

### FINAL EXAM VOCABULARY REVIEW

10 percent	Crossing over	Gel electrophoresis	Monomer	Punnett square
Active immunity	Cuticle	Genus	Natural selection	Reflex
Active transport	Cystic fibrosis	Germ layers	Nitrogen	Respiratory system
ADP	Cytokinesis	Glucose	Nocturnal	Ribose
Aerobic	Cytoplasm	Guard cells	Nondisjunction	Ribosome
Allele	DDT	Gymnosperm	Nonvascular plants	RNA bases
Amphibia	Decomposers	Habituation	Nucleic acid	Root
Anaerobic	Diaphragm	Hermaphrodite	Nucleus	Seed
Animalia	Dichotomous	Hibernation	Nutrition	Selectively permeable
Annelida	Dicot	Homeostasis	Organ	Sex-linked
Archaebacteria	Diffusion	Homologous	Organic	Sexual
Arthropods	Digestive system	Hormones	Osmosis	Sickle cell anemia
Atom	Disaccharide	Huntington's	Parasitism	Skeletal system
ATP	Diurnal	Hydrogen	Passive immunity	Specialization
B cells	Divergent	I <sup>A</sup> I <sup>A</sup> , or I <sup>A</sup> i	Passive transport	Speciation
Bacteria	DNA	Imprinting	Pea plants	Species
Biochemical evidence	Double helix	Incomplete dominance	Pedigree	Stamen
Camouflage	Down syndrome	Innate	Peptide	Stem cell
Cardiovascular system	Embryology	Integumentary system	pH	Stop codon
Carrying capacity	Endangered	Interphase	Phenotype	Symbiosis
Catalyst	Endosymbiotic theory	Invasive species	Phenylketonuria (PKU)	T cells
Cell	Enzyme	Karyotype	Phloem	Taxa
Cellular respiration	Estivation	Kidneys	Phospholipid	Tissue
Chloroplast	Eutrophication	Lipid	Photosynthesis	Transcription
CHON	Evolution	Macrophage	Phototaxis	Translation
Chordata	Excretion	Malaria (plasmodium)	Pistil	Transport
Chromatin	Exponential	Mammal	Plasma membrane	Vaccine
Chromosomes	Fertilization	Meiosis	Polygenic	Vacuole
Cladogram	Fluid mosaic	Migration	Population	Vertebrate
Cnidaria	Food web	Mimicry	Porifera	Vestigial
Codon	Fossils	Mitochondria	Predation	Viruses
Coelomate	Fruit	Monocot	Primary consumer	Water
Conditioning	G1 and G2 phases		Producer	Xylem
Covalent	Gamete		Protein (polypeptide)	Zygote

Use the word bank to fill in the following. Cross out words as you use them.

**BIOCHEMISTRY:**

- \_\_\_\_\_ 1. Example of a monosaccharide (a simple sugar)
- \_\_\_\_\_ 2. Type of bond formed when two atoms share electrons
- \_\_\_\_\_ 3. Acronym of the 4 most abundant elements found in all living things (the first letter of each word)
- \_\_\_\_\_ 4. High energy storage compound (used by all cells)
- \_\_\_\_\_ 5. Term for a single 'subunit' in biochemistry
- \_\_\_\_\_ 6. Process of transferring energy stored in glucose to ATP
- \_\_\_\_\_ 7. Primary component of the cell membrane
- \_\_\_\_\_ 8. Compounds that contain carbon
- \_\_\_\_\_ 9. 'Universal solvent'

- \_\_\_\_\_ 10. Building blocks of matter
- \_\_\_\_\_ 11. A weak bond (can be easily broken)
- \_\_\_\_\_ 12. Composed of two simple sugars
- \_\_\_\_\_ 13. A type of protein that can speed up the rate of a reaction; never used up
- \_\_\_\_\_ 14. This is formed when one phosphate is given up by ATP in order to release energy
- \_\_\_\_\_ 15. Organic compound: 3 fatty acids + 1 glycerol
- \_\_\_\_\_ 16. Bond formed between two amino acids
- \_\_\_\_\_ 17. Anything that speeds up a chemical reaction by lowering the activation energy
- \_\_\_\_\_ 18. Used to measure the Hydrogen Ion concentration of a solution (indicates acid or base)

