AP Biology Vocabulary Final Test (Version A)

1. B The weak intermolecular bond that forms between water molecules that causes them to "stick" to each other.

A.spindle fibers B.hydrogen bond C.natural selection D.replication

2. C The enzyme that splices DNA together in genetic engineering and the Okazaki fragments of replication.

A.buffer B.centrosome C.DNA ligase D.primary productivity

- 3. C The duplication of the DNA during the middle "s phase" of interphase during the cell cycle.

 A.polar bond B.gonads C.replication D.transpiration
- 4. C An organism that makes its own food.

 A.mitochondria B.hypothesis C.autotroph D.polar bond
- 5. D A testable explanation for a question.

 A.prokaryotic B.cell cycle C.centrosome D.hypothesis
- 6. B The single stranded nucleic acid with uracil instead of the thymine found in DNA.
 A.endoplasmic reticulum B.RNA C.species D.carrying capacity
- 7. D The enzyme that makes RNA from DNA.
 A.gametes B.dehydration synthesis C.carrying capacity D.RNA polymerase
- 8. D RNA made from DNA that attaches to amino acids and delivers them to the mRNA in the ribosome.

A.homozygous B.chlorophyll C.plasma D.transfer RNA

- 9. B The unwound form of DNA that is accessible for making RNA.
 A.cell cycle B.chromatin C.innate D.independent variable
- 10. A The vascular tissue in a plant that carries water up from the roots to the rest of the plant.

 A.xylem B.pancreas C.haploids D.codominance
- 11. C Bond formed between adjacent amino acids; between carboxyl group of one amino acid and amine group of other amino acid.

 A.plasma B.transpiration C.peptide bond D.diploid
- 12. D Net passive movement of particles from a region of higher concentration to region of lower concentration until the concentration of substances is uniform throughout.

 A.innate B.phenotype C.translation D.diffusion
- 13. D The one difference between the experimental group and the control group.

 A.meiosis B.dehydration synthesis C.chromatin D.independent variable
- 14. An intramolecular bond where atoms are sharing electrons equally.

 A.covalent bond B.homeostasis C.polar bond D.catalyst
- 15. B The attractive force between polar molecules of the same substance.
 A.somatic cell B.cohesion C.DNA ligase D.dehydration synthesis
- 16. D The members of a species within a specific area that has gene flow between its members.

 A.innate B.natural selection C.endosymbiosis D.population
- 17. D Membrane bound cell organelle that contains genetic material.
 A.homeostasis B.incomplete dominance C.protista D.nucleus
- 18. D The maximum population size of the species that the environment can sustain indefinitely, given the food, habitat, water, and other necessities available in the environment.

 A.hydrogen bond B.phloem C.cell wall D.carrying capacity

19. D The microtubules that are used to separate the chromosomes and drag them to separate sides during nuclear division.

A.cuticle B.insulin C.cell wall D.spindle fibers

20. B The continuous series of events that all somatic cells go through that includes interphase, mitosis, and cytokinesis.

A.species B.cell cycle C.zygote D.DNA ligase

21. A The description of an individual who has the same allele for a trait on both homologous chromosomes.

A.homozygous B.ribosome C.cuticle D.independent variable

- 22. D Enzymes that are used to "cut" DNA into pieces that often have "sticky" ends.
 A.chloroplast B.population C.auxins D.restriction enzymes
- 23. A The region of a chromosome to which the microtubules of the spindle attach, via the kinetochore, during cell division.

A.centromere B.transfer RNA C.enzyme D.amino acids

- 24. D The section of DNA that is responsible for the production of one new polypeptide.

 A.genotype B.DNA ligase C.xylem D.gene
- 25. B The green pigment molecule found in the chloroplasts of higher plants and in cells of photosynthetic microorganisms which is primarily involved in absorbing light energy for photosynthesis.

A.photosynthesis B.chlorophyll C.chromosomes D.cell wall

- 26. B The transport of molecules across the cell membrane without the use of energy. A.spindle fibers B.passive transport C.global warming D.pancreas
- 27. C The site of meiosis in humans that includes the ovaries and testes.

 A.carrying capacity B.incomplete dominance C.gonads D.protista
- 28. B The vascular tissue in plants that transports food from leaves to the rest of the plant.
 A.ribosomal RNA B.phloem C.zygote D.transcription
- 29. B The type of inheritance where the heterozygous individual has a blend of the dominant and recessive trait.

A.mitosis B.incomplete dominance C.protista D.virus

30. B A high energy molecule that can be split apart to release energy for many different processes in living things.

A.peptide bond B.ATP C.zygote D.DNA ligase

- 31. A The process of breaking down glucose to make ATP.

 A.cellular respiration B.codominance C.mitosis D.genotype
- 32. D The theory that eukaryotic cells arose from prokaryotic cells that lived closely together to the point that we now call these former cells "mitochondria" and "chloroplasts."

 A.passive transport B.nucleotides C.replication D.endosymbiosis
- 33. B The movement of molecules across the cell membrane without the use of ATP, but with the help of a protein.

