

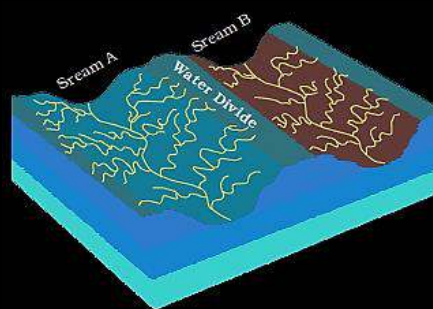
These Slides Accompany the YouTube Video Tutorial:
<https://www.youtube.com/watch?v=DMgPamV3TuY>

NCERT Class 9 Geography

Chapter 3: Drainage

Terms

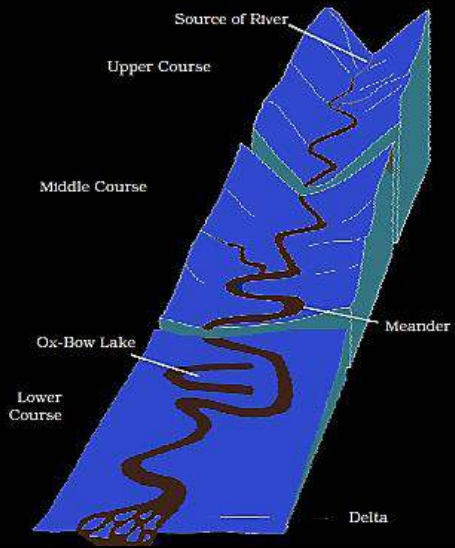
- Drainage
- Drainage Basin
- Water Divide
- Perennial – Water Year Round
- River System – River + Tributaries



These Slides Accompany the YouTube Video Tutorial:
<https://www.youtube.com/watch?v=DMgPamV3TuY>

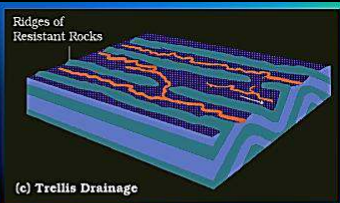
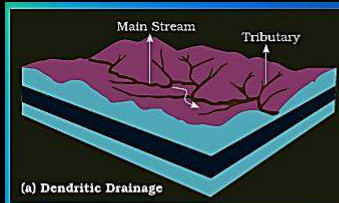
Stages of River

- Himalayan River – Intensive Erosion
- Peninsular River – Short & Shallow



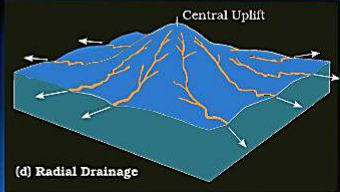
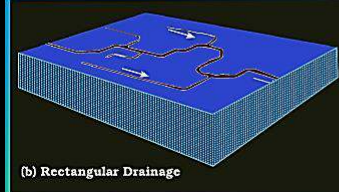
Drainage Patterns

Follows Slope



90°,
Hard ||
Soft
Rocks

Strongly
Jointed
Rocks



Move
from
Center

These Slides Accompany the YouTube Video Tutorial:
<https://www.youtube.com/watch?v=DMgPamV3TuY>

Indus River

- Rises in Tibet, near Lake Mansarovar
- Enters India in Ladakh, J & K
- Zaskar, Nubra, Shyok and Hunza R. - Join in Kashmir region
- Moves to Baluchistan & Gilgit & then Attock
- Satluj, Beas, Ravi, Chenab & Jhelum join Indus near Mithankot in Pakistan
- Length – 2900 km
- India – 1/3rd in J&K, HP & Punjab; rest in Pakistan
- Indus Water Treaty -1960 – 20% water for India

