Write definitions or descriptions for underlined words.

- What is a Species?
- What is selective breeding or artificial selection?
    - Why would you do it?
    - Think of 3 examples of artificial selection.
- How is it different than Natural selection?
    - What is the deciding factor in natural selection?
- What are the four principles of natural selection?(421)
    - 3 examples of evolution. Be able to explain using the principles
- Explain how each of the following is used as evidence(423)
    - Fossils
    - Comparative anatomy
    - Comparative embryology
    - Comparative biochemistry
    - Geographical distribution
    - Direct observation
- Genetic drift
- Gene Flow
- Describe reproductive isolation and allopatric speciation(geographical isolation)
- Adaptive radiation (divergent evolution)
- Convergent evolution
- Coevolution
- Structural adaptations
- Physiological adaptations
- Behavioral adaptations

- Classification – grouping of objects or organisms based on a set of criteria
- Taxonomy – study of classifying and naming organisms
- Binomial Nomenclature
    - – Carolus Linnaeus (1707-1778)
    - - Latin two part system of naming species
    - Hierarchy of Terms
        - Domain
        - Kingdom
        - Phylum
        - Class
        - Order
        - Family
        - Genus
        - Species
    - Human Classification
        - Eukarya
        - Animalia
        - Chordata
        - Mammalia
        - Primate
        - Hominidae
        - Homo

        - *Homo sapiens*
    - Scientific Name – genus and species italicized or underlined
- Three Domains
    - Eukarya, Archea, Bacteria
- 6 Kingdoms
    - Plantae – plants
    - Animalia – animals
    - Fungi – mushrooms, yeast, mold
    - Protista – amoeba, euglena, diatoms, not a real kingdom, old
    - Archaebacteria – ancient bacteria
    - Eubacteria – true bacteria
- Evidence for Classification
    - – based on ancestry
        - - Characters
            - Homologous structures
            - Protein or DNA Analysis
- Cladistics
    - Grouping organisms based on common ancestry
    - shared derived characteristics
- Cladogram - chart
- Traditional Systematics – based on common ancestry and degree of structural differences