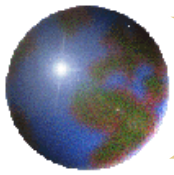
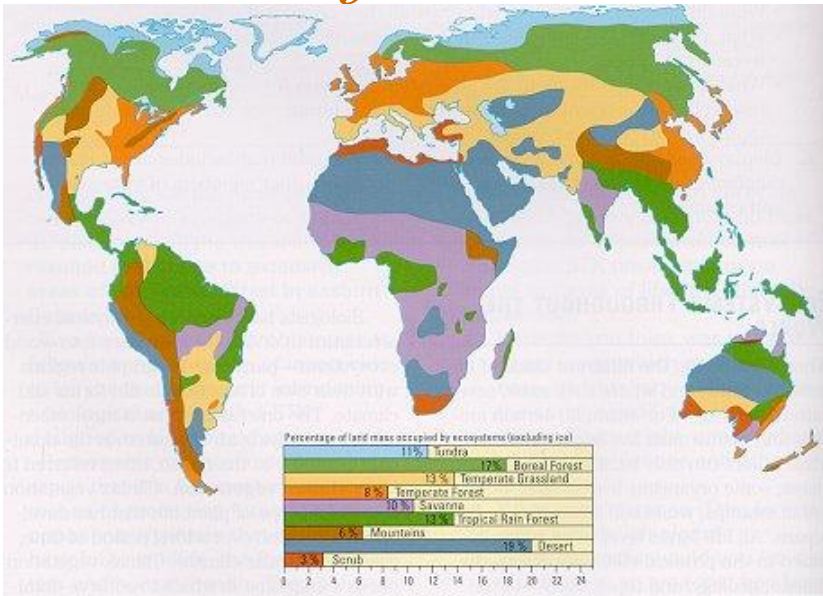


*Unit 3 Part 3*  
*Ecosystems of the world*

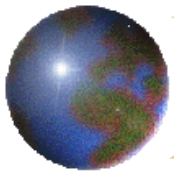
**p. 101 - 109**



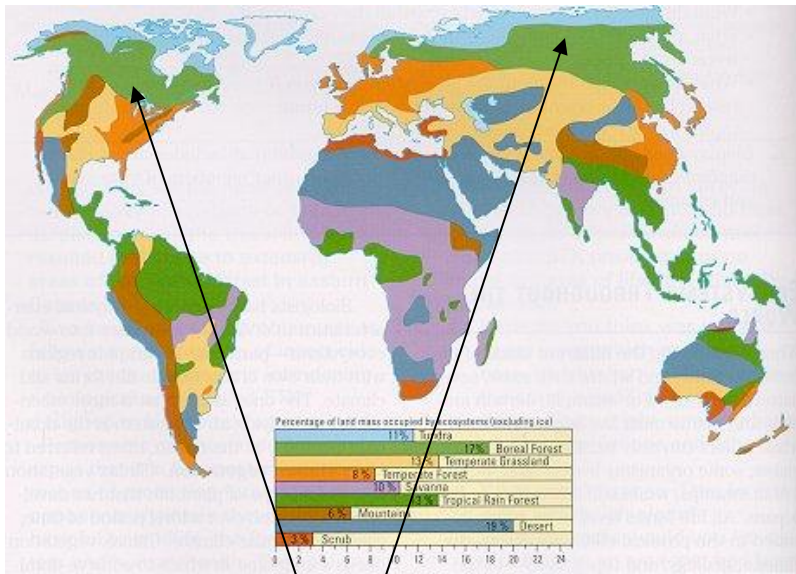
## 17. Define “climax vegetation” p. 102



- ❖ The natural vegetation in the last possible stage of vegetation development.
- ❖ Climax vegetation is stable and in balance with the climatic conditions
- ❖ It should change very little if left undisturbed



