

habitat - address
Niche - occupation

Competition Exclusion

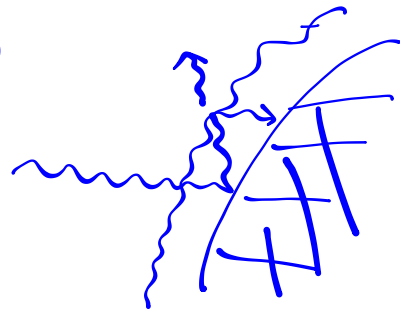
PRINCIPLE - NO 2

Species can occupy
Same niche @ same
time

Greenhouse effect

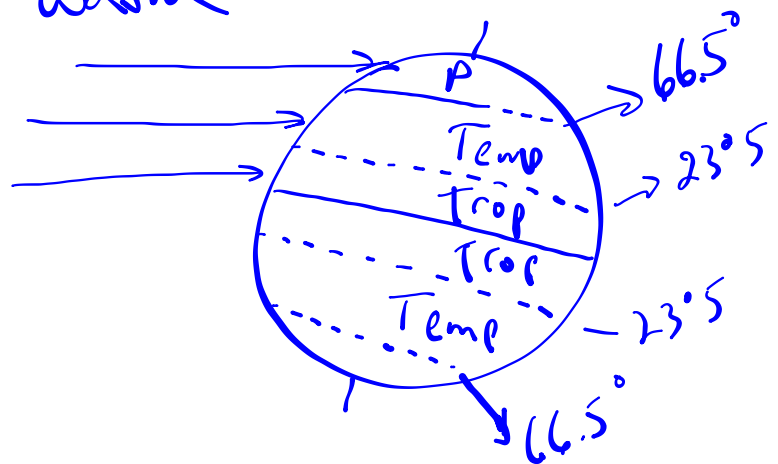
gases trap some of sun's
heat energy in biosphere

→ CO_2 , CH_4 , H_2O



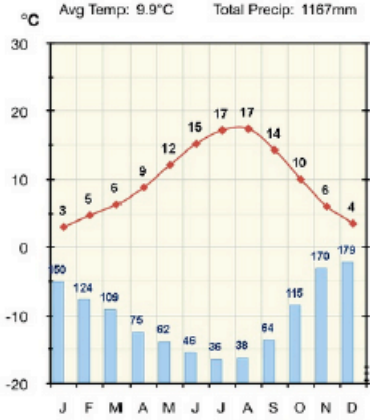
3 zones

polar - cold
temperate - temp. varies seasonal
tropical - warm



Vancouver, Canada

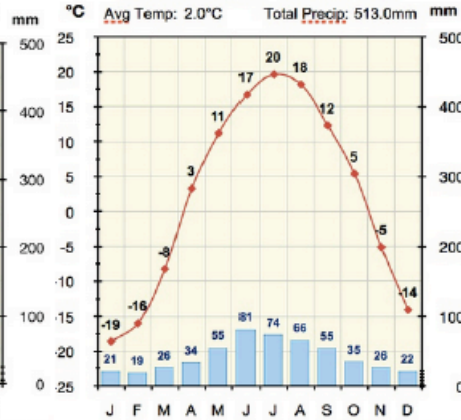
Location: 49°N 123°W Elevation: 2m
 Avg Temp: 9.9°C Total Precip: 1167mm



