Mary Anning was born on May 21, 1799, in Lyme Regis, a coastal town in Dorset, England. She grew up in a family that was poor and marginalized, partly due to their religious beliefs as Dissenters from the Church of England. Despite her limited formal education, Anning's early exposure to fossil hunting through her father, Richard Anning, who occasionally collected fossils to supplement the family's income, laid the foundation for her future career. Her father died when she was only eleven, leaving the family in debt, but his influence on Mary's life was profound as it set her on the path to becoming one of the most significant paleontologists of her time. Mary Anning's first major discovery came in 1811 when she was just 12 years old. She found the first complete Ichthyosaurus skeleton along the cliffs of Lyme Regis. Her brother, Joseph, had uncovered the skull the previous year, but it was Mary who painstakingly excavated the rest of the skeleton from the rocky cliffside. This discovery was significant because it was one of the first complete prehistoric animal skeletons to be scientifically described, and it provided early evidence for extinction, a concept not widely accepted at the time. In 1823, Mary Anning made another groundbreaking discovery with the first complete Plesiosaurus skeleton. This find challenged the scientific community's understanding of the natural world, as nothing like it had ever been seen before. The Plesiosaurus had a long neck, small head, and a body shape that was unlike any known modern animal. Anning's discovery was so unusual that when she presented it to the Geological Society of London, some members accused her of fabricating the creature, though it was later verified as authentic. Despite her significant contributions to paleontology, Mary Anning struggled with financial instability throughout her life. She often sold fossils to tourists and collectors to make ends meet, but her gender and social status limited her opportunities. The scientific community of the time was dominated by wealthy men who often published her findings without giving her credit. Anning was not allowed to join the Geological Society of London because she was a woman, and she received little recognition during her lifetime for her discoveries. Mary Anning's work contributed to the development of the theory of extinction. Before her time, most people believed in a static world where animals did not change over time. Anning's discoveries of creatures like the Ichthyosaurus and Plesiosaurus, which had no living counterparts, provided tangible evidence that species had indeed gone extinct, which was a radical idea at the time. Her work laid the groundwork for later naturalists, including Charles Darwin, who would build on the concept of extinction in developing the theory of evolution. Throughout her life, Mary Anning maintained a meticulous record of her findings and observations, which included detailed sketches and notes. Her work was not only significant for its discoveries but also for its methodical approach to understanding the anatomy and classification of the fossils she found. Anning's records are still valuable to paleontologists today, as they provide a rare and detailed look at the early practices of the field during a time when many scientific methodologies were just being established. Mary Anning's expertise was not limited to fossil collection; she also had a strong understanding of anatomy, which she gained through self-education and dissection of modern animal specimens. Her anatomical knowledge allowed her to reconstruct the likely appearance and lifestyle of the extinct creatures she unearthed. This skill was particularly evident in her work with the Plesiosaurus, where her careful reconstruction of its anatomy led to a better understanding of its place in the prehistoric ecosystem. The tongue twister 'She sells seashells by the seashore' is often associated with Mary Anning, although there is no concrete evidence that it was written about her. The rhyme is thought to have been inspired by Anning's life as a fossil collector selling her finds to tourists on the beaches of Lyme Regis. Regardless of its origin, the rhyme has become a part of the folklore surrounding Anning's legacy and reflects her influence on popular culture. Mary Anning's influence extended beyond her fossil discoveries. She also contributed to the early understanding of coprolites, or fossilized feces. Anning theorized that coprolites were the excrement of ancient creatures after she discovered that they often contained fragments of bones and scales. This insight provided a new avenue for understanding the diets and behaviors of extinct animals, further expanding the field of paleontology. Mary Anning died on March 9, 1847, at the age of 47 from breast cancer. After her death, her contributions to science began to receive more recognition. In 1865, the Geological Society of London finally paid tribute to Anning's work, and in 1908, they commemorated her by including her in a stained-glass window at their headquarters. In recent years, Anning's life and achievements have been celebrated through various media, including literature, film, and exhibitions, ensuring that her legacy as a pioneering female paleontologist endures.