**CELLS:**

- \_\_\_\_\_ 19. X-shaped structure in the nucleus of eukaryotic cells visible during cell division
- \_\_\_\_\_ 20. Composed of tissues
- \_\_\_\_\_ 21. Storage tank for H<sub>2</sub>O & dissolved material
- \_\_\_\_\_ 22. Control center of cell activities; found only in eukaryotic cells
- \_\_\_\_\_ 23. Made of cells
- \_\_\_\_\_ 24. Cells that use O<sub>2</sub> to convert energy.
- \_\_\_\_\_ 25. Powerhouse of cell in all eukaryotic cells, cellular respiration occurs here
- \_\_\_\_\_ 26. Selectively permeable
- \_\_\_\_\_ 27. Basic unit of structure and function of all living things
- \_\_\_\_\_ 28. Gel-like material outside nucleus
- \_\_\_\_\_ 29. Plant organelle where photosynthesis occurs
- \_\_\_\_\_ 30. Type of cell division that forms gametes
- \_\_\_\_\_ 31. Location of protein synthesis
- \_\_\_\_\_ 32. Stable internal conditions
- \_\_\_\_\_ 33. The process of making ATP without oxygen
- \_\_\_\_\_ 34. When a cell takes on a specific function; occurs during embryonic development as tissues form
- \_\_\_\_\_ 35. A cell that has not yet differentiated and can become any type of cell
- \_\_\_\_\_ 36. Describes the cell membrane's property of allowing only certain molecules in and out of the cell
- \_\_\_\_\_ 37. Phases of the cell cycle when the cell is focused on producing protein and growing
- \_\_\_\_\_ 38. Model of how prokaryotic cells may have become eukaryotic cells

**DNA:**

- \_\_\_\_\_ 39. Made up of three mRNA nucleotides
- \_\_\_\_\_ 40. Transfer of info from DNA to RNA
- \_\_\_\_\_ 41. Signals the end of a protein to the ribosome (2 words).
- \_\_\_\_\_ 42. Process that builds proteins
- \_\_\_\_\_ 43. Adenine, uracil, cytosine, guanine
- \_\_\_\_\_ 44. Nucleotide + nucleotide + nucleotide + nucleotide + nucleotide
- \_\_\_\_\_ 45. Sugar found in RNA nucleotides
- \_\_\_\_\_ 46. Amino acid + amino acid + amino acid + amino acid ...
- \_\_\_\_\_ 47. Double stranded nucleotides of Deoxyribose, phosphate group, and base.
- \_\_\_\_\_ 48. Shape of DNA
- \_\_\_\_\_ 49. Used to sort strands of DNA by size by the use of electrical attraction
- \_\_\_\_\_ 50. DNA is in this form in the nucleus during interphase

**CELL TRANSPORT:**

- \_\_\_\_\_ 51. Model of the cell membrane (or lipid bilayer)
- \_\_\_\_\_ 52. Diffusion of water through semipermeable membrane
- \_\_\_\_\_ 53. Movement across the membrane that does not require cell energy
- \_\_\_\_\_ 54. Molecules spreading out evenly throughout a solution (moving from a high to low concentration)
- \_\_\_\_\_ 55. Occurs when molecules move against concentration gradient; requires ATP