18. Describe “climax vegetation” in coniferous forest. P. 102

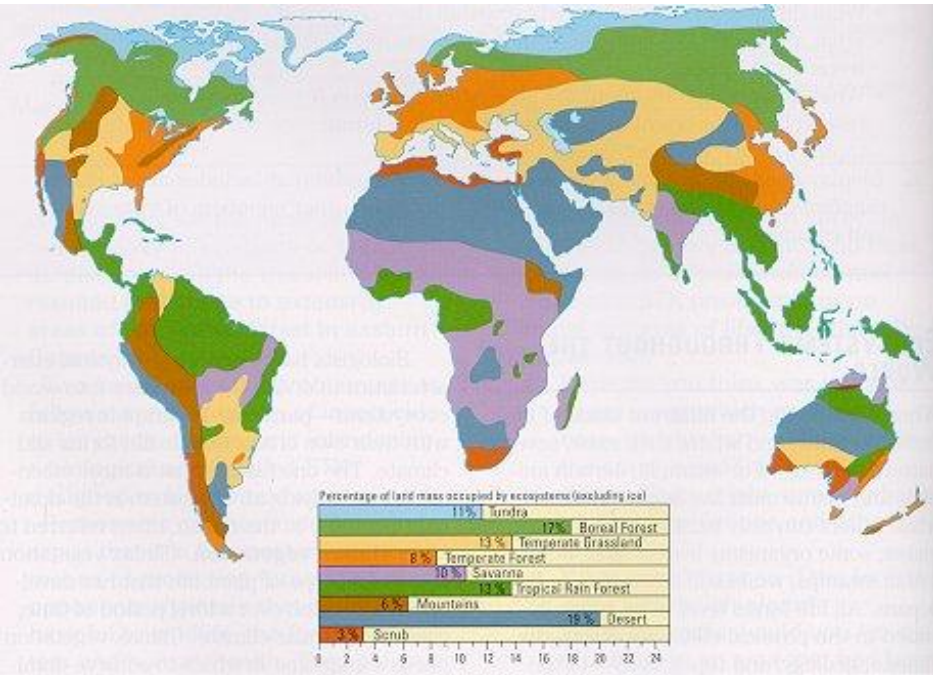


- ⊕ Evergreen trees
- ⊕ Needle like leaves
- ⊕ Thick bark
- ⊕ Conical shape
- ⊕ Dense growing which blocks sun

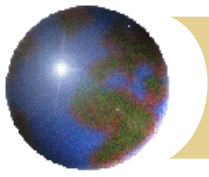
Coniferous forests



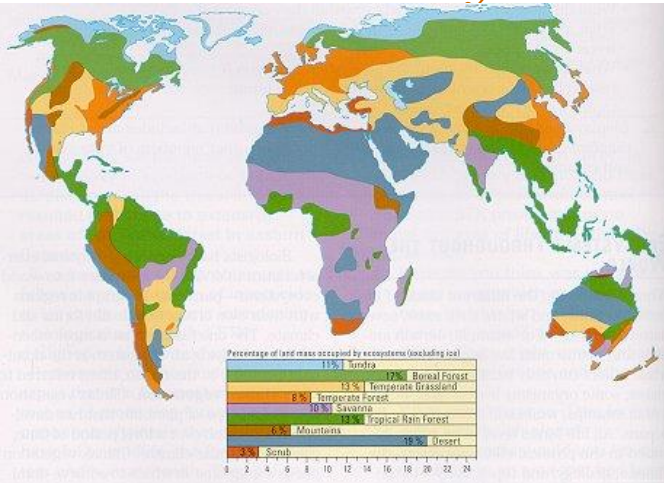
# 19. Analyze world ecosystem map.



- Boreal Forest & tundra are wide spread in high latitudes
- Tropical Rain Forests occur in low latitudes
- Tropical Rain forest is most predominant in South America.
- South America, Africa, Australia and Antarctica do not have tundra.
- Boreal forest is our ecosystem

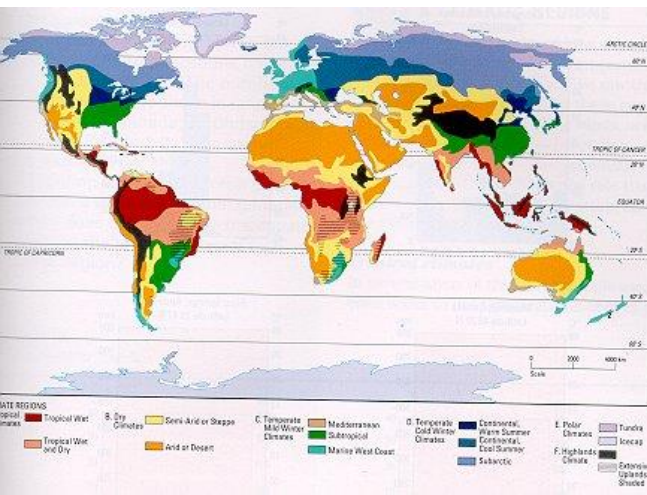


## 20. *Ecosystems vs. climatic regions p.104*

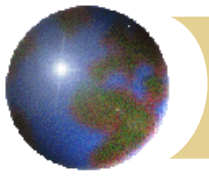


Ecosystem zones

- Ecosystems of the world are largely defined by their climax vegetation.
- Example: tropical rain forest, grasslands, boreal forests, cacti, etc.
- Climax Vegetation is determined by climate. Therefore, ecosystems parallel climate zones



