

Name _____

Marvelous Machines: Technological Advancements of the Middle Ages

Open-Ended Response Answer Key

1. The heavy plow and the three-field system both contributed to increased food production in medieval agriculture. The heavy plow improved soil aeration and enabled deeper cultivation, while the three-field system maintained soil fertility by rotating crops. Together, they boosted agricultural yields and ensured a more stable food supply.
2. Islamic scholars preserved and expanded medical knowledge from ancient civilizations, translating and compiling texts that later influenced European medicine. Their work contributed to the development of medical practices, including the use of herbs and surgical instruments, and the establishment of hospitals in Europe.
3. Gothic architecture's legacy can be seen in modern architectural styles that incorporate elements like pointed arches, flying buttresses, and ribbed vaults. These features continue to influence contemporary architecture, creating connections to the past.
4. Without the waterwheel and windmill, medieval Europe would have faced greater challenges in powering industrial processes and grain milling. Daily life would have been more labor-intensive, with a slower pace of production and potentially lower living standards.

