



CHOITHRAM SCHOOLNORTH CAMPUS

LESSON PLAN-1

SUBJECT - COMPUTER

TOPIC- Evolution of Computers

CLASS - IV

BRIEF DESCRIPTION OF THE CHAPTER:

Students will learn about

- ☞ Early counting tools
- ☞ Abacus – First calculating device
- ☞ Pascaline Adding Machine
- ☞ Leibniz Step Reckoner
- ☞ Charles Babbage's Analytical Engine
- ☞ Lady Ada Lovelace's programs
- ☞ Herman Hollerith's Tabulating Machine
- ☞ Computer generations

LEARNING OBJECTIVES:

SPECIFIC OBJECTIVES:

This lesson will enable the students to –

SP1- Understand the collaborative nature of computer development and recognize that computers are the result of the collective efforts of many individuals. (U)

SP2- Explore the historical origins of counting tools, such as knots, marks, fingers, and pebbles, and recognize their role in early computation. (K)

SP3-

Discuss the invention of the Abacus as the first calculating device and understand its importance and continued relevance in modern education. (K)

SP4-

Familiarize students with notable calculating machines, including the Pascaline Adding Machine and the Leibniz Step Reckoner, and their contributions to the advancement of computation. (K)

SP5-

Introduce Charles Babbage as the father of computers and explain his invention of the Difference Engine and the Analytical Engine, highlighting their significance as early mechanical computers. (K)

SP6-

Discuss the pioneering role of Lady Ada Lovelace as the first computer programmer and her contributions to Charles Babbage's Analytical Engine. (K)

SP7-

Inform students about Herman Hollerith and his Tabulating Machine, emphasizing its historical importance and its subsequent integration into IBM. (K)

SP8- Share with the students the characteristic features of the different generations of computers covering:

- First Generation (1940-1955) – MARK-I, ENIAC, UNIVAC
- Second Generation (1956-1964)
- Third Generation (1965-1975)

- Fourth Generation (1976-1985)
- Fifth Generation (1986-Present) (K)

BEHAVIOURAL OBJECTIVES:

This lesson will enable the students to

B1- demonstrate knowledge of the historical development of computers and their generations by accurately identifying and explaining the key milestones, inventions, and characteristics associated with each period. (U)

ACTIVITIES – For the better understanding of the topic following activities will be conducted –

A1- Ask the students to prepare a collage of different models of computers depicting its evolution over the generations. (A)

WRITTEN WORK:

- Students will do the course book exercises given on Pages 14, 15 and 16 of the main course book as One Touch Learn and Let’s Do It.
- Students will solve Crack the Code activity given on Page 16 of the main course book. Help the students to solve these questions.
- In Creative Assignment, activity like Hands-On and Fun in Lab given on Pages 16 and 17 of the main course book will enhance the ability of the students and serve as a Subject Enrichment activity.

ASSESSMENT:

- To check the understanding of the topic, assessment will be conducted.

LEARNING OUTCOMES:

Students will

L1- gain a thorough understanding of the historical development of computers, including key inventors, early counting tools, calculating machines, the contributions of Charles Babbage and Lady Ada Lovelace, the concept of computer generations, and the unique characteristics of each generation. (U)

Placement of objective, Instructional Activities and Assessment

| Topic/Duration/ Assessment Topic: Evolution of Computers Duration: 3 periods | | | | | | |
|--|--|---------------|-------------|----------|-----------|------------|
| | Knowledge | Understanding | Application | Analysis | Synthesis | Evaluation |
| Objectives | SP2, SP3, SP4, SP5, SP6, SP7, SP8, L1 | SP1, B1, L1 | | | | |
| Instructional Activities | | | A1 | | | |