

 Unit 6
Move Toward Independence

Building Academic Skills

Science

SCIENTIFIC TIME LINE

Directions: There is an old familiar saying, “Necessity is the mother of invention.” Do you believe this is true? Does needing something lead to creating something? One way to investigate the truth of the statement is to research the lives of inventors. A good example is George Eastman, who invented the Kodak camera. Read the following information about Eastman, summarized from the book *Click! A Story About George Eastman* by Barbara Mitchell (Carolrhoda Books, Inc., Minneapolis, 1986). Then discuss with your class the questions that follow.

As a boy in the 1850s and 1860s, George experienced quite a lot of necessity. After his father died, his mother ran a boarding house to try to support the family. George had two sisters, one of whom had been crippled by polio. Providing for her children became quite a struggle for the young widow Eastman, and George looked for ways to help out from a very young age. At the age of nine, he made a puzzle from his mother’s old knitting needles, which he sold to another boy for ten cents. He gave the dime to his mother.

At thirteen, George took a job as a messenger. At fourteen, he became an office boy. All of George’s employers noticed that he was extremely well-organized in everything he did.

George still liked to do things for his mother. One day he had a photograph of himself made for her. George became fascinated by the photography process. As a junior bookkeeper for a bank in his early twenties, George decided to purchase a camera to take on a trip to Central America. He was dismayed to find his equipment weighed almost fifty pounds! His “camera” included bottles of chemicals, a box of glass plates, and a dark tent. Carrying such equipment made travel difficult.

Several trips later, George concluded that there should be a way to make a smaller camera that would be convenient for carrying. George set out to find a solution. After a long series of experiments, George produced his first little camera in 1888. This camera weighed only twenty-two ounces and was easily held in one hand. What a great invention! George’s first Kodak was the ancestor of the pocket instamatic of the twentieth century.

For Discussion

1. What forms of necessity did George experience as a boy? As a young man?
2. Do you think that George’s family background could have influenced the type of person he became? If so, how?
3. Describe an instance from your own experience when someone used his or her resourcefulness to meet a need that otherwise would have gone unfulfilled.