# Biology 2<sup>nd</sup> Semester Final Review (Covers 2<sup>nd</sup> Semester) \*\*Actual study guides on GOOGLE CLASSROOM\*\* \*\*Ecology & Evolution Study Guides due the day of your final\*\*

#### Ecology

- Food web vs. food chain
- Autotroph vs. heterotroph
- Trophic levels and energy loss and energy pyramid
- Carrying capacity vs. limiting factor
- Density independent factors vs. density dependent factors
- Levels of organization
- Habitat vs. niche
- Exponential growth
- J- curve vs. S- curve
- Types of symbiotic relationships
- Camouflage vs. mimicry
- Cycles of matter
- Biomes
- 6 kingdoms of life and Taxonomic Order from largest to smallest

### **Evolution and Geologic history**

- Precambrian, Paleozoic, Mesozoic, Cenozoic Era
- What does the word evolution mean
- Fossil record
- Absolute dating (radioactive isotope) vs. relative dating (layers of sedimentary rock)
- Homologous structures vs. vestigial structures
- Natural selection vs. artificial selection
- Geographical isolation
- What were the first organisms thought to evolve?
- Louis Pasteur vs. Francesco Redi
- Primate characteristics
- Australopithecus afarensis, Homo habilis, Homo erectus, Homo neanderthalensis
- Taxonomy vs. cladogram

## Human Body Systems

- What is a negative feedback loop? How does the body maintain homeostasis?
- How is the human nervous system divided (central vs. peripheral)
- Effects of drugs on the synapse
- Action potential vs. resting potential of a neuron
- Sensory neurons, motor neurons and interneurons
- Cellular respiration and the cardiopulmonary system (heart and lungs)
- Pathway of food during digestion
- Macromolecules of life and their monomers
- Accessory organs in digestion
- Mechanical vs. chemical digestion examples
- Function and layers of skin
- Composition of blood
- Function and major organs of ALL body systems discussed in class

### Quizlets

- Ecology Terms: <u>https://quizlet.com/\_43w6ns</u>
- Evolution and Geologic History Terms: <u>https://quizlet.com/\_6pzlkz</u>
- Human Body Systems Terms: <u>https://quizlet.com/\_6pzmaq</u>