**CELL REPRODUCTION / GENETICS:**

- \_\_\_\_\_ 56. Used to examine fetal cells (chromosomes) for genetic disorders
- \_\_\_\_\_ 57. Egg or sperm
- \_\_\_\_\_ 58. Fertilized egg
- \_\_\_\_\_ 59. Physical trait expressed using words
- \_\_\_\_\_ 60. Form of reproduction that allows for genetic variation
- \_\_\_\_\_ 61. Part of cell cycle in which the cell grows and DNA replication occurs
- \_\_\_\_\_ 62. Chart used to show patterns of inheritance in a particular family
- \_\_\_\_\_ 63. Varying forms of the same gene
- \_\_\_\_\_ 64. Exchange of genetic information between similar chromosomes
- \_\_\_\_\_ 65. Union of egg and sperm
- \_\_\_\_\_ 66. Chromosomes with the same genes or information
- \_\_\_\_\_ 67. Used to predict probability of producing offspring with a particular trait
- \_\_\_\_\_ 68. RR = Red, rr = white, **Rr = pink**
- \_\_\_\_\_ 69. Failure of homologous chromosomes to separate
- \_\_\_\_\_ 70. Genotypes for an individual with type A blood
- \_\_\_\_\_ 71. Division of the cytoplasm of the cell
- \_\_\_\_\_ 72. Mendel's test subjects of his genetic experiments
- \_\_\_\_\_ 73. 3 - 21<sup>st</sup> chromosomes, also known as Trisomy 21
- \_\_\_\_\_ 74. Example of an autosomal dominant disorder; deterioration of the brain
- \_\_\_\_\_ 75. Type of inheritance for red-green colorblindness, hemophilia, and muscular dystrophy
- \_\_\_\_\_ 76. Example of an autosomal recessive disorder; buildup of mucus in the lungs and other organs
- \_\_\_\_\_ 77. Disorder where individual cannot break down phenylalanine; can be regulated through diet
- \_\_\_\_\_ 78. Disorder where hemoglobin is misshaped; provides immunity to malaria
- \_\_\_\_\_ 79. A trait determined by many different genes located on different chromosomes; ex. Human height

**EVOLUTION:**

- \_\_\_\_\_ 80. A chart used to show evolutionary relationships and adaptations
- \_\_\_\_\_ 81. Traces or impressions of organisms that were once alive
- \_\_\_\_\_ 82. Darwin's theory that organisms change over time to be better adapted to their environment
- \_\_\_\_\_ 83. DNA, RNA & protein similarities
- \_\_\_\_\_ 84. A change in a species over time
- \_\_\_\_\_ 85. Caused by geographic and reproductive isolation
- \_\_\_\_\_ 86. Type of evolution that results in homologous structures
- \_\_\_\_\_ 87. Structures that no longer serve a function (but at one time did).
- \_\_\_\_\_ 88. Comparison of the features of unborn organisms.
- \_\_\_\_\_ 89. First life forms
- \_\_\_\_\_ 90. Chemicals that allow communication between cells

**CLASSIFICATION:**

- \_\_\_\_\_ 91. Key used to identify unknowns (provides 2 options each time)

- \_\_\_\_\_ 92. Classification group
- \_\_\_\_\_ 93. First word of every scientific name
- \_\_\_\_\_ 94. Second word of every scientific name (smallest taxon).
- \_\_\_\_\_ 95. Kingdom of bacteria that live in harsh conditions
- \_\_\_\_\_ 96. Multicellular heterotrophs that lack cell walls
- \_\_\_\_\_ 97. How organisms get what they need to cells
- \_\_\_\_\_ 98. How organisms get rid of waste and balance fluids
- \_\_\_\_\_ 99. How organisms break down and get rid of food
- \_\_\_\_\_ 100. Disease-causing nonliving particles
- \_\_\_\_\_ 101. Disease caused by the transmission of a protist from organism to organism by mosquitoes or ticks

**PLANTS:**

- \_\_\_\_\_ 102. Stigma + style + ovary
- \_\_\_\_\_ 103. Veins in leaves parallel
- \_\_\_\_\_ 104. Embryo and endosperm surrounded by a protective coat
- \_\_\_\_\_ 105. Cone bearer
- \_\_\_\_\_ 106. Moves water and nutrients up a vascular plant
- \_\_\_\_\_ 107. Moves food (starch) down a vascular plant.
- \_\_\_\_\_ 108. Ripened ovary
- \_\_\_\_\_ 109. Covering on stem & leaves that prevents water loss
- \_\_\_\_\_ 110. Petals & sepals in multiples of 4 or 5
- \_\_\_\_\_ 111. Anther + filament
- \_\_\_\_\_ 112. Anchor, storage, takes in water & minerals
- \_\_\_\_\_ 113. Production of glucose from CO<sub>2</sub>, H<sub>2</sub>O and light.
- \_\_\_\_\_ 114. Moss, liverwort and hornwort
- \_\_\_\_\_ 115. Opens/closes stomata to allow gas exchange

