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CLASS – X SUBJECT – English (Footprints
Without feet) Lesson – 06 The making of a scientist

Study Materials

The Making of a scientist

Introduction to the lesson

Richard Ebright has received the Searle Scholar Award and the Schering Plough Award for Biochemistry and Molecular Biology. It was his fascination for butterflies that opened the world of science to him.

The story is about Richard H. Ebright who grew up in the town of Reading in Pennsylvania, USA. As he did not have much to do there, collecting things was his hobby. He used to collect butterflies as a child in kindergarten. Let's read how this curious child who collected butterflies went on to become one of the greatest scientists of the world.

The Making of a scientist Summary

The chapter, 'The Making of a Scientist' is a story about the famous scientist Richard Ebright. Richie as his mother used to

call him was a very curious child right from his childhood. He had started collecting butterflies in his childhood and when he was 2 years old, he had already collected all the 25 species found near his hometown. He thought it to be an end of butterfly collection until one day his mother bought him a book named 'The Travels of Monarch X'. This was a turning point in his life and he got much more interested in dealing with science. He started with tagging butterflies which a task given at the end of the book that his mother bought for him. Then, when he first entered the county science fair with a slide of the frog tissue he lost. Everybody won something but his project did not win any prize. He was sad but also understood that to win, he needed to do real experiments and not just make neat and clean models. Then he wrote down to Dr. Urquhart at the University of Toronto, asking him for ideas to make projects. He stayed busy during his high school, working on the long list sent to him by Dr. Urquhart. Then, for the next year's fair, he chose the project of looking at the viral disease that killed nearly all the monarch caterpillars every few years. He thought that the reason for this could be a beetle, so he started raising caterpillars in the presence of beetles but could not get any results. So, when he showed his trial experiment at the county science fair, his project won a prize. Then for the next year he made an experiment to show that the viceroy butterflies copied monarchs. This project also made him win prizes. Then he started his research as to the purpose of the 12 golden spots on the back of a monarch pupa. Everybody believed that it was just a design but Dr. Urquhart thought otherwise. Then Ebright and another brilliant science student

got together and made a device that could show that the gold spots were responsible for releasing a hormone that was necessary for its growth. With the help of sophisticated instruments at one of the labs, he got a chance to work and found the chemical structure of the hormone in the gold spots. Then, one day, while looking at the photo of the chemical structure, he solved one of the biggest puzzles of life. He came to know how a cell blueprints its DNA. It was a big breakthrough and was published in a magazine. He also had many other interests and also admired his social studies teacher as he was the one who used to give him new ideas. He was good at debating, public speaking and a great canoeist. He never used to win for the sake of winning or for prizes but because he wanted to be the best at whatever he used to do. It is shown in this chapter that with the right amount of curiosity, a bright mind and the will to win for right reasons are the qualities needed to be a scientist. His mother also played a big role in making him what he was as it was she who supported him throughout his journey and bought him the book 'The Travels of Monarch X' which aroused his curiosity in the field of science.

Work to do :

1. To study the lesson thoroughly
2. To write the meaning of difficult words
3. To do the *questions answers* of the chapter in fair copy.