Climate zones



# 20. Continued (Ecosystems vs. climatic regions p.104)

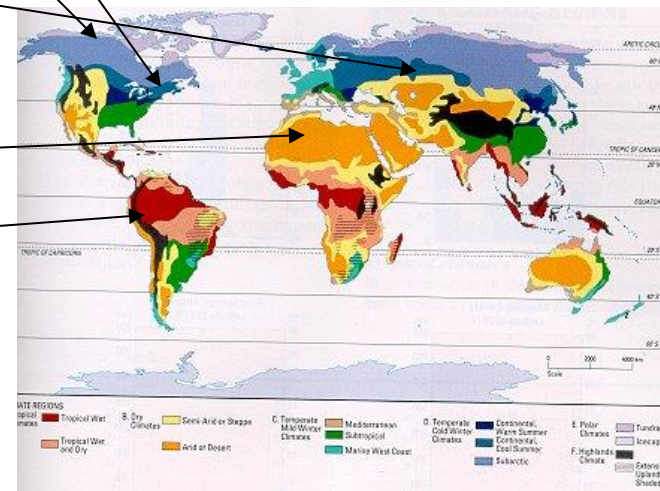
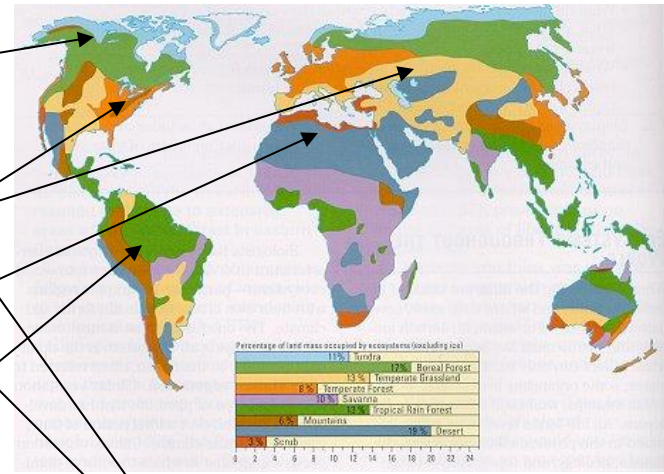
Temperate cold winter gives Boreal Forest

