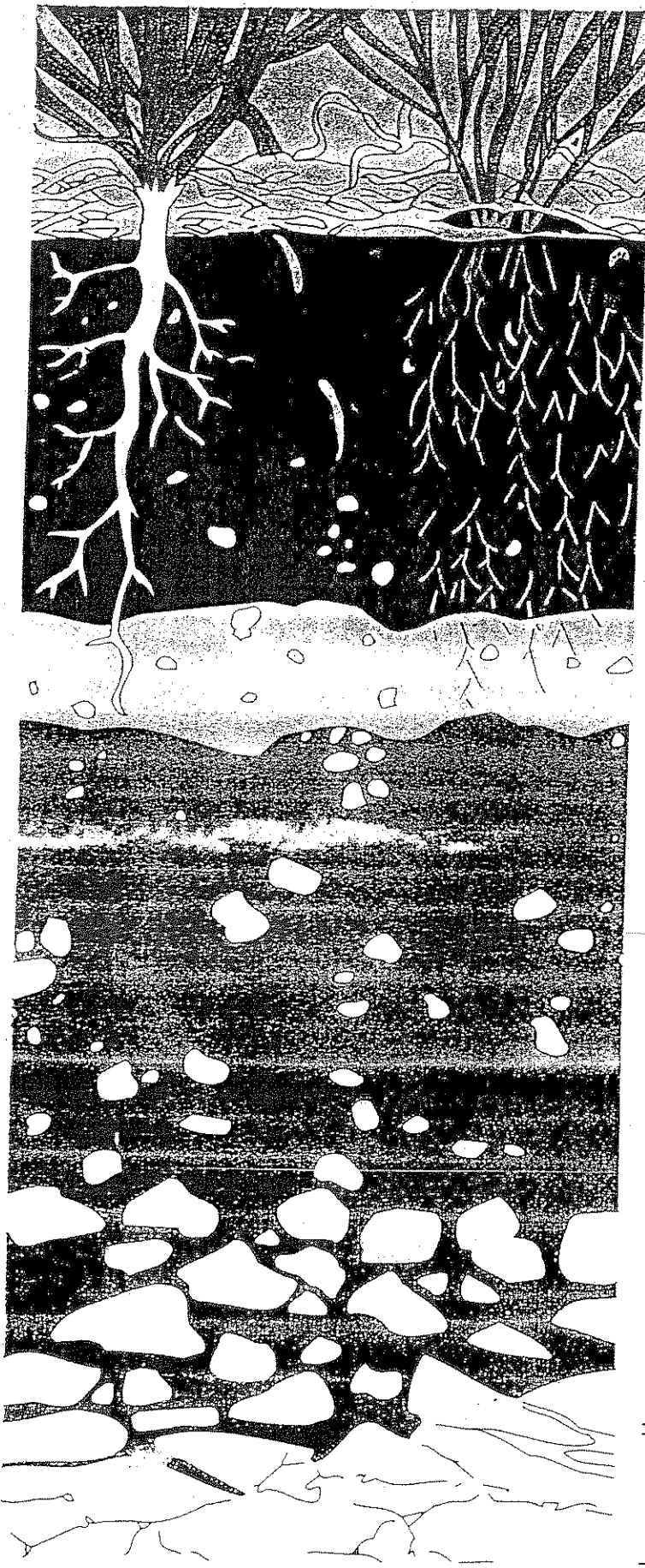


## WHAT IS SOIL

Several versions of the definition of soil

- 1- Soil is: A body of natural substances, on the surface of the earth, composed of mineral and organic matter and pore space (air and/or water), in a state of dynamic equilibrium, forming a medium capable of supporting life.
- 2- Soil is: A natural, three-dimensional body on the earth's surface capable of supporting plants having properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief over periods of time.
- 3- Soil is: The unconsolidated mineral and organic material on the immediate surface of the earth that serves as a natural medium for the growth of land plants.



