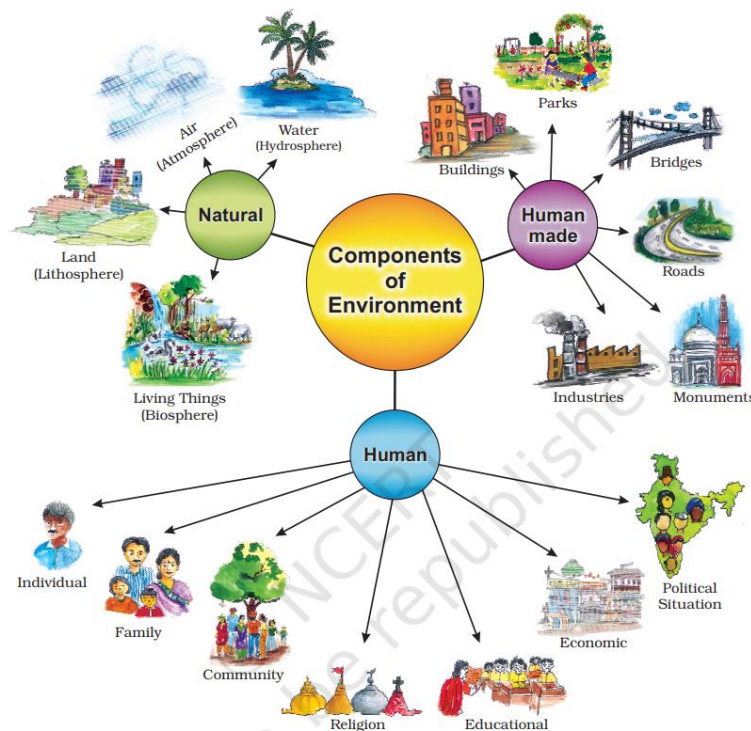


Chapter – 1: Environment

- After long vacation – Ravi went back to school – noticed – only playground – dug up
- Ravi – very sad – all the grass, flowers and beauty of nature – gone – new building set up
- Principal – also noticed – said the environment is changing
- Children asked – what is environment
- Teacher told them – all your surroundings
- Teacher told them – some made by nature – mountains, rivers, forests – some made by human – roads, cars, books
- Children wondering – why is environment changing
- Teacher told them – because of our needs, we are modifying and sometimes destroying our environment



- Everything that surrounds us – **environment** – combination of human made and natural – **biotic** and **abiotic**

Natural environment

- Land, water, air, plants, animals – everything – environment
- Domains of earth –
- Lithosphere –
 - Solid crust or solid top layer
 - Made of rocks and minerals – covered with thin layer of soil
 - Various landforms – mountains, plateaus, plains, valleys – over the continents and ocean beds
 - Provides – forests, grasslands, agriculture land, human settlements, mineral wealth
- Hydrosphere –
 - Various sources of water

- Different water bodies – rivers, lakes, seas, oceans
 - Essential – all living beings
- Atmosphere –
 - Thin layer around earth
 - Gravitational force – holds it in place
 - Protects from harmful rays and heat
 - Lots of gases, dust and water vapour
 - Change in atmosphere – change in weather and climate
- Biosphere –
 - All three domains – together – present here

What is ecosystem?

- Children discussing at an NCC camp
- One says – heavy downpour (rainfall) – reminds him of his hometown
- Other says – no rainfall in his hometown – only sand and stones and some animals like camel, snakes, insects
- Children wondered – why do animals, vegetation, life of people – vary from place to place?
- Plants, animals, human beings – depend on each other and surroundings – **ecosystem**
- Ecosystem – large rain forest, grasslands, desert, mountains, lake, river, ocean, small pond

Human environment

- Human beings – interact with environment and modify it
- Early humans – adapted to the nature
- Simple life – needs – nature around them
- With time – needs grew – human – learns new ways – use and change environment
- Started growing crops, domesticate animals, settled lives
- Wheel invented – extra food produced – barter system started – trade started – commerce developed
- Industrial revolution – large scale production – transportation improved
- Information revolution – communication improved
- Watermelon in summer – roasted peanuts in winter – maintain balance between nature and human environment
- Humans – learn to live and use environment – harmonious way