A.anticodon B.facilitated diffusion C.auxins D.codon

34. A The asexual reproduction in bacteria.

A.binary fission B.ribosome C.chromosomes D.catalyst

35. An organism that cannot manufacture its own food and instead obtains its food and energy by taking in organic substances.

A.heterotroph B.phenotype C.carrying capacity D.phloem

36. C The haploid cells produce by meiosis.

A.diploid B.anticodon C.gametes D.translation

37. D A cell with a nucleus and membrane bound organelles.

A.genetic engineering B.peptide bond C.global warming D.eukaryotic cell

38. D A change in the DNA either by changing a chromosome's structure or the order of nucleotides.

A.chromatin B.binary fission C.zygote D.mutation

39. D Cells that have no nucleus or membrane bound organelles.

A.mitochondria B.eukaryotic cell C.homozygous D.prokaryotic

40. $\underline{\mathsf{A}}$ The making of RNA from DNA.

A.transcription B.chlorophyll C.chloroplast D.incomplete dominance

41. D The gland that releases glucagon and insulin to help control blood sugar.
A.chloroplast B.hypothesis C.nucleotides D.pancreas

42. A The monomer subunit that links together along the sugar phosphate backbone to form nucleic acids.

A.nucleotides B.glycerol C.polar bond D.gametes

43. An organic catalyst that lowers the activation energy of chemical reactions in organisms thus increasing the rate of reaction.

A.enzyme B.nucleotides C.pancreas D.insulin

44. A The chemical reaction that makes glucose and oxygen from water and carbon in the presence of sunlight.

A.photosynthesis B.binary fission C.cohesion D.DNA ligase

45. A In eukaryotic cells it is the site of the Krebs cycle and electron transport chain of aerobic cellular respiration.

A.mitochondria B.hypothesis C.incomplete dominance D.protista

- 46. C Any chromosome not considered as a sex chromosome, or is not involved in sex determination.

 A.diffusion B.homozygous C.autosomal chromosomes D.enzyme
- 47. C The entire complement of chromosomes in an individual.

 A.transcription B.cell wall C.genome D.phenotype
- Form of dominance in which the alleles of a gene pair in a heterozygote are fully expressed thereby resulting in offspring with a phenotype that is neither dominant or recessive.

 A.hydrogen bond B.peptide bond C.haploids D.codominance
- 49. A Cells that have two copies of each kind of chromosome.

 A.diploid B.gene C.pituitary gland D.homeostasis
- 50. A The type of nuclear division that leads to four nuclei with a haploid complement of chromosomes produced from one diploid nucleus.

 A.meiosis B.genotype C.RNA D.hypothesis
- 51. D A group of similar looking organisms that can reproduce to make fertile offspring.

 A.mutation B.genotype C.replication D.species
- 52. A The 23rd pair of chromosomes in humans that determine whether the offspring is male or female.

A.sex chromosomes B.phenotype C.diffusion D.mitosis

53. C The DNA when it is wrapped up tightly around proteins during metaphase.

A.zygote B.cell cycle C.chromosomes D.codominance

54. C A bond where the atoms are sharing electrons unequally creating small negative and positive charges on the atoms.

A.transcription B.nucleotides C.polar bond D.ribosome

55. $\underline{\mathsf{D}}$ The process of combining the DNA of two different organisms.

A.xylem B.mitochondria C.ATP D.genetic engineering

56. D The physical appearance of an organism as a result of the interaction of its genotype and environment.

A.primary productivity B.autotroph C.replication D.phenotype

57. C The smallest of blood vessels that serve to distribute oxygenated blood from arteries to tissues of body and to feed deoxygenated blood from tissues back into veins.

A.chromatin B.primary productivity C.capillaries D.nucleus

58. A set of alleles that determines the expression of a particular trait.

A.genotype B.plasma C.nucleus D.mutation

59. C Any cell of an organism that is not a sex cell (not egg or sperm).

A.chlorophyll B.antigen C.somatic cell D.stomata

60. D The part of the cell responsible for dehydration synthesis of proteins using the mRNA template.

A.antibodies B.glycerol C.transpiration D.ribosome

61. D The type of reaction that links together monomers to make polymers and release water in the process.

A.catalyst B.xylem C.eukaryotic cell D.dehydration synthesis

62. B Plant hormones that lead to phototropism by elongating the dark side of the plant.

A.buffer B.auxins C.glycogen D.gonads

63. D The increase in carbon dioxide and other gases causing heat to be trapped raising the temperature of the earth.

A.meiosis B.phenotype C.polar bond D.global warming

64. B A chemical that can release or absorb hydrogen ions depending on the conditions and therefore can maintain the pH of a solution at a constant level.

A.mutation B.buffer C.chromatin D.hydrogen bond

65. C The kingdom that has predominantly unicellular eukaryotic organisms including algae, protozoans, and slime molds.

A.chromatin B.active transport C.protista D.transcription

66. C The series of membranes inside the cell that allow for passage of materials through the cytoplasm and the synthesis of lipids.