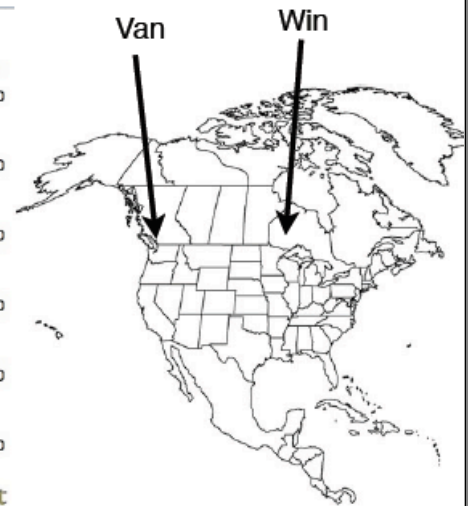
GEOKnow.net

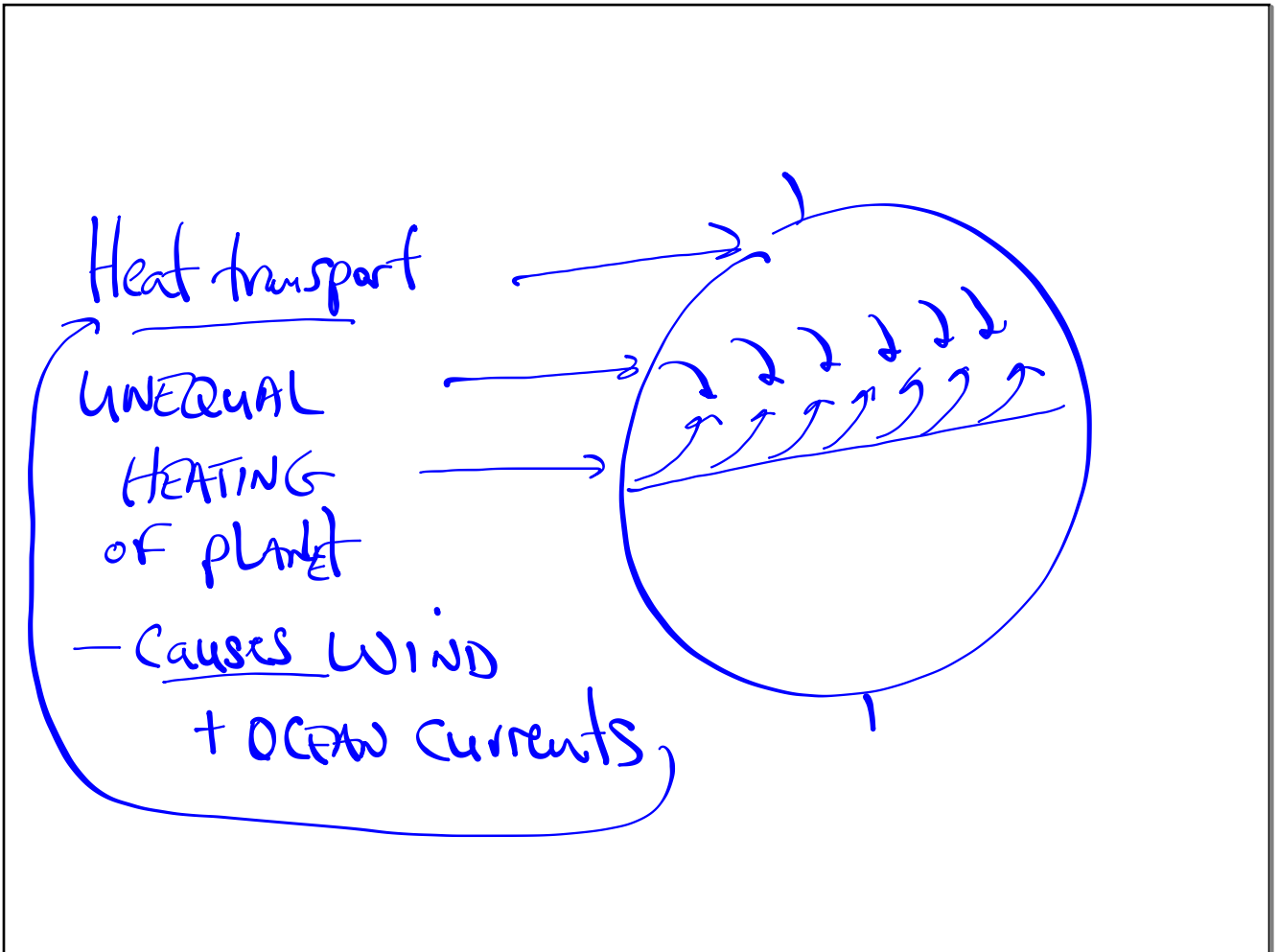
Winnipeg, MN, Canada

Location: 49°N 97°W Elevation: 239m
 Avg Temp: 2.0°C Total Precip: 513.0mm



GEOKnow.net





Abiotic factors-

Soil
Rocks
Atmosphere
Climate
H₂O

Biotic
Factors

- predators
- parasites
- plants
- decomposers

Community interactions — ENERGY

— predator/prey

— symbiosis

— mutualism — both benefit

— commensalism — 1 benefits —
other not helped / not hurt

— parasitism — 1 benefits, 1 harmed

Eco.

Succession - after disturbance

primary - on newly exposed surfaces

secondary - on soil

Biodiversity

$$D = \frac{N(N-1)}{\sum n(n-1)}$$

N = total #
organisms
in ecosystem
 n = # of each species

$$N = 200$$

$$\sum n(n-1) = 750$$

$$D = \frac{200(199)}{750} = 53.1$$

FACTORS AFFECTING —

- Deforestation
- pollution
- Development / Fragmentation
- intro of exotic species
- OVER-HARVESTING