Ganga River

- From Gangotri Glacier in Bhagirathi R.
- Joins Alaknanda R. at Devprayag
- Reaches plains at Haridwar
- Yamuna from Yamotri Glacier join at Allahabad (Left Bank)
- Ghaghara, Gandak & Kosi R. from Nepal Himalaya
- Chambal, Betwa & Son from Peninsular Region – Semiarid & Short Course of Flow
- Ganga flows eastwards till Farakka in West Bengal (northmost part of Ganga delta) – Separate in 2 parts:
 - Bhagirathi-Hooghly R. - flows southwards - deltaic plains to the Bay of Bengal.
 - Mainstream - flows southwards into Bangladesh & joins Brahmaputra – (Later called Meghna)
- Forms Sunderban Delta – World's largest and fastest growing delta – Sundari Tree
- Ambala- Waterdivide b/w Indus & Ganga
- Length: 2500 km

These Slides Accompany the YouTube Video Tutorial:
<https://www.youtube.com/watch?v=DMgPamV3TuY>

Brahmaputra River

- Origin: Mansarovar lake in Tibet
- Reaches Namcha Barwa & takes U shaped turn in Arun. P. – Dihang
- Joins Dibang, Lohit, Kenula R. – form Brahmaputra
- Called Tsang Po in Tibet & Jamuna in Bangladesh
- Forms braided channel in Assam & riverine islands

Narmada River

- Rises in Amarkantak, MP
- Westward in rift valley formed by faulting
- Deep gorge – Marble Rocks in Jabalpur
- Dhuadhar Falls – River plunges on steep rocks
- Tributaries short & join at right angles
- Flows through MP & Gujarat

These Slides Accompany the YouTube Video Tutorial:
<https://www.youtube.com/watch?v=DMgPamV3TuY>

Tapti River

- Rises in Betul District in Satpura
 - In rift valley parallel to Narmada
 - Shorter than Narmada R.
 - Covers MP, Gujarat & Maharashtra
-
- Other west flowing rivers - Sabarmati, Mahi, Bharathpuzha & Periyar

Godavari River

- Largest Peninsular river.
- Rises from the slopes of the Western Ghats in Nasik, Maharashtra
- Length: 1500 km
- 50% in Maharashtra, then MP, Odisha & Andhra Pradesh
- Tributaries: Purna, Wardha, Pranhita, Manjra, Wainganga & Penganga
- Known as Dakshin Ganga

These Slides Accompany the YouTube Video Tutorial:
<https://www.youtube.com/watch?v=DMgPamV3TuY>

Mahanadi River

- Rises in Chhattisgarh
- Length: 860 km
- Drains Maharashtra, Chhattisgarh, Jharkhand and Orissa

Krishna River

- Rises near Mahabaleshwar
- Length: 1400 km
- Tributaries: Tungabhadra, Koyana, Ghatprabha, Musi & Bhima
- Maharashtra, Karnataka and Andhra Pradesh

These Slides Accompany the YouTube Video Tutorial:
<https://www.youtube.com/watch?v=DMgPamV3TuY>

Kaveri River

- Rises in Brahmagiri range of the Western Ghats
 - Reaches the Bay of Bengal in south of Cuddalore, in Tamil Nadu
 - Length: 760 km
 - Tributaries: Amravati, Bhavani, Hemavati and Kabini R.
 - Drains Karnataka, Kerala and Tamil Nadu
-
- Other Eats Flowing Rivers: Damoder, Brahmani, Baitarni & Subarnekh

Lakes

- Large Lakes = Sea – Dead Sea, Caspian Sea
- Dal Lake – Shikaras – Kashmir
- Spits and bars form lagoons - Chilika lake, Pulicat lake, Kolleru lake
- Seasonal – Sambhar – Rajasthan – Salt Water Lake
- Wular Lake – J & K – Fresh Water – Tectonic – Largest freshwater lake
- Dal lake, Bhimtal, Nainital, Loktak and Barapani
- Artificial: Guru Gobind Sagar (Bhakra Nangal Project)

These Slides Accompany the YouTube Video Tutorial:
<https://www.youtube.com/watch?v=DMgPamV3TuY>

River Pollution

- Untreated Sewage & Industrial Effluents
- Increasing Urbanization & Industrialization

- Ganga Action Plan (GAP) phase-I: Started in 1985 & closed in 2000
- Ganga Action Plan (GAP) Phase-II: Merged with NRCP (National River Conservation Plan) – 152 towns on 27 interstate rivers in 16 states