Temp. mild winter gives Temp. deciduous Forest

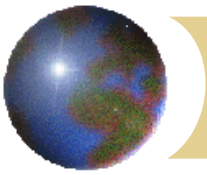
Semi-Arid gives Grassland

Arid gives Desert

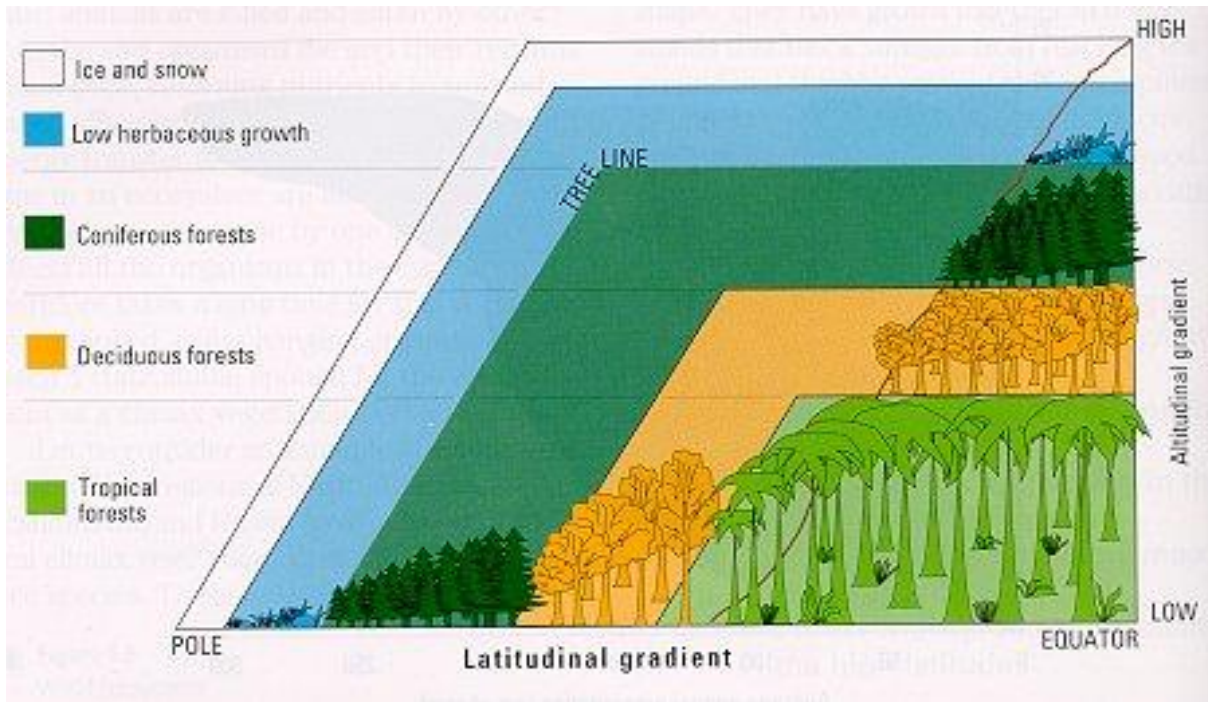
Tropical Wet gives Tropical Rain forest



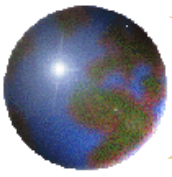
Worksheet 6.2 reviews this well.



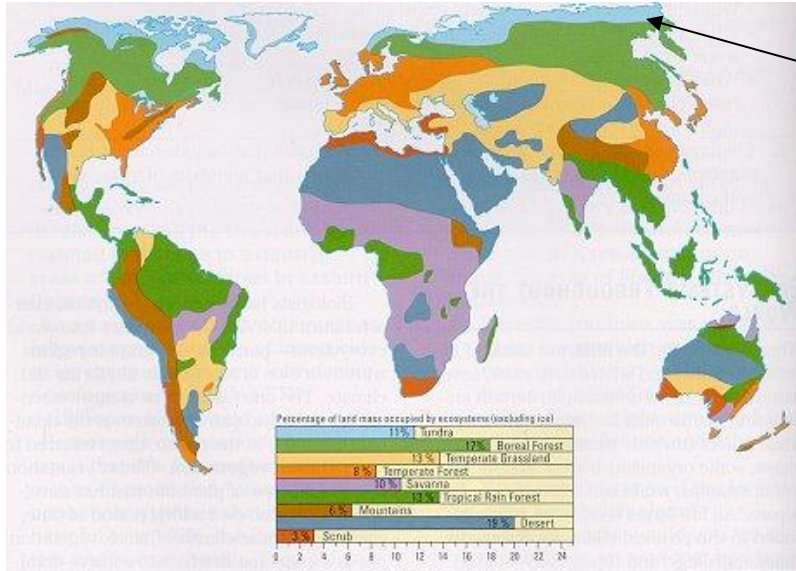
## 21. *Altitudinal succession vs. latitudinal succession p. 104*



- ✪ The changes in ecosystems that occur as one moves from the equator to the poles is very similar to the changes in ecosystems seen moving from the base of an tropical mountain to the summit.



