

CHAPTER 2: Prehistory

Introduction

Prehistory refers to the long period of human existence **before the invention of writing systems**. It is characterized by a **primitive way of life**, in which humans depended directly on **nature for food, shelter, and tools**. This era is essential in the history of science because it marks the beginning of **human curiosity, observation, and problem-solving**, laying the foundations for later scientific knowledge.

A. Nature of the Era

- Prehistory = time before written records.
- Humans lived close to nature, relying on their environment for survival.
- Development of basic skills for food, defense, shelter, and toolmaking.

B. Major Periods

1. Paleolithic Age (Old Stone Age)

- Began around **3 million years ago**.
- Humans lived as **hunter-gatherers**, using **carved stone tools**.
- **Key innovations**: mastery of fire, use of animal skins for clothing, early boats.
- **First domestication**: dogs likely began in this period.



2. Neolithic Age (New Stone Age)

- Around **9,000–6,000 BCE**.

- Characterized by **polished stone tools**, **agriculture**, and **animal domestication** (goats, pigs, cattle).
- **Major inventions:** pottery, wheel, first furnaces for metalworking.
- **Agricultural Revolution:** allowed permanent settlements and stable food supplies.



C. Early Forms of Knowledge

1. Food Knowledge

- **Consumption Stages:**
 1. Direct eating of natural products.
 2. Selection and diversification of foods.
 3. Cooking and blending of ingredients.
- **Acquisition Methods:**
 1. Hunting and gathering.
 2. Food storage.
 3. Farming.
 4. Grazing and animal husbandry.

2. Raw Materials

- **Plants:** first materials for tools (easy to shape).
- **Animals:** bones for tools, skins for clothing and containers.
- **Stones:** abundant, shaped into weapons and tools.
- **Metals:** used later, required knowledge of soil and smelting.

3. Defense and Shelter

- **Clothing & Footwear:** protection against weather and hazards.
- **Housing:** from caves to roofed dwellings with natural barriers.
- **Weapons:** to defend against wild animals and enemies.

4. Toolmaking

- Early tools were **simple and multipurpose**.
- Later evolved into **specialized instruments** for farming, hunting, and construction.
- **Pottery invention** provided containers for food storage.

5. Transportation

Progress developed in **three stages**:

1. **Human power:** carrying by hand.
2. **Animal power:** using domesticated animals.
3. **Water power:** boats and early hydraulic systems.

Summary

Prehistory represents the **first chapter in the history of science**, where humans developed practical knowledge for **survival**. From **hunting and gathering** to **agriculture and toolmaking**, early humans laid the groundwork for technological and scientific progress. The journey of science thus began with **basic survival skills** and gradually evolved into the **systematic pursuit of knowledge**, leading to modern biology—the science that explores life in all its forms and its connections with nature and technology.