height was achieved through flying buttresses, tall towers and spires.

Pointed Arch - One of the most defining characteristics of Gothic Architecture. Previously the rounded Romanesque arch was being used. The Gothic arch has a steeper angle, creates more height, and more vertical visual character. It was used in every location possible, both structurally and decoratively.

Flying Buttresses - Externally supported the outward thrust of the vaulted ceiling and added to the lighter more skeletal appearance of the Gothic church.

Light - The skeletal structure of the building allowed for walls to be constructed of much lighter materials allowing for more windows. One of the most distinctive characteristics of Gothic Architecture is the expanse of windows.

Stained Glass Windows - "illuminated wall decorations" created Holy Light and incorporated narratives, and historic figures at a time when many could not read. Creating stained glass windows is very time consuming and requires very skilled craftsman.

Process of creating stained glass windows :

1. design and create full scale drawings of each panel
2. select, cut and shape each piece of glass
3. pieces of glass fit together like a puzzle with lead comes or copper foil between each piece and soldered together with lead.
4. details such as faces, hair and hands were painted on