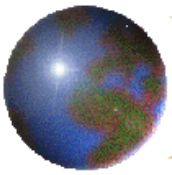
## 22. *Ecosystem climatic conditions p.104*



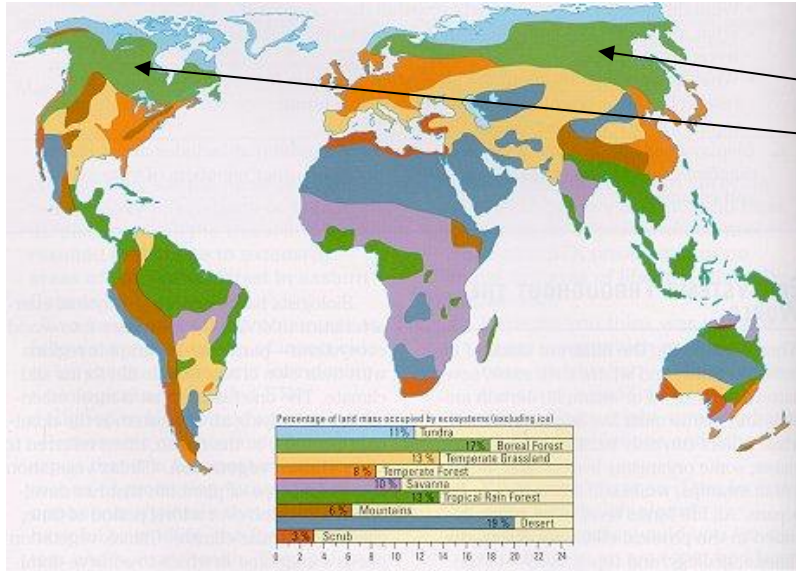
### ***Tundra***

- ❊ Polar – sub arctic climate
- ❊ Short summers
- ❊ Avg. monthly temp. always below 10°C
- ❊ Very cold long winter
- ❊ Light precipitation





## 22. *Continued* (Ecosystem climatic conditions p.104)

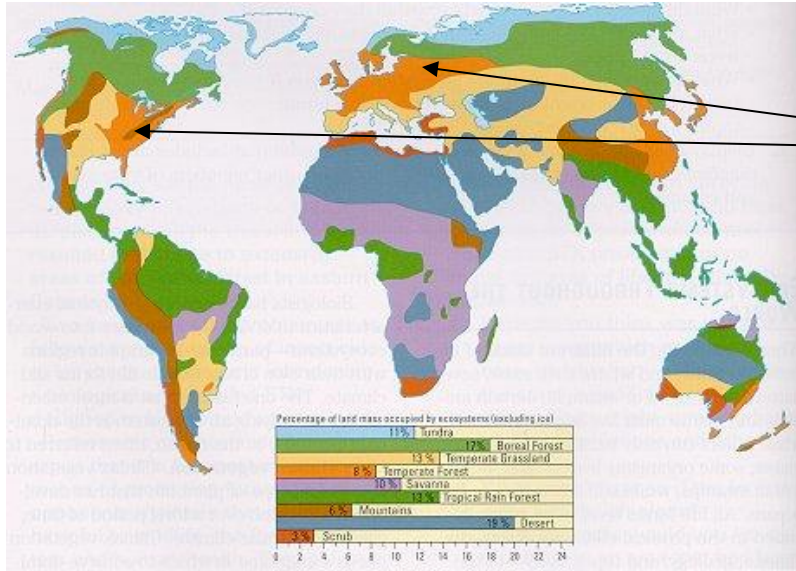


### ***Boreal Forest***

- ⊕ Temperate cold winter climate
- ⊕ Warm summers
- ⊕ Moderate precipitation

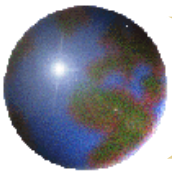


## 22. *Continued* (Ecosystem climatic conditions p.104)

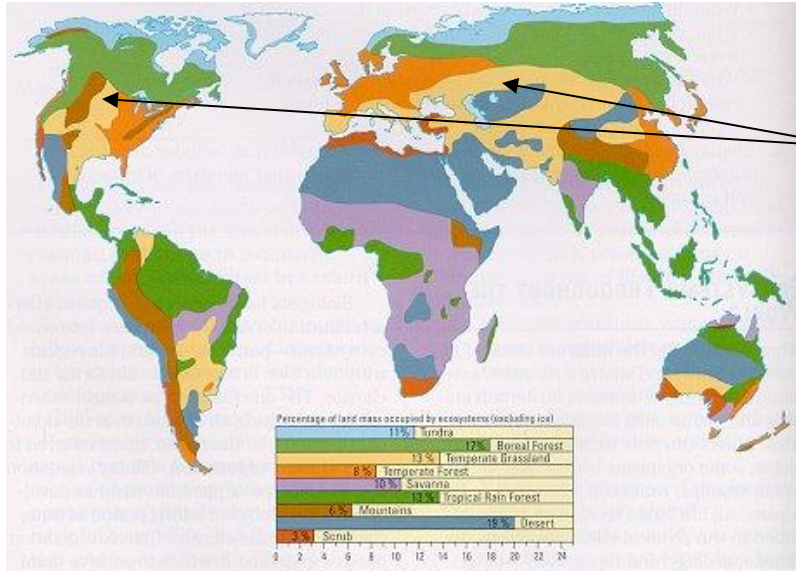


### ***Temperate Forest***

- ⊕ Temperate Mild winter climate
- ⊕ Warm – hot summers
- ⊕ Moderate - heavy precipitation

