

Ch. 24 Guided Notes Answer Key

Chapter 24: Physical Geography of South Asia: The Land Where Continents Collided

- South Asia's major landforms, including the massive Himalayan Mountains, were created when the subcontinent broke off from Africa and drifted into Asia.
 - **Section 1: Landforms and Resources**
 - **Section 2: Climate and Vegetation**
 - **Section 3: Human-Environment Interaction**

Section 1: Landforms and Resources

- South Asia is a subcontinent of peninsulas bordered by mountains and oceans.
- A wide variety of natural resources helps sustain life in the region.

Mountains and Plateaus

The Indian Subcontinent

- India, Pakistan, Bangladesh, Bhutan, Nepal, Sri Lanka, the Maldives
- Subcontinent—large landmass that's smaller than a continent
 - called Indian Subcontinent because India dominates the region
- Though half the size of U.S., area has 1/5 of world's people
- Natural barriers separate subcontinent from rest of Asia
 - mountains form northern border, Indian Ocean surrounds rest
 - Arabian Sea to west, Bay of Bengal to east

Northern Mountains

- South Asia was once part of East Africa
 - split off 50 million years ago and collided with Central Asia
 - collision of tectonic plates pushed land into huge mountain ranges
- Himalaya Mountains—1,500 mile-long system of parallel ranges
 - include world's tallest mountain—Mt. Everest
 - form barrier between Indian subcontinent and China
 - kingdoms of Nepal, Bhutan are also in these mountains

Northern Mountains

- At west end, Hindu Kush mountains separate Pakistan, Afghanistan
 - historically blocked invasions from Central Asian tribes
 - Khyber Pass is one of the major land routes through the mountains
- Karakoram Mountains are in northeastern part of Himalayas
 - include world's second highest peak, K2

Southern Plateaus

- Tectonic plate collision also created smaller mountain ranges
 - Vindhya Rang in central India
- Deccan Plateau covers much of southern India
- Western, Eastern Ghats: mountain ranges flank Deccan Plateau
 - block moist winds and rain, making Deccan mostly arid

Rivers, Deltas, and Plains

Great Rivers

- Northern Indian, or Indo-Gangetic, Plain:
 - lies between Deccan Plateau, northern mountain ranges
 - is formed by three river systems that originate in Himalayas
- Indus River flows west, then south through Pakistan to Arabian Sea
- Ganges River flows east across northern India
- Brahmaputra winds east, then west, south through Bangladesh
- Ganges and Brahmaputra meet, form delta, flow into Bay of Bengal

Fertile Plains

- Rivers irrigate farmlands, carry rich alluvial soil
 - overflow deposits this soil on alluvial plains—rich farmlands
- Indo-Gangetic Plain has some of the world's most fertile farms
- Heavily populated area has 3/5 of India's people

- area's big cities: New Delhi, Kolkata in India; Dakha in Bangladesh
- Plain is drier to west between Indus, Ganges
- The Thar, or Great Indian Desert, lies to the south

Offshore Islands

Sri Lanka: The Subcontinent's "Tear Drop"

- Island in Indian Ocean, off India's southeastern tip
- Large, tear-shaped country with lush tropical land
- Range of high, rugged, 8,000-foot mountains dominate center
- Many small rivers flow from mountains down to lowlands
- Northern side has low hills, rolling farmland
- Island is circled by coastal plain, long palm-fringed beaches

The Maldives Archipelago

- Maldives is archipelago—island group—of 1,200 small islands
 - stretch north to south for 500 miles off Indian coast, near equator
- Islands are atolls—low-lying tops of submerged volcanoes
 - surrounded by coral reefs, shallow lagoons
- Total land area of Maldives is 115 square miles
 - only 200 islands are inhabited