**ANIMALS:**

- \_\_\_\_\_ 116. Endoderm, mesoderm, ectoderm
- \_\_\_\_\_ 117. Having a true body cavity
- \_\_\_\_\_ 118. Possessing a backbone
- \_\_\_\_\_ 119. Body covered with hair, 4-chamber heart, endothermic (warm blooded)...
- \_\_\_\_\_ 120. Sponge
- \_\_\_\_\_ 121. Crab, insects, spiders
- \_\_\_\_\_ 122. Lancelet, tunicate, shark, dog
- \_\_\_\_\_ 123. Jellyfish
- \_\_\_\_\_ 124. Earthworms & leeches
- \_\_\_\_\_ 125. Must lay eggs in water, moist skin, vertebrates
- \_\_\_\_\_ 126. An animal capable of producing sperm and egg

**BODY SYSTEMS:**

- \_\_\_\_\_ 127. Nasal passages, larynx, trachea, bronchi, alveoli, lungs...
- \_\_\_\_\_ 128. Heart & blood vessels
- \_\_\_\_\_ 129. Mouth, stomach, intestines...
- \_\_\_\_\_ 130. Skin, sweat glands, hair
- \_\_\_\_\_ 131. Bones, ligaments, joints
- \_\_\_\_\_ 132. Muscle that separated the thoracic and abdominal cavity

Name \_\_\_\_\_ Block \_\_\_\_\_ Date \_\_\_\_\_

- \_\_\_\_\_ 133. Filters waste from the blood and sends it to the bladder.
- \_\_\_\_\_ 134. Cells that engulf foreign particles
- \_\_\_\_\_ 135. Cells that kill foreign particles through chemical means
- \_\_\_\_\_ 136. Cells that produce antibodies
- \_\_\_\_\_ 137. An inactive dose of a pathogen to allow the body to produce antibodies and memory cells
- \_\_\_\_\_ 138. Type of immunity where a person actively makes antibodies to fight an infection
- \_\_\_\_\_ 139. Type of immunity where a person receives antibodies from the mother through the placenta

**BEHAVIOR:**

- \_\_\_\_\_ 140. Active during day
- \_\_\_\_\_ 141. Orientation movement; moth to light
- \_\_\_\_\_ 142. Automatic response
- \_\_\_\_\_ 143. Escape of high temperature and dry periods
- \_\_\_\_\_ 144. Inborn behavior
- \_\_\_\_\_ 145. Escape of low temperature
- \_\_\_\_\_ 146. Behavioral movement; birds & salmon
- \_\_\_\_\_ 147. Geese identify scientist as mother
- \_\_\_\_\_ 148. Active at night
- \_\_\_\_\_ 149. Training by association
- \_\_\_\_\_ 150. When an animal no longer responds to a stimulus; ex. Sleeping through noises that used to bother

**ECOLOGY**

- \_\_\_\_\_ 151. White rabbit in the arctic snow
- \_\_\_\_\_ 152. Members of a species in one area
- \_\_\_\_\_ 153. Hawk eating snake
- \_\_\_\_\_ 154. Trophic level of a maple tree, moss, fern or algae
- \_\_\_\_\_ 155. Number of individuals environment can support
- \_\_\_\_\_ 156. Trophic level of a grasshopper
- \_\_\_\_\_ 157. Tick on a dog
- \_\_\_\_\_ 158. Numbers in a population become so low that extinction is possible
- \_\_\_\_\_ 159. Made up of interrelated food chains
- \_\_\_\_\_ 160. Pesticide that caused thin-shelled eggs
- \_\_\_\_\_ 161. Fungi and bacteria
- \_\_\_\_\_ 162. Organisms interacting and living together
- \_\_\_\_\_ 163. Approximate amount of energy transferred from level to level
- \_\_\_\_\_ 164. Currently, most human populations show this type of growth
- \_\_\_\_\_ 165. Bacteria in legumes “fix” this into a form that plants can use.
- \_\_\_\_\_ 166. A body of water receives an increased amount of nutrients, leading to algal growth and then death
- \_\_\_\_\_ 167. Looking like a poisonous animal (even though it isn't).
- \_\_\_\_\_ 168. A species from another environment which out-competes the native species