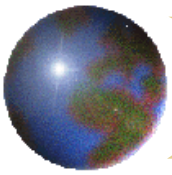


## 22. *Continued* (Ecosystem climatic conditions p.104)

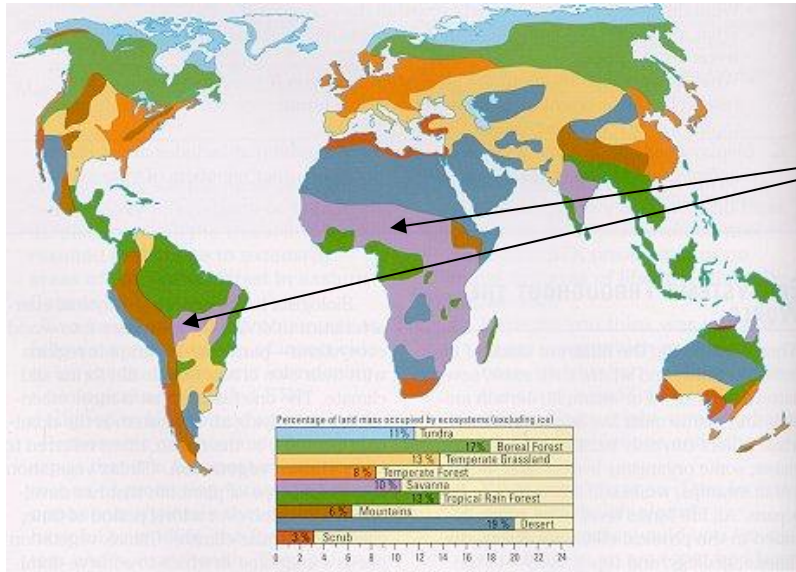


### ***Temperate Grassland***

- ☉ Semi-arid climate or temperate cold winter
- ☉ Light precipitation, most of it occurs in summer
- ☉ Warm to hot summer
- ☉ Cold winters

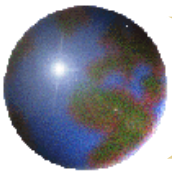


## 22. *Continued* (Ecosystem climatic conditions p.104)

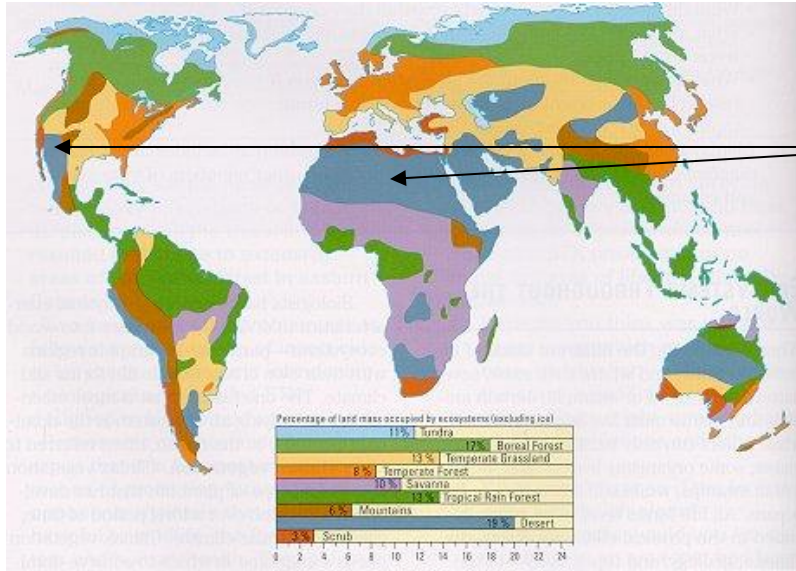


### ***Savanna***

- ☉ Tropical wet & Dry to semi-arid climate
- ☉ High temperatures most of the year
- ☉ Light to Moderate precipitation usually all in one season

