



SENTENCE STRUCTURE PRACTICE DRILL I PASSAGE

Scraping the Sky

As long as people have known how to build, people have tried to build tall structures. Skyscrapers as we know them are a modern invention, but we can find¹ examples of very tall buildings throughout ancient history. Early in Genesis, we are told that a group of people who were moving eastward, settled in Shinar and their pride caused them to want to build a tower to the heavens until God confused their language and scattered them throughout the earth. It is thought that the tower was rebuilt by Neo-Babylonian rulers Nabopolassar and Nebuchadnezzar II and was called Etemenanki. The Romans lived in insulae, high-rise apartment buildings, and² could rise to heights over 10 stories. Some medieval Italian cities featured stone towers over 200 feet tall. Such as³ the Towers of Bologna or the Tower of Pisa. In Yemen, the walled city of Shibam, which was built in the sixteenth century and⁴ consists entirely of buildings with five to eleven stories. Buildings that tall, however, were rare until the nineteenth century. Because older buildings were made of materials like stone and brick, the outer walls bore the brunt of the building's weight, this limited⁵ the maximum height that a tower could safely be built. However, once engineer Henry Bessemer discovered a process for cheap steel production,⁶ buildings could be made with skeletal steel construction. A network of steel beams would distribute the weight of the building away, allowing taller construction from the outer walls⁷ on relatively small plots of land. Another problem was that tall buildings were inconvenient; no one⁸ likes climbing ten flights of stairs every day. Elevators had existed in primitive form since the time of the Greek mathematician Archimedes, but they were cumbersome and dangerous. In 1852, Elisha Otis created the first safety elevator it was⁹ equipped with a braking system to stop the car if the cables snapped. Furthermore, innovations in hydraulic and electric power made these new elevators practical to install and they were maintained¹⁰ in urban environments. These advancements, along with a few others like central heating and electric water pumps, made modern skyscrapers possible. Inspired by these developments, a construction boom was started by engineers at the turn of the century.¹¹ Soon, taller and taller skyscrapers popped¹² up in cities like Chicago and New York at an incredible rate. From 1890 to 1913, the record for the world's tallest skyscraper was broken eight times. New designs in engineering continue to push the limits of human achievement, this¹³ race to be the tallest has not stopped. In 2010, the city of Dubai celebrated the opening of the Burj Khalifa. A huge tower that stands¹⁴ at 2,717 feet tall-over twice as tall as the Empire State Building. As we¹⁵ continue to create new technologies and building techniques, we will keep rising to new heights.