Natural Resources

Water and Soil

- Water and soil resources provide food through farming, fishing
- River systems help enrich land with alluvial soil, water
 - large- and small-scale irrigation projects divert water to farmlands
- Types of fish include mackerel, sardines, carp, catfish
- Waters provide transportation, power
 - India, Pakistan work to harness hydroelectric power

Forests

- Indian rain forests produce hardwoods like sal and teak
 - also bamboo and fragrant sandalwood
- Bhutan's and Nepal's highland forests have pine, fir, softwoods
- Deforestation is a severe problem
 - causes soil erosion, flooding, landslides, loss of wildlife habitats
 - overcutting has devastated forests in India, Bangladesh, Sri Lanka

Minerals

- India is fourth in world in coal production, has petroleum, uranium
- Pakistan, Bangladesh have natural gas resources
- Iron ore from India's Deccan Plateau used in steel industry, exported
- Other minerals: manganese, gypsum, chromium, bauxite, copper
- India has mica for electrical equipment and growing computer industry
- India is known for diamonds; Sri Lanka for sapphires, rubies

Section 2: Climate and Vegetation

- Climate conditions in South Asia range from frigid cold in the high mountains to intense heat in the deserts.
- Seasonal winds affect both the climate and vegetation of South Asia.

Climate—Wet and Dry, Hot and Cold

Climate Zones

- Cold highland zone in Himalayas, other northern mountains
- Humid subtropical in foothills (Nepal, Bhutan), Indo-Gangetic Plain
- Semiarid zone of west Plain, Deccan Plateau is warm with light rain
- Desert zone covers lower Indus Valley, west India, south Pakistan
 - Thar Desert is driest area, with 10 inches of rain annually
- Tropical wet zone in Sri Lanka and coasts of India, Bangladesh
 - Cherrapunji, India, holds rainfall record—366 inches in one month

Monsoons and Cyclones

- Monsoons—seasonal winds that affect entire region

- dry winds blow from northeast October–February
- moist ocean winds blow from southwest June–September
- moist winds bring heavy rainfall, especially in southwest, Ganges Delta
- unpredictable; cause hardship in lowlands of India, Bangladesh
- Cyclone—violent storm with fierce winds, heavy rain
 - in Bangladesh low coastal region swamped by high waves

Vegetation: Desert to Rain Forest

Vegetation Zones

- Forested tropical wet zone in India’s west coast, south Bangladesh
 - lush rain forests of teak, ebony, bamboo
- Highland forests of pine, fir in north India, Nepal, Bhutan
- Humid subtropical river valleys; foothills have sal, oak, chestnut
- Less vegetation in semiarid areas; desert shrubs, grasses
 - Deccan Plateau, Thar Desert
- Sri Lanka’s tropical wet and dry climate produces grasses, trees

Section 3: Human-Environment Interaction

- Rivers play a central role in the lives of South Asians, but water pollution and flooding pose great challenges to South Asian countries.

Living Along the Ganges

Mother Ganges

- Ganges is the best-known South Asian river
 - it’s shorter than the Indus, Brahmaputra
 - flows 1,500 miles from Himalayan glacier to Bay of Bengal
 - drains area three times France; home to 350 million people
- Provides drinking and farming water, transportation
- Known as *Gangamai*—“Mother Ganges”
 - becomes the Padma where it meets the Brahmaputra

A Sacred River

- Hinduism is the religion of most Indians
- To Hindus, the Ganges River is the sacred home of the goddess Ganga
- Hindus believe waters have healing powers; temples line its banks
 - pilgrims come to bathe, scatter ashes of dead
 - at sacred site of Varanasi they gather daily for prayer, purification
 - float baskets of flowers, burning candles on water

A Polluted River

- Centuries of use have made Ganges most polluted river in world
 - sewage, industrial waste, human bodies poison the water
 - users get stomach and intestinal diseases, hepatitis, typhoid, cholera
- In 1986, government plans sewage treatment plants, regulations
 - today few plants are operational, factories still dump waste
- Clean up will take time, money, a change in how people see river