SOME questions from January 20th

1- When on the test, are we expected to know the scientific names of all plants/animals from lecture slides?

2- Are the gradualism and punctuated equilibrium model accepted as counter-theories or coinciding theories?

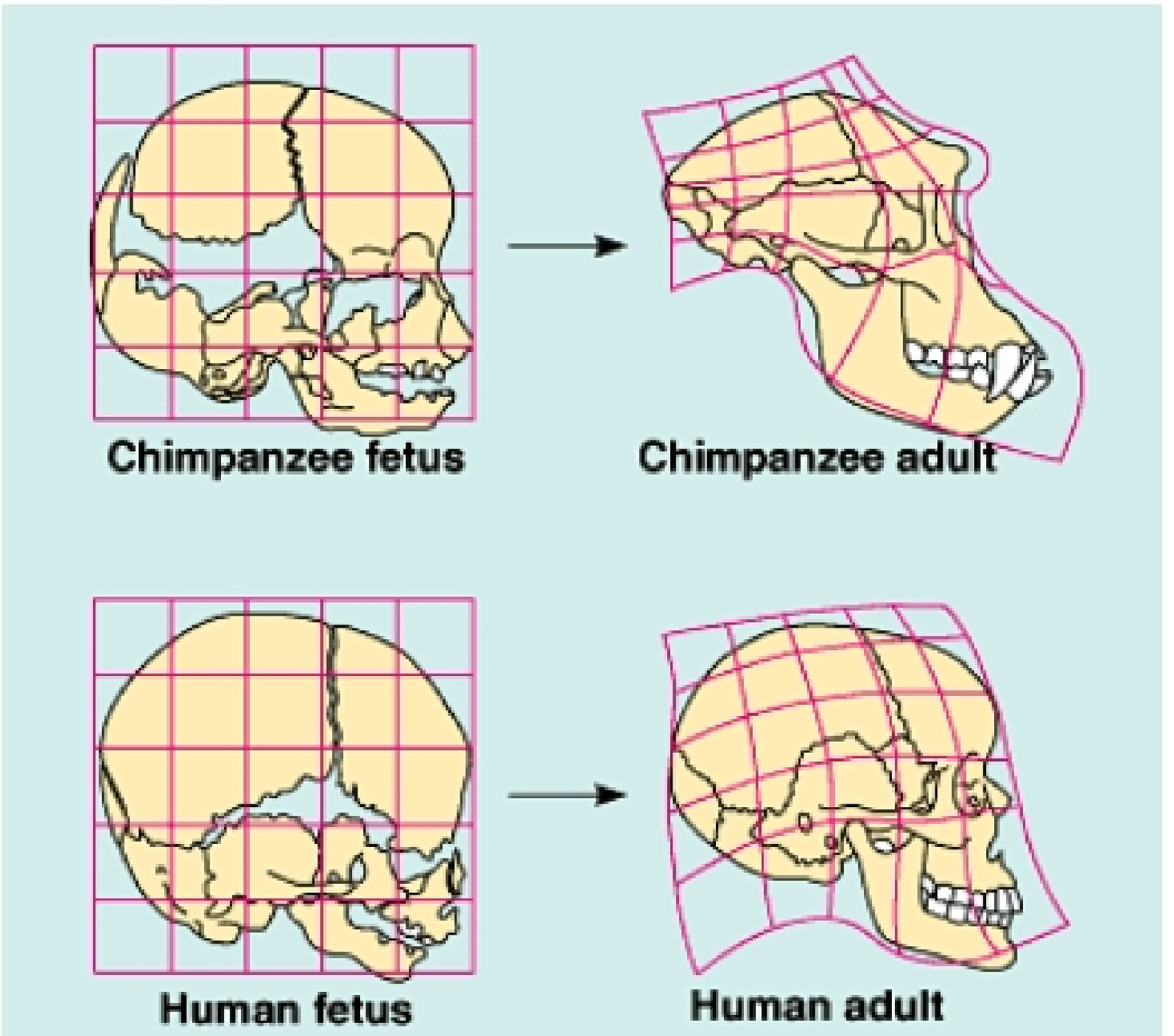
3- When discussing evolution, the concept of a “common ancestor” is often mentioned, if evolution has always been occurring, where did the “common ancestor” come from or evolve from?

4- Are humans polymorhic? If so, could we evolve into separate species overtime?

Evo-devo (interface between evolutionary biology and development)

Genes that control development play a major role in evolution.

Slight changes in the relative rates of growth during development can change the adult form substantially. *Ex: skulls of humans and chimpanzees.*



(b) Comparison of chimpanzee and human skull growth

Evolution of morphology that arises by a modification in allometric growth is an example of heterochrony: evolutionary change in the rate or timing of developmental events.

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Fig. 24.19

Paedomorphosis (“child” and “formation”) If the rate of reproductive development accelerates compared to somatic development, the sexually mature stage of a species may retain body features that were juvenile structures in an ancestral species.

Fig. 24.21