

SOILS (no soils slides)

Know examples of things:

- Especially with biomes(plants, animals, other organisms)
- Types of species(generalists, specialists, etc)

4 Components of Soil:

- Minerals, water, air, organic matter

5 Factors:

- Parent material- residual and transport
- Climate
- Time
- Biological Agents (live things)
- Topography- windward sides are wetter than leeward; southern slope a little dryer and warmer

Know horizons and how they are formed (O A E B C R)

High field capacity vs. low field capacity (top two in list have high, bottom two have low)

Red has iron than brown

Don't have to memorize soil triangle, just have to know how to use it (use line that number is aligned with)

Taxonomy- don't need to know top 3 (do know bolded things-where they are found)

1.75million

PROCESSES AND PRINCIPLES

Be able to recognize photosynthesis formula

-limitations (decreased photosynthesis with increased respiration with increase with heat and temp)

-plants(directly) and animals(indirectly) are made from photosynthesis: less plants mean less animals

NPP is higher in warm and wet conditions

Food pyramid=efficiency

Food web=pathways

3 categories of how organisms get energy: autotrophs to heterotrophs to decomposers

Don't worry about extinction and depletion

Know types of species and examples(indicator, keystone, etc.)

Adaptions and examples (what is color, hibernation, etc)

-Deciduous trees lose their leaves based on a lack of water instead of cool temperatures

-Predation will increase biodiversity

PHYTOGEOGRAPHY

Carbon-key element of organic life on this planet

Nitrogen- 4 steps in processing of nitrogen

Biomes- know what plants are there and examples (Georgia- temperate deciduous and mixed forest)

(SLIDES OF BIOMES THAT MUST BE IDENTIFIED- pictures on power point)

Primary Succession- starts with bare rock; faster?

Secondary- starts with soil maybe some plants

Greater biodiversity will come in the later stages of both successions

Allogenic- involves disturbance like a forest fire

Know definition of ecological niche

ZOOLOGY

Marsh-has more grasses than trees

Swamp- has more trees and bushes than grasses

Prairie potholes- result of glaciation

Zoogeographic Realms

-know animal examples and where they are

Grant zebras have stripes on stomachs grevy zebras don't

Duck bill plat- monotreme mammal

Habitat destruction is main cause of extinction

