The Basilica di Santa Maria del Fiore (Saint Mary of the Flower), nicknamed the Duomo after the enormous octagonal dome on its east end, is the cathedral of Florence, Italy, and, arguably, the birthplace of the Renaissance.

A cathedral is a bishop's church. There are many other Catholic churches in Florence, many of them associated with the Renaissance, including Santa Maria Novella, Santa Croce, and the Brancacci Chapel. However, the Duomo is the home church of the Roman Catholic Archdiocese of Florence, which traces its roots to 394 CE.

Although construction was begun in 1296, the cathedral did not get the structure that gives it its name until 1436. The east end of the church was open to the elements or covered with flat, unstable roofing for more than a century.

The huge octagonal shape proved daunting to engineers and architects. Italian architects were familiar with circular domed shapes, such as the Pantheon in Rome. However, those domes were constructed with concrete. The recipe for concrete had been lost in the Dark Ages.

Medieval gothic cathedrals, such as Notre Dame de Paris in France, relied on flying buttresses to support their massive stone weight. Architects and engineers of the budding Renaissance were determined not to use flamboyant Gothic style or flying buttresses—they wanted to look back to the simple, clean lines of their Roman past.
The architect Filippo Brunelleschi came up with a solution. The Duomo is actually **two** domes. The inner dome is made of **sandstone** and **marble**. The outer dome is made of **brick-and-mortar**—each brick carefully designed, shaped, and fired to support the dome. The dome was constructed without any supports beneath it.

The Duomo was an immediate success, and Brunelleschi became the chief architect associated with the Renaissance.

In an ironic twist, the marble facade of the cathedral (not visible in this photograph) was only completed in the late 1800s, during a period when medieval, not Renaissance, art was popular. The birthplace of the Renaissance has a medieval face.

**Fast Facts**

The names of artists who contributed to the Duomo reads like a who's who of Renaissance artists:

- Giotto designed the campanile (bell tower).
- Donatello and Nanni di Banco assisted Brunelleschi in modeling the dome.
- Lorenzo Ghiberti crafted the bronze doors of the baptistery.
- Ghiberti's baptistery doors were later nicknamed the "Gates of Paradise" by Michelangelo.
- The copper ball and cross at the top of the dome were engineered and designed by Andrea del Verrocchio and his assistant—Leonardo da Vinci.

**Vocabulary**
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<thead>
<tr>
<th>Term</th>
<th>Part of Speech</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>architect</td>
<td>noun</td>
<td>person who designs buildings or other large structures.</td>
</tr>
<tr>
<td>basilica</td>
<td>noun</td>
<td>large and important medieval Christian church.</td>
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<tr>
<td>bishop</td>
<td>noun</td>
<td>leader of a church's diocese.</td>
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<tr>
<td>brick</td>
<td>noun</td>
<td>block of clay and sand, dried and used for construction.</td>
</tr>
<tr>
<td>cathedral</td>
<td>noun</td>
<td>important regional church.</td>
</tr>
<tr>
<td>Catholic</td>
<td>adjective</td>
<td>having to do with the Christian denomination with the Pope as its leader.</td>
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<tr>
<td>century</td>
<td>noun</td>
<td>100 years.</td>
</tr>
<tr>
<td>concrete</td>
<td>noun</td>
<td>hard building material made from mixing cement with rock and water.</td>
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<tr>
<td>Dark Ages</td>
<td>noun</td>
<td>(476-1000) early part of the Middle Ages in Europe, when the study of science fell out of favor.</td>
</tr>
<tr>
<td>daunting</td>
<td>adjective</td>
<td>intimidating, frightening, or discouraging.</td>
</tr>
<tr>
<td>diocese</td>
<td>noun</td>
<td>division of many churches or organized religions, led by a bishop.</td>
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<tr>
<td>dome</td>
<td>noun</td>
<td>shape that is half of a sphere.</td>
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<tr>
<td>elements</td>
<td>plural noun</td>
<td>weather or climate.</td>
</tr>
<tr>
<td>engineer</td>
<td>noun</td>
<td>person who plans the building of things, such as structures (construction engineer) or substances (chemical engineer).</td>
</tr>
<tr>
<td>enormous</td>
<td>adjective</td>
<td>very large.</td>
</tr>
<tr>
<td>Filippo Brunelleschi</td>
<td>noun</td>
<td>(1377-1446) Italian architect and engineer.</td>
</tr>
<tr>
<td>flying buttress</td>
<td>noun</td>
<td>external arch supporting a wall, most often associated with medieval church architecture.</td>
</tr>
<tr>
<td>marble</td>
<td>noun</td>
<td>type of metamorphic rock.</td>
</tr>
<tr>
<td>medieval</td>
<td>adjective</td>
<td>having to do with the Middle Ages (500-1400) in Europe.</td>
</tr>
<tr>
<td>mortar</td>
<td>noun</td>
<td>sticky substance, such as cement, used to bond bricks or stones.</td>
</tr>
</tbody>
</table>
**Term** | **Part of Speech** | **Definition**
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Renaissance | noun | period of great development in science, art, and economy in Western Europe from the 14th to the 17th centuries.
sandstone | noun | rock formed by grains of sand.
steep | adjective | extreme incline or decline.
stone | noun | piece of rock.

**Articles & Profiles**
- National Geographic Magazine: Brunelleschi's Dome

**Audio & Video**
- National Geographic Magazine: Il Duomo—Daring Design

**Images**
- National Geographic Education: The Duomo and Domed Buildings