A.cell wall B.transpiration C.endoplasmic reticulum D.transfer RNA

67. D A non-cellular infectious agent that is unable to grow or reproduce outside a host cell. contains either RNA or DNA.

A.ATP B.homeostasis C.phenotype D.virus

68. D Cells that have one copy of each kind of chromosome.

A.genetic engineering B.antigen C.mitosis D.haploids

69. A The amount of photosynthesis in an ecosystem.

A.primary productivity B.active transport C.carrying capacity D.centrosome

70. D A long term relationship between organisms of two different species where at least one of the organisms benefits.

A.phenotype B.insulin C.controlled variables D.symbiosis

- 71. D The three carbon backbone molecule of the triglycerides.

 A.centromere B.genotype C.ATP D.glycerol
- 72. B The 20 molecules that are held together by peptide bonds to make up proteins. A.autosomal chromosomes B.amino acids C.polar bond D.spindle fibers
- 73. B The waxy protective layer on plants that prevents desiccation.

 A.codominance B.cuticle C.cohesion D.genetic engineering
- 74. C A fertilized egg
 A.glycerol B.population C.zygote D.dehydration synthesis
- 75. B The condition in animals where they keep their internal environment constant for a specific characteristic often as a result of negative feedback.

 A.glycogen B.homeostasis C.ATP D.replication
- 76. B A molecular component of a ribosome, the cell's essential protein factory.

 A.RNA B.ribosomal RNA C.codon D.photosynthesis
- 77. A The polysaccharide that is how animals store glucose in their liver.

 A.glycogen B.nucleus C.population D.meiosis
- 78. B Pair of genes where one is dominant and one is recessive.

 A.ATP B.heterozygous C.diploid D.covalent bond
- 79. D The gland that controls the release of hormones from many other glands.
 A.innate B.pancreas C.transfer RNA D.pituitary gland
- 80. B Proteins made by the B cells that immobilize antigens.
 A.protista B.antibodies C.endosymbiosis D.eukaryotic cell
- 81. B The steroid embedded in the cell membrane that keeps the membrane fluid and strong.

 A.chromosomes B.cholesterol C.RNA D.photosynthesis
- 82. A Structural part of some cells that can be made of cellulose, peptidoglycan, or chitin depending on what kingdom the organism belongs to.

 A.cell wall B.codon C.controlled variables D.autotroph
- 83. C The many characteristics of the experimental group and control group which are held constant.

 A.autosomal chromosomes B.pituitary gland C.controlled variables D.incomplete dominance
- 84. B The process of making proteins from the mRNA template.
 A.pancreas B.translation C.homozygous D.diffusion
- 85. B A molecule that speeds up a chemical reaction by lowering the activation energy.

 A.transfer RNA B.catalyst C.amino acids D.passive transport
- 86. A The three nucleotide combination on the messenger RNA that matches up with the three letter combination on the transfer RNA and has the information to code for one amino acid.

 A.codon B.xylem C.chromatin D.virus
- 87. D The movement of molecules across the cell membrane with the use of ATP.

 A.catalyst B.plasma C.endosymbiosis D.active transport
- 88. B The type of nuclear division that leads to two nuclei with the entire diploid complement of chromosomes.
 - A.mitochondria B.mitosis C.prokaryotic D.sex chromosomes
- 89. A The liquid noncellular component of blood.

 A.plasma B.phloem C.homeostasis D.virus
- 90. D The outer selectively permeable membrane bilayer of all cells.

 A.autosomal chromosomes B.species C.nucleus D.plasma membrane

- 91. D An organelle near the nucleus of a cell that contains the centrioles (in animal cells) and from which the spindle fibers develop in cell division.
 - A.centromere B.heterozygous C.pituitary gland D.centrosome
- 92. A The evaporation of water from the stomata of a leaf that allows water to be pulled up a stem.

 A.transpiration B.phloem C.controlled variables D.peptide bond
- 93. D The theory that explains how a population changes over time to reflect the individuals who are most successful.
 - A.insulin B.transfer RNA C.root D.natural selection
- 94. B The small openings on the underside of leaves that allow for carbon dioxide to come in and oxygen to escape.
 - A.dehydration synthesis B.stomata C.mitochondria D.transfer RNA
- 95. A The hormone that lowers blood sugar by having it stored as glycogen in the liver and increasing cellular uptake.
 - A.insulin B.prokaryotic C.population D.antigen
- 96. D Behavior of an organism that is not learned and is genetically determined.

 A.ribosomal RNA B.glycogen C.restriction enzymes D.innate
- 97. C The foreign particles or substances that trigger an immune response.

 A.nucleotides B.mitosis C.antigen D.active transport
- 98. A The cell part responsible for photosynthesis in eukaryotic cells.

 A.chloroplast B.photosynthesis C.cellular respiration D.RNA
- 99. B The structure responsible for water absorption in plants.

 A.genetic engineering B.root C.antibodies D.covalent bond
- 100. A The three nucleotide combination on the transfer RNA that matches up with the three letter on the messenger RNA.
 - A.anticodon B.genetic engineering C.diffusion D.eukaryotic cell