

Geography Cheat Sheet

Plate Tectonics

- Lithosphere: The rigid outer shell of the Earth, broken into tectonic plates.
- Asthenosphere: Semi-fluid mantle layer on which plates move.
- Convergent Boundary: Plates move toward each other; can form mountains or subduction zones.
- Divergent Boundary: Plates move apart; new crust forms at mid-ocean ridges.
- Transform Boundary: Plates slide horizontally past each other along faults.

Climate Zones

- Tropical Climate: Warm year-round with high rainfall near the equator.
- Arid Climate: Dry regions with very low precipitation; deserts.
- Temperate Climate: Moderate temperatures with distinct seasons.
- Polar Climate: Very cold year-round with low precipitation.
- Mediterranean Climate: Dry summers and wet winters, common on west coasts of continents.

Biomes

- Tropical Rainforest: Dense, biodiverse forest near the equator with high rainfall.
- Savanna: Grasslands with scattered trees; distinct wet and dry seasons.
- Desert: Sparse vegetation adapted to very low rainfall.
- Temperate Forest: Broadleaf or mixed forests with four seasons.
- Tundra: Treeless region with permafrost and short growing seasons.

Rivers And Landforms

- Watershed: Area of land that drains to a common outlet.
- Meander: A winding curve in a river channel formed by lateral erosion.
- Delta: Depositional landform at a river mouth where sediment accumulates.
- Erosion: Removal of rock and soil by water, wind, or ice.
- Deposition: Laying down of sediments after transport.

Atmosphere Weather

- Troposphere: Lowest atmospheric layer where weather occurs.
- Pressure Gradient: Difference in air pressure that drives wind.
- Coriolis Effect: Apparent deflection of moving air due to Earth's rotation.
- Front: Boundary between air masses of different characteristics.
- Cyclone: Low-pressure system with inward spiraling winds.

Map Projections

- Mercator Projection: Cylindrical map preserving direction but distorting area near poles.
- Robinson Projection: Compromise projection balancing shape and area distortions.