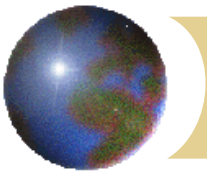


## 22. *Continued* (Ecosystem climatic conditions p.104)

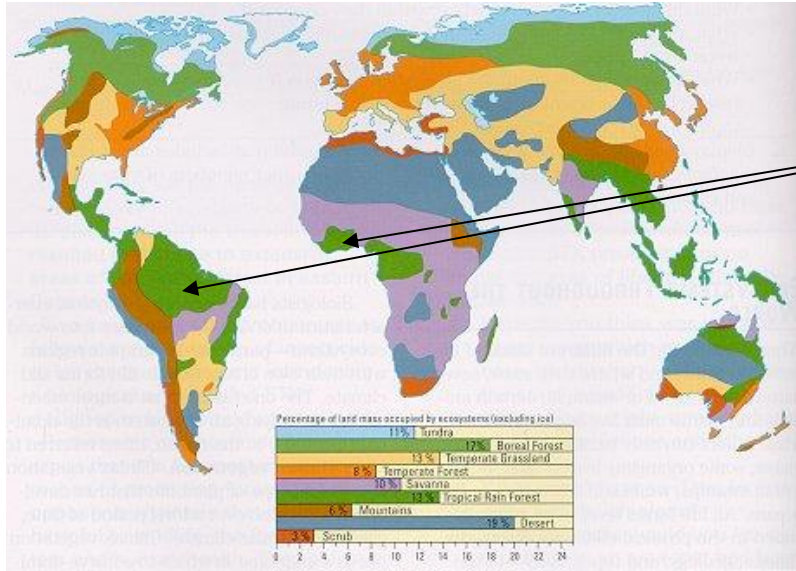


### ***Desert***

- ❊ Arid climate
- ❊ High temperatures year round
- ❊ little precipitation

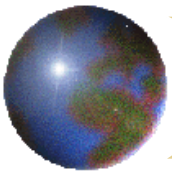


## 22. *Continued* (Ecosystem climatic conditions p.104)

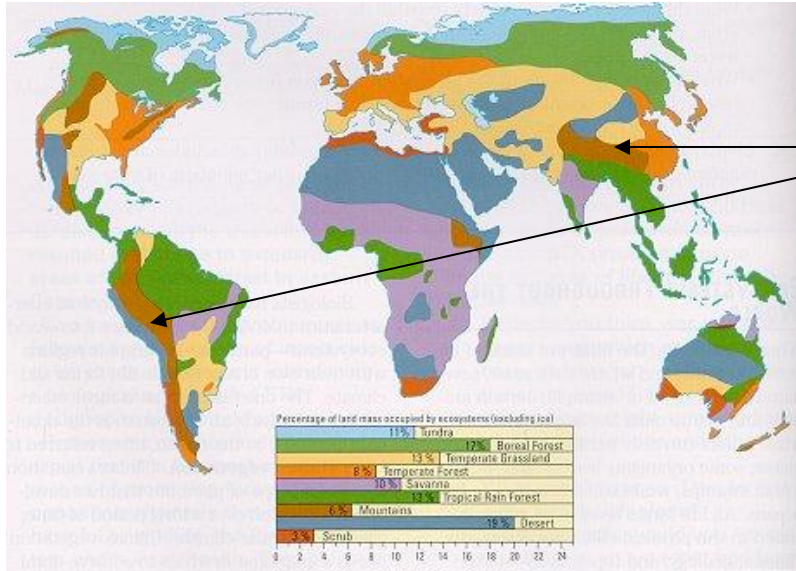


### ***Tropical Rain Forest***

- ☉ Tropical Wet climate
- ☉ High temperatures year round
- ☉ High precipitation year round

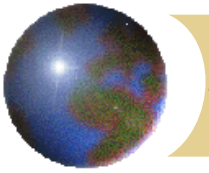


## 22. *Continued* (Ecosystem climatic conditions p.104)



### ***Mountain***

- ⊕ Different climates at different elevations
- ⊕ High elevations often like tundra



## *Lab /Practice questions*

- ✚ Questions #23 24, 25 p. 105-106 make a nice practice or even a lab!!