

I. ICE AGE THEORY NOTES

NAME _____ HR _____

A. 5 ICE AGES IN EARTH'S HISTORY

- a. Huronian (2.4-2.1 billion years ago),
- b. Cryogenian (850-635 million years ago),
- c. Andean-Saharan (460-430 mya),
- d. Karoo (360-260 mya) and
- e. Quaternary (2.6 mya-present)

B. WHAT CAUSES THEM?

6-9 degree C drop in average world temperature [this does not mean that EVERYWHERE is that much colder. Equator area is still quite warm and tropical]

- a. Change in sun's energy output [thermostat turned down in sun]
- b. Change in tilt of earth's axis (maybe not 23.5, maybe only 21 degrees)
- c. Continental plate movement
- d. Volcanic ash blocking out sunlight
- e. Nearby star explodes disrupting flow of energy from the sun

C. WHERE DOES THE WATER COME FROM TO MAKE A GLACIER?

- a. Water to form glaciers comes from oceans
- b. This drops their levels several hundred feet [evaporated water hits land, freezes, then oceans lower]
- c. Humans then could walk across a land bridge between Siberia and Alaska

D. WHERE ARE GLACIERS FOUND AND HOW BIG ARE THEY?

- a. Glaciers move from poles towards the equator and
- b. may be 2-3 miles thick

E. WHAT PLANTS GREW NEAR THE GLACIERS?

- a. Lichens,
- b. moss,
- c. fast flowering plants

F. WHAT ANIMALS LIVED NEAR GLACIERS?

- a. Primary consumers
 - i. Caribou,
 - ii. musk ox,
 - iii. mammoths
 - iv. giant sloths
- b. Secondary consumers
 - i. Sabertooth [hunted to extinction probably because they were brave and invaded human camps],
 - ii. wolves, [were domesticated- dogs. for protection?]
 - iii. bears [called cave bears and were 12 feet tall!] (all secondary consumers)

G. Human housing:

- a. Humans likely used temporary housing that could pack and travel, since they were following the animals for food
- b. If caves were available, they may have lived there, but evidence suggests that they actually used caves for temporary shelter, for art, and for ceremonies.