**Put the following in order from smallest to largest:**

**166. Tissue, Organism, Organs, Cell, Organ Systems**

**167. Phylum, Domain, Class, Species, Genus, Family, Kingdom, Order**

**Match one of the choices below with each statement (none will be used twice):**

**It's about the air!**

- 168. \_\_\_\_\_ Condition that results when CO<sub>2</sub> in the atmosphere absorbs heat from earth forming an atmospheric blanket.
- 169. \_\_\_\_\_ Bacteria in legumes are able to take nitrogen from the air to make it usable
- 170. \_\_\_\_\_ Flying would be a good way for birds to do this.
- 171. \_\_\_\_\_ Precipitation that contains acid as a result of pollutants combining with water vapor.
- 172. \_\_\_\_\_ Pollutants such as chlorines cause depletion of this.

**Eat in or take out!**

- 173. \_\_\_\_\_ Consumers that are not carnivores could be these (ex. Grasshopper).
- 174. \_\_\_\_\_ Feeding levels in an ecosystem are called this
- 175. \_\_\_\_\_ Interconnecting food chains
- 176. \_\_\_\_\_ Compares the total amount of energy at each trophic level
- 177. \_\_\_\_\_ Bacteria and fungi are examples

**“BIO” world**

- 178. \_\_\_\_\_ Non-living components of an ecosystem
- 179. \_\_\_\_\_ Term to describe a substance that can be broken down by microorganisms
- 180. \_\_\_\_\_ A branch of science that is the study of life
- 181. \_\_\_\_\_ Living components of an ecosystem
- 182. \_\_\_\_\_ Processes allow nutrients to move through the biosphere

**“P” words!**

- 183. \_\_\_\_\_ Results in killing and eating other organisms
- 184. \_\_\_\_\_ Undesirable change in an ecosystem (ex. Factory emissions)
- 185. \_\_\_\_\_ A substance like DDT that kills insects that damage crops
- 186. \_\_\_\_\_ An organism that can make its own food would be one of these
- 187. \_\_\_\_\_ Individuals of the same species in a given area

**Odds and Ends!**

- 188. \_\_\_\_\_ Number of organisms that can be supported by the environment
- 189. \_\_\_\_\_ In the water cycle, this is evaporation from leaf surfaces
- 190. \_\_\_\_\_ Raw material that supports life
- 191. \_\_\_\_\_ Close relationship between two different species (ex: commensalisms, parasitism, mutualism)
- 192. \_\_\_\_\_ Predictable, sequential replacement of populations in an ecosystem

**Places to Live!**

- 193. \_\_\_\_\_ All the populations of organisms living in a ecosystem
- 194. \_\_\_\_\_ Consists of abiotic & biotic factors
- 195. \_\_\_\_\_ Physical area where an organism lives
- 196. \_\_\_\_\_ Part of Earth where life exists
- 197. \_\_\_\_\_ Environment that has a characteristic climax community

- |                         |                      |                   |
|-------------------------|----------------------|-------------------|
| A. Abiotic              | K. Decomposer        | U. Ozone layer    |
| B. Acid rain            | L. Ecosystem         | V. Pesticide      |
| C. Biodegradable        | M. Energy pyramids   | W. Pollution      |
| D. Biogeochemical cycle | N. Food webs         | X. Population     |
| E. Biology              | O. Greenhouse effect | Y. Predation      |
| F. Biome                | P. Habitat           | Z. Producer       |
| G. Biosphere            | Q. Herbivore         | AA. Succession    |
| H. Biotic               | R. Migration         | BB. Symbiosis     |
| I. Carrying capacity    | S. Natural resources | CC. Transpiration |
| J. Community            | T. Nitrogen fixation | DD. Trophic level |