**O HORIZON**  
**Surface litter:**  
 fallen leaves and  
 partially decomposed  
 organic debris

**A HORIZON**  
**Topsoil:** organic  
 matter (humus), living  
 organisms, inorganic  
 minerals

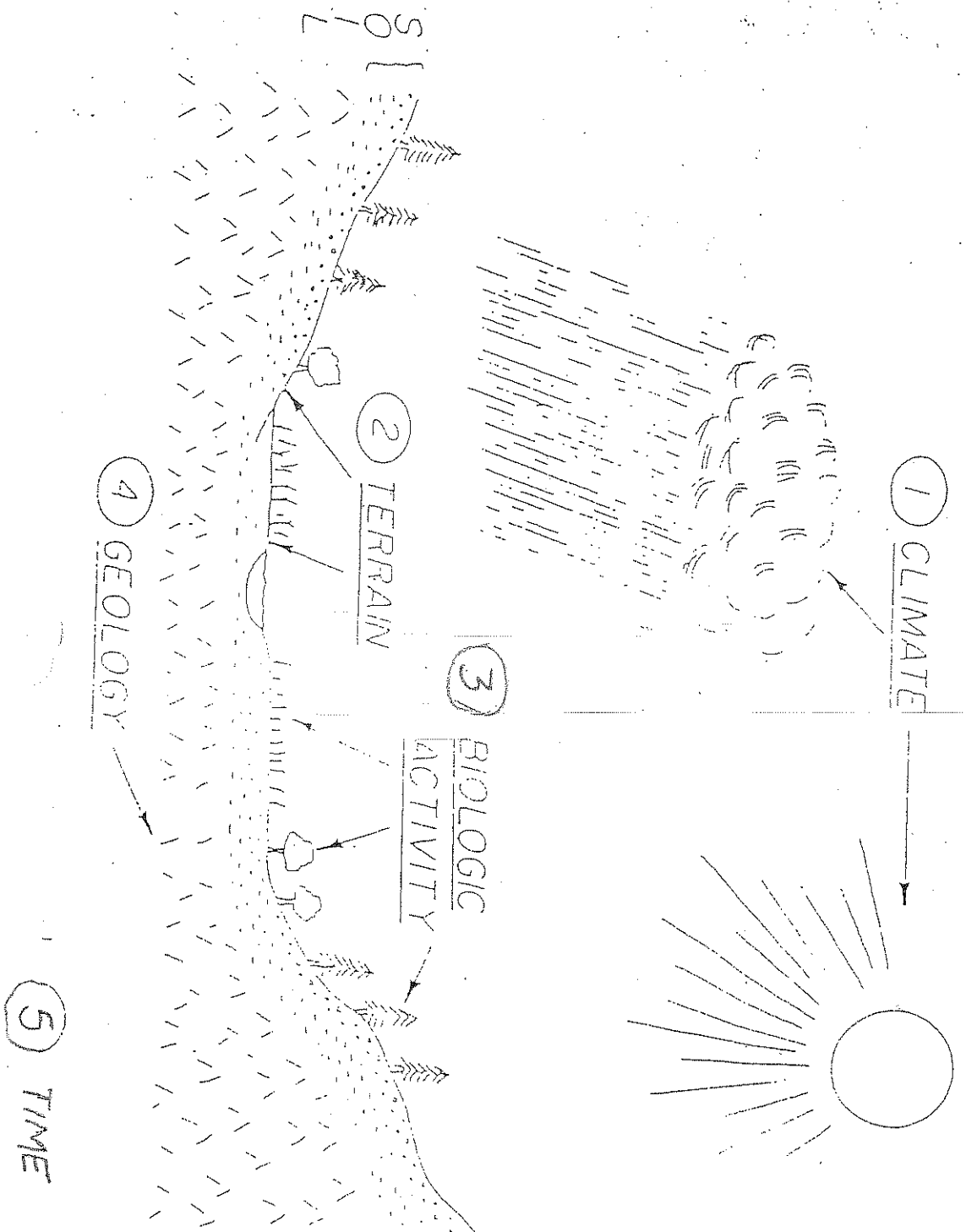
**E HORIZON**  
**Zone of leaching:**  
 dissolved or  
 suspended materials  
 move downward

**B HORIZON**  
**Subsoil:** accumulation  
 of iron, aluminum, humic  
 compounds, and clay  
 leached down from the  
 A and E horizons

**C HORIZON**  
**Weathered parent  
 material:** partially  
 broken-down inorganic  
 minerals

**R HORIZON**  
**Bedrock:**  
 impenetrable  
 layer

# THE FIVE SOIL FORMING FACTORS



# RELATIVE PARTICLE SIZES

SAND 2.0-0.05 mm

SILT



0.05-0.002 mm

⊙

CLAY

Less than  
0.002 mm

